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Human Rights Education: The United Nations Endeavour and the Importance of Childhood and Intelligent Sympathy

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School is the major vehicle for humanism, which is, in essence, respect on human nature. Human Rights Education is important for the existence of human society in the modern globalising era. Education can function as a unifying factor and produce informed and active citizens of an interdependent world. It can provide the tools for advocacy and resolution of conflict that are necessary for the maintenance of peace between nations and people. United Nations initiated in human rights and peace pedagogy. Social and individual amelioration may start from elementary school, taking advantage of children's pro-social behaviour as the agent of change. John Dewey introduced the concept of 'intelligent sympathy' in a democratic classroom aiming at personal growth, for considering new ways of thought, and creating a peaceful society.

Human rights, United Nations, Prosocial behaviour, Childhood, Intelligent sympathy

INTRODUCTION

The issue of human rights abuse and advocacy advances the imperative of educating children in a democratic way for humanistic growth. John Dewey based his philosophy of education on the belief that humans and their surroundings are living in unity, within a transactional process. Alienation and dehumanization appear when people can not see this unity in their every thought and action, but set the dualisms of 'I-You', 'Us-Them'.

Historically, some of the most horrific abuses of human rights have occurred under regimes and conditions that systematically demonize and degrade certain targeted social groups or people. This type of us-them dualistic thought and ideology is often associated with a glorification of violence, which equates brutality with heroism, and social devastation with divine kill.

Stanley Milgram's experiment in 1968, proved the crucial role of authority in the perpetration of violence, and found that ordinary people were all too commonly complicit in the injury of another human being when prompted to do so by an authority figure. A reason for this is that there is a diffusion of responsibility involved in the process of following the orders of an authority, so that individuals do not feel personally accountable for their own action, no matter how fatal the results might be. Another reason is that there is a special trust given to the authority, so that many people assume that the authority figure knows better than they themselves do, and because of this they are willing to defer their own judgement to that of another person. Upon conclusion Milgram hoped that, despite people seem like puppets controlled by the strings of society, they have perception and awareness, which might prove the first step to their own liberation.

What we need today is a re-evaluation of the philosophy that social institutions enshrine, which lay the foundation for people's dehumanization through uncritical obedience, passivity, and adjustment to authorities and rules imposed upon them. Modern society needs reflective citizens

and intelligent inquirers, who promote social understanding, cooperation, and peace. Human rights education aims at that target.

In 1946, the United Nations Charter mandated to promote and emphasize human rights. The principles of human rights education aim to promote dignity, tolerance and peace, by educating individuals and groups to respect, defend and advocate for their rights. These rights are enshrined in the Universal Declaration of Human Rights, which made human rights a global responsibility (United Nations, 1948). The preamble of the Declaration states clearly, that respect for human rights and fundamental freedoms are to be advanced through teaching and education. Articles 26 and 28 of the Declaration affirm that education about our rights is the foremost right that leads to the full and free development of the person.

THE ENDEAVOUR OF THE UNITED NATIONS

The United Nations declared the years 1995 to 2004 as the Decade for Human Rights Education. During this decade nations are called upon to promote and implement human rights education in all sectors of their society. The importance of human rights education was also reinforced by several World Congresses. For example, the World Conference on Human Rights, in 1993, called on states and institutions to implement human rights education within their formal and informal learning sectors. The International Congress on Education for Human Rights and Democracy adopted the World Plan of Action on Education for Human Rights and Democracy, which also called on states to develop specific programs of action, with special emphasis on the rights of women.

Human rights education is defined by the United Nations High Commissioner on Human Rights as those training, dissemination, and information efforts that aim at building a universal culture of human rights. According to the plan of action of the United Nations program for the Decade for Human Rights Education, for the materialization of this goal is essential the training on particular skills, the acquisition of knowledge and building of those attitudes that, altogether, would: strengthen the respect for human rights and fundamental freedoms, facilitate the holistic development of human personality and human sense of dignity, promote understanding, respect, gender equality and friendship among nations, declare equality of indigenous people and of racial, national, ethnic, religious and linguistic groups, enable all persons to participate effectively in a free society, and expand the activities of the United Nations for the maintenance of world peace.

The Office of the United Nations High Commissioner for Human Rights in conjunction with the United Nations Educational Scientific and Cultural Organization (UNESCO), in 2000, undertook a mid-term global evaluation of the United Nations Decade for Human Rights Education. Nations were surveyed on the progress made toward implementing national human rights educational programs. The evaluation revealed that states had ratified treaties and proclaimed their support to human rights education, but few, if any, had developed or implemented relevant national programs (United Nations, 2000). Non-governmental organizations (NGOs) proved that they had played an important role in disseminating information about human rights and developing plans of action. The evaluation called for increased support and collaboration between Non Governmental Organizations, Inter Governmental Organizations, and Human Rights Commissions.

The obstacles and needs that were identified in that mid-term evaluation of the human rights education decade were mainly financial. The lack of financial resources prohibited the development and carrying out of educational plans. Another obstacle identified was the lack of clarity and real understanding of human rights issues within organizations.

The most common obstacle, often, is that while educational institutions or organizations adopt the rhetoric of human rights their operation is not consistent with that rhetoric, because they are usually shaped by diverge forces that are also present in larger society. The hierarchy and power relations in a society are always reflected in the operation of schools. Finally, the existing educational programs on human rights pay emphasis more on understanding and awareness than action. As such, these programs, usually, choose neutrality as their main feature of operation, in an effort not to offend people of other cultures. However, a life-long effect can come only through a social, mindful action component of educational practice.

The practice and the goals of human rights education are commonly misused and misunderstood. The goals include teaching about human rights as well as working for human rights. The overly academic treatment of human rights lacks action, hence, it does not challenge the *status quo* or social powers to act as agents of social change in larger society. Human rights educational programs ought to educate students and adults about their rights and empower them to stand up for them, in order to take control of their own lives and of the decisions that affect them.

In the present world, full of conflicting interests, needs and purposes, human rights' principles provide a universal standard in working towards peace and justice for more people. Human rights education aim to engage people at a deeper level than mere knowledge, to the level of critical reflection and action that is required for social change, as Dewey had visualized.

The contemporary resurgence of religious, national, racial and cultural conflicts shows that school mechanisms can serve as a main partner to the generalized efforts for establishing new means for the expansion of universal wisdom and experience, effective in the elimination of humanistic havoc. According to the statement by the Secretary General of the United Nations, education is of major importance in the promotion of international peace and security and forms the critical communication channel among nations.

In under-developing and developing countries, where the need for basic amenities and lack of infrastructure are dominant, a human rights education might seem superfluous to other more pressing needs. Nevertheless, a human rights education ensures that genuine development takes place in these countries and, in turn, fosters empowerment and realization of human rights. At present, the *Human Rights Watch World Report 2000* indicated that the scope of the world's human rights problems has far exceeded the capacity to address them. This happens despite the fact that most nations and signatories to international treaties have adapted to International Law and have adopted more democratic and humanistic approaches to their governance and policy. There is clearly a gap between rhetoric and practice.

THE SIGNIFICANT CHILDHOOD

Human rights education is an effective mean to educate children from a very young age to develop respect for self, for other people and humanity, appreciation of diversity, valuing of freedom, equality, and justice, determination, intelligent inquiry and a critical independent mind for reflective citizenship, upon global, moral, civic, and multicultural concerns; all of which compose the basis of a democratic society and humane citizenry.

Personal experiences, family and cultural backgrounds influence the formation of ideas, interests, character, and attitudes of children from a very young age; thus they affect their receptiveness and reaction to anything that school will try to implement. Nevertheless, even if children may come to the learning environment with pre-existing attitudes, an education that touches them personally can still make the difference.

Elementary school is the appropriate level for educating on human rights and training children for good individuals and good citizens. Childhood years are a critical period for the development of attitudes and formation of personality. It is the period of increased and important developmental changes with a rapid growth in cognition. Politically relevant attitudes such “as empathy and solidarity, a sense of freedom and a feeling for right and wrong”, are implanted at that age (Schmidt-Sinns, 1980, 178).

Childhood is an important period for the formation of the growing self. Children have a particular openness, an increased concern and interest for other people, and particular receptiveness to social information, their attitudes are open to influence, they are willing to learn and inquire naturally about everything around them, develop strong friendships, they are interested in fairness, and can take up responsibilities according to their developmental stage.

Peer interactions are of much importance for healthy, mature, and interpersonal relations. By associating and socializing with peers, children learn concern for others well being, obtain a sense of unity, and a responsibility towards other people. Friendship in childhood provides companionship, stimulation, physical support, and opportunities for social comparison. This interaction is essential to children’s understanding of fairness, self-esteem, for their tendencies toward pro-social behaviour, and the acquisition of role-taking and communication skills. Friendship is a site for the reeducation of human soul and mind, since it is an integral part of sympathy, where the desires, aims, interests and modes of response of other people become an expansion of our own being, in order to understand them. Friendship is when “we learn to see with his eyes, hear with his ears, and their result give true instruction, for they are built into our own structure” (Dewey, 1934b, 339). It is through friendship that we gradually rediscover our self, and acquire the courage to express our individuality and our inner spirit.

Relationships with peers start from being one-sided and egocentric to becoming more reciprocal and encompassing other’s perspectives. An early human rights pedagogy can contribute to inhibiting students from adopting egocentric and ethnocentric views of rights upon other people. As Dewey argued, friendship is the site for reeducation for soul and spirit, wherein the person discovers his self. Friendships, at this period, are chosen for their personal attributes and temperament, characterized by equality, similar interests, and reciprocity, in contrast to the convenience that characterizes those at adolescence. Children tend to choose friends of the same age, who live in proximity, and have similarities. The most important feature of friendships of that age is conformity to peer cult, in the sense of sharing norms and rules.

Among the various instances of preadolescent friendships, for example, assistance, talking, playing, laughing, studying, conflict are also present. Both conflict and cooperation are important in childhood and preadolescent peers relationships. Cooperation, particularly, contributes to the maintenance of children’s friendships and their outcome. Conflicts and violations of the norms of friendship are very often, either leading to resolution strategies or disagreement. Preadolescent children, also, spend much more time in negative evaluation conversations, than younger or older children, perhaps because they are insecure about their social position and guard against rejection.

Children understand the interdependence, can develop reasoning and intelligent sympathy, and have an increasing capacity for analysis and critical judgement. During pro-elementary and first elementary years, the most important features associated to the developmental stage of children, that could form the basis for a human rights training are mainly friendship and self. In the middle years of elementary school, students behave more pro-socially than elementary first graders. For, they have the feeling of ‘we’ that “involves collaboration in the sense of adjustment to others’ needs in pursuit of mutual interests” (Higgins, 1983, 25).

Pro-social behaviour, that is being built during childhood, is a complex phenomenon, which is affected by many factors including age, personality, motivation, cultural factors, and surrounding conditions. That behaviour is tied closely to both social and moral aspects of children's lives, and is defined as that positive form of social behaviour which benefits others.

Piaget asserted that within the social context of egalitarian peer communication children develop their mentality that has a social character. The participation in essential social relationships offers the ground for cultivation and justification of global human values, such as responsibility, honesty, tolerance, and justice. Piaget identified stages in children's development of the concept of justice and claimed that egalitarian justice develops with age, in relation to solidarity, between children and in opposition to adult authority. As children mature and spend more time with their peers, they learn to cooperate and communicate effectively, shifting the nature of their respect from the respect for the adult authority to the reciprocal respect for their peers.

Most children during preadolescence believe that, being a good person means to be nice; this is important for others to think well of them, gaining their approval, while children can think well of themselves, building self-esteem. They begin to understand other perspectives that facilitate them in making moral judgements. Middle childhood, from about 9 to 11 years of age, is a period of awakening morality and conscience, when children care about other people and are considerate of their happiness, even though, sometimes what is fair and what is wanted are not clear inside them. Moral judgement and moral responsibility are wrought in us by the social environment. Hence, morality is socially conditioned (Dewey, 1922).

Children develop empathy and role-taking skills usually in accordance to the development of their pro-social behaviour. In that way, their care and concern may extend beyond their immediate situations to unfortunate people around the world. This has obvious implications for human rights instruction. Empathy is an affective attitude that children develop in form of emotional matching or experiencing a range of emotions consistent with those of another person. Thus, they can develop empathy for suffering distant others and be motivated to engage in pro-social actions driven by these feelings, bearing a charitable character. Role-playing, a skill associated with pro-social behaviour, is a capacity to look at a situation from another person's perspective, the ability to infer another's feelings, thoughts, perspectives, motives, and intentions. In essence, it is the pre-requisite of altruistic behaviour. Both skills, empathy and role taking, are important in pro-social development, but also depend on encouragement and motivation given by adults.

Young children have a more self-focused, hedonistic orientation of pro-social behaviour. During middle childhood they become more needs-orientated, and at upper elementary level they reflect on the approval from others. Few children may progress to the latter stage which is more self-reflective, to concern for others and for the consequences of their own actions.

The elementary classroom environment is an ideal learning and practice laboratory for pro-social behaviour, as peers and teachers can be effective agents of reinforcement for the acquisition and modification of humanistic ideals. However, for cognitive reasons, educators have to start from individual rights, which is always the starting point, and must select instruction topics that are age appropriate. Piaget had strongly advocated educators not to force students to repeat and pay attention to 'ready-made truths' of past facts, because they will hide the historically embedded significance of meaning, which is handed down in ideas (Piaget, 1976). Meaning is recognized in relation to the past, while values are embedded in experiences of the immediate present, and purposes are directed toward the future.

The development of humanistic values in the classroom, their real practice in school and in the near community are very important for students' personal and social development. The optimal

condition would be their identification with a teacher, who models positive social behaviour in practice and not only in principles, and who manifests altruism at classroom' life instances and school environment. It is especially important to teach human rights using the concrete experiences of our students (Torney-Purta, 1984). "In the learning process, the only person who really learns is he who is able to apply the appropriate learning to concrete existential situations", concluded Paulo Freire. Of the same importance is to allow students to become involved in designing the human rights curriculum, because that is the way of the democratic school, which will build in students more favorable attitudes toward social studies, school, and their peers, more constant behaviour and an effective social learning.

DEWEYEAN CONCEPT OF INTELLIGENT SYMPATHY

Dewey introduced intelligent sympathy as an important idea in the interpersonal understanding beyond differences, and one essential condition for creative democracy, which helps people overcome conflicts among diverse spirits. The term actually refers in a sensitive responsiveness to the interests and rights of others. It is the key to attain a common vision that extends its scope beyond the self "till it approaches the universal".

Sympathy is intelligent when it manifests impartiality and objectivity of moral knowledge. It occurs when we have learned to put ourselves in the place of another and see things from their standpoint and values-set; it is a consideration for another self-centeredness. In impartiality we do not focus exclusively on our own self or the other self. A person can attain this condition by forgetting oneself and transcending his or her narrow ego. Intelligent sympathy is the practical art of living. It reminds us that each one can, and should, be a moral prophet of humanity (Dewey, 1934b). Thus, intelligent sympathy can be neither altruistic nor self-loving, but caring for the self and others at the same time.

The hope of humanity lies in the fact that we can always abandon despair and depart anew along an unsettled path of living, only when we can detach from the old path, as the mean of full participation. In surrendering our ego to the broader sense of life, we receive something precious "We are carried out beyond ourselves to find ourselves... This whole is then felt as an expansion of ourselves." (*ibid.*, 199). By acquiring a certain mode of detachment, one does not lose oneself, but regains oneself, because each person becomes a part of the whole and belongs to the universe in which he or she lives.

The interpersonal relationship of intelligent sympathy is the educational center for individuality, and the social center from which democratic culture expands. Intelligent sympathy, as the nest of democracy, aims to educate the self from inside. People need to begin with criticism from within, because self-criticism is the path to the release of creative activity and the driving force of social action. In the conditions of social misery, oppression, and insecurity social change needs to be initiated from inside the self, carrying affection and desire for justice and security (Dewey, 1934a). Social justice, which does not emanate from the inner source of self and lacks the support of intelligent sympathy, is unreliable.

The social centre of intelligent sympathy helps in perfecting the directive criteria of growth in different dimensions of life, and contributes to the improvement of moral standards in a society. "The heart of reflective morality is reflection, and reflection is sure to result in critics of some matters generally accepted... Toleration is... positive willingness to permit reflection and inquiry" (Dewey, 1932, 230). Reflection is always an essential component of the pedagogic relation, for it continually questions the methods and aims of the teacher.

The moral progress of a society relies upon the level of understanding between its dominant and marginal elements. Dewey stated that toleration of difference during a moral judgement is a duty, which needs the intelligent art of being open-minded and imaginative to the opportunities offered for personal growth. The art of becoming tolerant is necessary in the contemporary era, because societies are developing into multicultural entities. In the societal playground, people from different cultural backgrounds associate in various ways and need to give attention to avoiding an attitude of indifference during interaction.

When people with different cultural backgrounds encounter others with diverse values, both parts have to practise the art and sensitivity to care, and prove their openness in actions and words. Relativistic attitudes built on the excuse of incommensurable cultural differences can never solve peacefully the problems occurring in multicultural societies. When people with different attitudes, cultures, and languages meet there is a greater chance for misunderstanding. In particular, indigenous people, either in society or school, should show more sensitivity towards those coming from other societies, in order to avoid conflicts. Attitudes of indifference or enmity can only arouse misunderstanding or violence among people of diverse cultures. By having the courage to revise our values in dialogue with outsiders we can benefit ourselves, as well as the others.

The educational centre of intelligent sympathy plays a significant role in the arena of international and intercultural communication, because it forms a common standard for the testing of a common vision. The mutual understanding among different cultures and values is not merely a political matter, but involves the real life and individuality of people. Intelligent sympathy is like an eye to look below the surface of things and overcome ignorance and prejudice. Communication among different cultures in a society, as well as within one culture, requires the ability to become impartial from within our partiality, to detach and self-transcend, which gives us hope for building a common vision in value conflicts.

CONCLUSION

Experiencing intelligent sympathy and practising human rights as a component of democracy in classroom, involves students in inquiring, making arguments, deciding, cooperating, evaluating, sharing, and living according to the ideal they want to reach. The exploration and practice of human rights that are ideal in the classroom are essential for democratic citizenship requirements, and for the development of individual abilities to deal with personal circumstances. Educating for human rights allows children to stand up for their own rights, and to work for the rights of others, from school mates to people in the community and world, “if a student emerges from a course of study with a blinkered view of my rights as an individual or our rights as a group or country, the crucial appreciation of the reciprocity and universality of rights may be totally lost” (Heater, 1984, 2).

Pedagogical tools for teaching children about human rights are stories and books about human rights issues, for they highlight peaceful solutions to difficult problems, and make the issue understandable in very personal ways, which scholarly articles or factual reports can not communicate (Branson-Stimmann, 1982). It is important to acknowledge the discomfort, which can be raised by human rights issues on violations, and to give students an opportunity to reflect and share their feelings. Open discussion is an important strategy along with journal writing. Using these means, students can explore their understanding of issues, share concerns, and note questions that may not have answers or conclusions. Many educators stress the importance of providing students with the opportunity to take their thoughts, concerns, and feelings into an action project. Action projects could involve conducting interviews, writing letters to organizations, public officials, doing volunteer work in their community, or fundraising for an aid organization, as well as expressing artistically in a form of theatre or song. Moreover, students can

work on human rights projects in their schools, by improving conditions for the physically challenged, protecting the rights of young children on the playground, or speaking out against their immediate social evils, for example, racism, discrimination, violence and injustice. Action-related education, personal contribution, and energetic participation are particularly necessary for the younger elementary students who are still concrete thinkers. Children can better understand and support human rights issues if they associate them with experiences from their lives at home, school, or with friends.

The explicit human rights education program pervades almost all of the co-developing contemporary educational programs, such as global education, peace education, multicultural education, development education, environmental education, anti-racist education, moral education and civic education. The United Nations with their Human Rights Education campaign aims at educating reflective and active citizenry for the human community, and for an interdependent world.

REFERENCES

- Branson-Stimmann, M. and Torney-Purta, J. (1982) *International Human Rights, Society, and the Schools*. Washington D.C.: National Council for the Social Studies.
- Dewey, J. (1922) Human Nature and Conduct. In J. A. Boyston (ed) *The Collected Works of John Dewey: The Middle Works, 1899-1924*. Vol. 14. Carbondale and Edwardsville: Southern Illinois University Press.
- _____. (1932) Ethics. In J. A. Boyston (ed) *The Collected Works of John Dewey: The Later Works, 1925-1953*. Vol. 7. Carbondale and Edwardsville: Southern Illinois University Press.
- _____. (1934a) A Common Faith. In J. A. Boyston (ed) *The Collected Works of John Dewey: The Later Works, 1925-1953*. Vol. 11. Carbondale and Edwardsville: Southern Illinois University Press.
- _____. (1934b) Art as Experience. In J. A. Boyston (ed) *The Collected Works of John Dewey: The Later Works, 1925-1953*. Vol. 10. Carbondale and Edwardsville: Southern Illinois University Press.
- Heater, D. (1984) *Human rights education in schools: concepts, attitudes, and skills*. Strasbourg, France: Council of Europe.
- Higgins, T. E. and Parsons, J. E. (1983) Social Cognition and the social life of the child: stages as subcultures. In T. E. Higgins, D. N. Ruble and W. W. Hartup (eds) *Social cognition and social development*. New York: Cambridge University Press.
- Human Rights Watch. (2000) *Human Rights Watch World Report*. New York: Human Rights Watch.
- Piaget, J. (1976) *To understand is to invent: The future of education*. New York: Penguin Books.
- Schmidt-Sinns, D. (1980) How Can We Teach Human Rights? *International Journal of Political Education*, 3, 177-185.
- Torney-Purta, J. (1984) Human Rights. In N. J. Graves, J. O. Dunlop and J. V. Torney-Purta (eds) *Teaching for International understanding, peace, and human rights*. Paris: UNESCO.
- United Nations. (1948) *Universal Declaration of Human Rights*. Geneva, Switzerland: The General Assembly Press. [Online] <http://www.un.org/Overview/rights.html>
- _____. (2000) *Report of the United Nations High Commissioner for Human Rights on the mid-term global evaluation of the progress made towards the achievement of the objectives of the United Nations Decade for Human Rights Education (1995-2004)*. (September) Geneva, Switzerland: The General Assembly, A/55/360.

Prosocial Behaviour and Political Culture among Australian Secondary School Students¹

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This study investigates the extent to which forms of prosocial behaviour and values of social responsibility are related to various domains of political culture among Australian youth. Using data from a survey of 1311 senior secondary students from the ACT and South Australia, it was found that 14 per cent had participated in one or more volunteer activities and 26 per cent scored highly on social responsibility values. Furthermore, it was found that at least one or the other of these prosocial measures was positively related to five of the six domains of political culture, the exception being the feeling of political efficacy. Students who were prosocial also manifested higher levels of political knowledge, political awareness, political activism experience, and positive attitudes towards political freedoms and towards human rights. The implications of these findings for family practices and school programs for volunteer activities and for the instilling of a sense of social responsibility are discussed.

Prosocial Behaviour, Political Culture, Australian Secondary Students

INTRODUCTION

The path for the political development of youth to adult citizenship is said to be “emotionally charged” (Coleman and Hendry 1999). For this reason some consider youth to be ill-equipped for political responsibilities, and they argue that too early an involvement with political education is irrelevant and perhaps a potential threat to political stability (Coleman and Hendry 1999; Frazer 1999; Saha 2000b). Others however contend that young people should acquire the knowledge of, an interest in, and an engagement with politics not only as a preparation for future political participation, but for its own sake (Frazer 1999). The latter maintain that the path to responsible adult citizenship and the maintenance of a participatory democracy assumes the gradual acquisition by young people of the knowledge, attitudes and skills necessary to engage in political action (Saha 2000a). In effect, adult citizenship requires this early and gradual acquisition of the political culture of a society.

Political culture refers to the multi-dimensional patterns of orientation to political action in a given society (Nathan and Remy 1977; Delli Carpini and Keeter 1996). In this paper it is defined in terms of six domains: political knowledge, attentiveness to politics, political activist experience, a feeling of political efficacy, values regarding political freedoms, and values regarding human rights.

The literature regarding the youth acquisition of these various domains of political culture is large. The importance of family background, schooling and other similar agents of political socialization, including politically-linked behaviours, is well documented (Beck 1977; Sears

¹ Parts of this paper were presented to the Social Studies Education Association Conference in Canberra on 25 January 2001.

1990). One type of behaviour which has been linked with political engagement of many forms is that of prosocial behaviour (Yates and Youniss 1999). However this form of behaviour has not yet been directly related to political culture. This paper will do just that, and will focus specifically on the relationship between prosocial behaviour and the domains of political culture.

PROSOCIAL BEHAVIOUR AND SCHOOL STUDENTS

Prosocial behaviour is usually defined as behaviour intended to help others. It is sometimes, but not always, referred to as altruistic behaviour, although the latter is often regarded as being sympathetically or morally motivated (Eisenberg 1996). Prosocial behaviour includes forms of volunteer work, unpaid work, charity, and community service. These terms are intended to convey the free choice of those who participate in it. The concept, as used in this paper, is taken also to include intentions, goals, and predispositions to work towards the betterment of society such as the alleviation of poverty or suffering. Therefore in this study prosocial behaviour is defined first, as volunteer activity, and second, as having a sense of social responsibility.

Volunteer Behaviour as Prosocial Behaviour

Prosocial behaviour in the form of volunteer work has long attracted the attention of politicians, economists, and social scientists. In an Australian national survey in 1999, it was found that 33 per cent of respondents participated in some form of voluntary unpaid work, with an average of 7.9 hours per week. This work had an estimated value of over 40 million dollars for Australian society as a whole (Evans and Kelley 2000).

But there are other benefits to volunteer behaviour to the giver and to the receiver. For the giver the benefits may take the form of a sense of well-being related to religious or ideological convictions. For the receiver volunteer activity may obviously bring material, social and psychological benefits which otherwise might not be forthcoming. Social scientists have often been interested in who engages in this form of behaviour, and why they do so. This interest is largely because there are characteristics which identify the real or potential participant in volunteer activity (Wilson and Musick 1997; Baldock 1999).

Young people benefit by engaging in volunteer work. Its very name focuses on the contributory aspect of the activity and also the link between prosocial behaviour and the community.² In this respect, volunteer behaviour by young people has attracted recent attention, not because it represents a form of economic benefit to society, but because of the benefits it brings to the participant in the development of a sense of engagement with the wider society. For some, volunteer activity by young people is seen even as a part of the political socialization process, and as a contribution to the formation of a civic identity, and the preparation for adult life in a democratic society (Youniss and Yates 1999; Niemi, et al. 2000).

Youth school-based volunteer activities, sometimes called extracurricular activities, range from community service projects to organised school sport, and can include various school-linked clubs, such as debating, chess, or stamp and coin collecting. But many activities take place outside

² Mandatory prosocial behaviour is not the same as volunteer behaviour, but it brings about the same consequences. For example, Yates (1999) found that youth who participated in a mandatory project for the homeless experienced heightened social awareness. "The data from this program suggest that required participation can be meaningful when the service is conceptualized and carried out as an integral part of a school's or other community institution's overarching mission." Although the notion of mandatory voluntary work appears to be a contradiction, Seginer (1999) reports how, in Israel, compulsory volunteer programs in secondary school are by and large successful in promoting collectivist community orientations among youth in an increasingly individualistic cultural environment.

of school hours and are unpaid and community focused. Examples of these latter activities include the Red Cross, the Wilderness Society, the Royal Life Saving Society, and Amnesty International.

It is argued that these latter types of prosocial activities develop habits in young persons, which are beneficial for the principles of a democratic society. Studies have found that young people who engage in volunteer activities are more likely to become politically engaged as adults. They are more likely to vote, to participate in political debate, and generally to become more politically active citizens as adults (Verba, et al. 1995).

In addition to the beneficial outcomes of volunteer behaviour for a democratic society, much of its justification is related to individual outcomes that have social and political consequences.³ The support for volunteer activity by young people is founded on the belief that prosocial behaviour helps the young person develop empathy, which is the ability to take the perspective of another person and is an essential component for responsible adult citizenship (Berman 1997). Furthermore, this process of personal development is seen as more effective if it is based on experiential rather than theoretical knowledge, since the actual experience of an activity leads to the formation of habits, which are more likely to be repeated later in life (Youniss and Yates 1999).

As a form of prosocial behaviour, volunteer work by youth does have positive political socialization consequences. However, given that political culture has many domains, and given that there are other determinants of the acquisition of political culture, the question to be analysed here is whether volunteer work exercises an effect independent of the family, school, and other agents in this process.

Social Responsibility as Prosocial Behaviour

There probably has been more attention directed to the study of antisocial than prosocial behaviour among youth (Coleman and Hendry 1999). The reason is obvious, as antisocial behaviours are seen as leading to social problems for society. On the other hand, since the 1970s there has been an increasing interest in prosocial activities among youth, particularly since they are now recognised as leading to a sense of social responsibility toward others, and because it already begins to develop in very young children (Eisenberg 1996).

A feeling of social responsibility is as much linked with active citizenship and political culture as is volunteer behaviour. Social responsibility focuses on the relational aspect of being a good citizen and has been defined as “the personal investment in the well-being of others and the planet” (Berman 1997, p.12). Insofar as a sense of social responsibility is a form of prosocial behaviour, its possession also can be expected to be related to political knowledge and other domains of political culture.

The acquisition of social responsibility is often linked with moral development from childhood to adulthood. The theories of Piaget and Kohlberg have been influential in attempting to explain the process whereby individuals internalise the moral values of society. These values are generally limited to the consideration of moral rules which prevent inflicting harm, either directly or indirectly, to another person (Nunner-Winkler 1994). However the positive side of morality includes everything from feelings of empathy, the sharing of objects, comforting behaviour,

³ Alexis De Tocqueville, in his analysis of democracy in America, originally noted the link between volunteer community service and democracy. According to Gamson (1992) the experience of any kind of collective action, whether collective community service through an organised program, or other collective movement, contributes to the formation of collective identity, solidarity, and political consciousness. All of these, in one form or another, contribute to the practice of an active citizenship and the support of democratic processes.

behaviour intended to improve the well-being of others, and life goals which include the helping of others.

A characteristic of persons who engage in socially responsible behaviour is the ability to take the perspective of another person. This aspect of perspective-taking also includes groups or categories of individuals as well. Therefore individuals with a sense of social responsibility are also likely to be more concerned with the wider community and with issues related to the community. One aspect of this wider interest touches the domain of politics. Thus young persons who have a strong sense of social responsibility can also be expected to be more engaged with political culture. However, given that political culture has many domains, as was pointed earlier, it is not clear whether a sense of social responsibility will bring about engagement with all of them.

PROSOCIAL BEHAVIOUR AND POLITICAL CULTURE

Niemi, Hepburn and Chapman (2000) suggest that prosocial programs in schools, whether through volunteer community service projects or classroom exercises, represent a form of political learning that will lead to greater political engagement in adult life. They contend that consequent gains in politically related knowledge and an increase in a sense of social responsibility lead to favourable attitudes toward civic and political activities. Their own review of the literature suggests some positive support for this argument, although they do acknowledge both the paucity of evidence and the somewhat mixed results of previous studies. Nevertheless, Niemi and his colleagues demonstrate in their own study of American high school students, based on the 1996 National Household Education Survey, that volunteer activities can lead to greater political knowledge, political skills, and the formation of positive political attitudes. They also conclude that volunteering behaviour **causes** these changes because the pattern in relationships is the same irrespective of whether the activity was voluntary or mandatory, or whether the school arranged or did not arrange the volunteer experience. In other words, prosocial activity, along with civics education and other academic curriculum-related sources, makes an independent contribution to the acquisition of political knowledge, and therefore leads to a heightened sense of civic responsibility.

Niemi, Hepburn and Chapman (2000) admit, however, that their findings are a “mixed bag”, and should be accepted with a number of cautions. These cautions relate to the importance of the intensity or amount of volunteer activity, the type of activity performed, and the apparent lack of any effect of prosocial activity on changes in political tolerance. For example, they found that one-off experiences with volunteer activities had little or no effect on political knowledge variables. Second, their measure of prosocial behaviour was based on a generic self-reported question that only required the student to indicate that they had performed a volunteer activity, and for what duration.⁴ Finally, although they did find evidence of increased political knowledge by those who had participated in prosocial activities, these activities were not related to any increase in religious tolerance or in tolerant attitudes regarding the placing of controversial books in a public library.

There is little empirical data to test whether prosocial activities, as described above, cause similar gains among Australian youth. First, figures on the participation of young students in various prosocial activities do not exist except by inference from the age categories of wider social science surveys (Evans and Kelley 2000). Second, where these figures do exist, they are not related to politically related variables. The Longitudinal Surveys of Australian Youth (Fleming 2000), for example, do include questions regarding volunteer work, but there are no direct

⁴ The actual question asked whether respondents had participated in “community service activity or volunteer work at your school or in your community” (Niemi et al., 2000).

political knowledge variables with which to relate this behaviour.⁵ The analysis which follows will fill this gap in our knowledge, as it will investigate in greater depth the relationship between prosocial activities and political culture for a sample of Australian school students.

THE DATA

The data necessary to investigate these questions are found in the second *Schools, Work and Politics Project*, which was conducted by the author in Canberra, ACT, and Adelaide and Whyalla, South Australia, in 1991 and 1992.⁶ The survey did include questions about political knowledge and attitudes, student participation in extra-curricular activities and also student life goals. The study included students from Years 10, 11 and 12 in 27 schools. The schools were selected on a stratified random basis to be representative regarding school type (government or private) and regions of the respective cities. Of the 1311 students surveyed, 73 per cent attended government schools and 27 per cent attended private schools. The students were almost evenly distributed by state, with 54 per cent from the ACT and 46 per cent from South Australia. The questionnaires were administered by the researchers during class periods, and required about 35 to 50 minutes to complete. The sample provides a reasonable cross-section of the Canberra and South Australian secondary school population.⁷

The independent variables and the variables of interest

The content of the survey focused specifically on how students learned about politics and about jobs. In addition to questions about their family background, schooling, and their leisure and part-time work activities, students were asked about their attitudes and knowledge regarding work, life goals, and politics. Information was also obtained about part-time work, homework, and some politically related actions. (Saha 2000b) Among the life goal items, two specifically asked about the importance to the student of helping to correct social inequalities and helping others in need.

Finally, students were asked to list the extracurricular activities in which they were currently involved.⁸ In the questionnaire, there were seven numbered lines on which they could list these activities, although there was room on the page for more. From these data two variables were created. The first included the total number of activities listed, and the second included only those activities that were considered of a prosocial or volunteer work nature. It is the latter variable that is used in this study.

⁵ The 1999 Wave 5 survey reports that 15.9 per cent of the 8783 student responses claim to have engaged in volunteer work, of whom 11.2 per cent do it once a week. However the only items in the questionnaire which have any bearing on political knowledge concern the reading of newspapers or books. There are, however, interest items, such as interest in the “state of the world”, and satisfaction items, such as “satisfaction with the way the country is run”, and “satisfaction with the state of the economy” (Fleming, 2000).

⁶ Although the data were collected some time ago, they are unique in the range of politically-related variables that were included in the same questionnaire. There is no current data set known to the author with which to examine the issues developed in this paper. Furthermore the study was conducted before the development and introduction of specific civics-related curriculum materials in Australian schools.

⁷ Appreciation is due to the government departments of education in the Australian Capital Territory (ACT) and South Australia in helping to develop a sample of schools and gaining access to them. Appreciation is also due to the principals, teachers and students of the schools in this study for their cooperation in making this study possible. The study was supported by a small ARC Grant.

⁸ The actual question was as follows: “Do you participate in any extra-curricula activities (eg, rugby club, debating club, student representative, choir, etc.? If yes, list any extra-curricula clubs or associations, both school and non-school, to which you presently belong or in which you are now participating?”.

Thus, the two prosocial variables are as follows. The first is Volunteer Activity, which indicates whether or not a student had participated in one of the extracurricular voluntary work activities. Of the student respondents, 14 per cent had done so. The second variable, Sense of Social Responsibility, was composed from two variables, namely whether the student had life goals to correct inequalities (three response categories) and whether the student found helping others to be satisfying (four response categories). Of the students, 26 per cent were said to be ‘very high’ on Sense of Social Responsibility in that they had a score of 6 or 7 on this variable, meaning that they had given the highest response category for at least one of the two component items, and next to highest response category on the other. (See Table 1 for a more detailed description of these variables.)⁹

Table 1. Description of Independent Variables in the Analyses

VARIABLE LABELS	VARIABLE DESCRIPTIONS
Variables of Interest	
Prosocial Orientation	
Volunteer Activity	Belongs to, or participates in, community-oriented volunteer club or activity: 0 = no, 1 = yes; Mean = 0.20, SD = 0.51
Sense of Social Responsibility	Variable constructed by combining two items: 1) “Life goal is working to correct inequalities” (four codes, from low to high agreement), and 2) Work is satisfying if it is helping others” (three codes, from low to high importance). For the variable 2 = low social responsibility, to 7 = high social responsibility; Mean = 4.86, SD = 1.07
Control Variables	
Background	
State (ACT)	The State of student: 1 = South Australia, 2 = ACT; Mean = 1.54, SD = 0.50
Year in School	Year in school: 1 = 10th, 2 = 11th, 3 = 12th; Mean = 1.86, SD = .80
Sex (Male)	The Sex of student: 1 = Female, 2 = Male; Mean = 1.48, SD = 0.50
Father’s Occupational Status	ANU2 scale with 331 = worker, to 880 = profession; Mean = 577.49, SD = 133.21
Mother’s Occupational Status	Same as above; Mean = 4.23, SD = 1.47
Father’s Education	Seven codes with 1 = no schooling, to 7 = university degree; Mean = 4.59, SD = 1.75
Mother’s Education	Same as above; Mean = 523.65, SD = 92.48
School	
Private School	Attendance at Private School: 0 = no, 1 = yes; Mean = 1.27, SD = 0.44
Interaction with Teachers	1 = poor, to 4 = very good; Mean 3.40, SD = 0.63
Like School	1 = hate it, to 4 = yes, very much; Mean = 2.85, SD = 0.76
Civics Class	Studied Australian government: 1 = no, 2 = yes; Mean = 1.52, SD = 0.50
Achievement Index	An index based on five recent grade results, with 1 = Fail, to 5 = A. The range is from 64 (highest) to 14 (Lowest); Mean = 36.94, SD = 6.77
Social Psychological	
Australian Identity	Identify with Australia: 1 = not at all, to 5 = completely; Mean = 3.77, SD = .99
Trust Gov	Trust Government: 1 = none of the time, to 4 = all the time. Mean = 2.15, SD=0.72
God is Important in Life	The extent to which respondent considers God as important to one’s life: 1 = not important, 2 = important, 3 = very important; Mean = 1.74, SD = 0.80

Previous research for a long time has identified family background and school experience as important determining factors for a range of politically-related attitudes and behaviours among

⁹ Of the student respondents, 59 per cent indicated that they had participated in one or more types of extracurricular activity, about 25 per cent listing more than one activity. Less than one per cent listed seven activities. Girls were more likely to participate in extracurricular activities than boys, the percentages being 45 per cent and 37 per cent respectively. With respect to voluntary activities, 16 per cent of the students indicated participation, again with a slightly larger proportion of girls (20 %) than boys (13 %) listing an activity in this category. The propensity for girls to be more inclined to participate in voluntary activities is consistent with findings in both Canada and the United Kingdom (Pancer and Pratt 1999; Roker et al., 1999).

youth. (See, for example, Sears, (1969), Jennings and Niemi, (1974) and Beck (1977). Selected variables which measure these two environments are included in the analytical model. The state of residence is included to investigate whether regional differences exist. In addition, three important social psychological variables are included which are expected to affect political culture variables, namely national identity, trust of the government, and the importance of religion. Finally, two prosocial variables complete the analytical model. All independent variables are described in Table 1. For ease of interpretation, the variables of interest for this analysis, namely Volunteer Activity and Sense of Social Responsibility, are placed at the top of the table.

Measures of political culture

In many studies, a number of variable clusters are used to measure political culture. For example Niemi, Hepburn and Chapman (2000), in their study of American high school students, include variables that cluster within the following political domain categories: political knowledge, attention to politics, participation skills, political efficacy, and political tolerance.

This study builds on that by Niemi and his colleagues, and includes political culture variables in similar clusters. There are small differences in the measurement of the political culture variables used here and those used by Niemi and his colleagues. However, as a whole they measure the range of political culture domains that are conceptually similar to those in the Niemi study.

Six domains of political culture are used in this analysis. Each of these six are factor variables that were constructed from a larger number of the questionnaire items (see Appendix), and therefore they are measured in the same metric. In addition to the factor scores, the variables for each domain were checked for scale reliability using Cronbach's alpha. The components of each of the six political culture variables, the factor weightings, Cronbach's alpha, and the bivariate correlations with the two prosocial behaviours are described in Table 2.

Political Knowledge includes three survey questions relating to knowledge about the houses of Parliament and the ability to name both Australian and international political figures. Cronbach's alpha for these items is 0.68, and the correlation coefficient between the factor variable and Volunteer Activity is 0.14. Political Knowledge does not correlate with Sense of Social Responsibility.

Attention to Politics includes talking about politics with parents, reading about politics, watching news on TV, and getting political information from media, friends and other adults. The reliability coefficient for these items is 0.72, and the factor variable correlates significantly with both Volunteer Activity ($r = 0.26$) and Sense of Social Responsibility ($r = 0.21$). Clearly, students who engage in volunteer activity and who have a sense of responsibility toward others in society, are also likely to be more interested in, and attentive to, politics in various forms.

Activism Experience measures the extent to which the students have experienced forms of political activism that are considered to be within the acceptable or normative limits of behaviour.¹⁰ This factor variable includes signing and collecting signatures, writing letters to the Prime Minister, other politicians, and the media, and taking part in a peaceful demonstration (Saha 2000b). Students who engage in volunteer behaviour or who have a sense of social responsibility are also likely to have participated in normative activism, and therefore have activism experience ($r = 0.15$ and 0.18 respectively). These correlations support Loeb (1994), who

¹⁰ The survey items actually measured a second "non-normative" type of activism that included damage and violence (see Saha (2000b)). However it was not consistent with definitions of activism in other studies and therefore was dropped from this analysis.

argues that individuals who are activist-oriented, tend to alternate between direct forms of activism, as represented in the normative activist scale, and various kinds of prosocial activity.

Table 2. Description of Dependent Variables (Political Culture Factor Variables)

Variable Name	Variable Description	Correlations with:	
		Volunteer Activity	Social Responsibility
Political Knowledge	A factor variable constructed from three political knowledge variables (factor weightings in parentheses): Number of Australian Politicians Named (0.88), Number of International Political Figures Named (0.89), and Can You Name the Houses of Parliament (0.57). Cronbach's alpha = 0.68.	0.14***	0.04
Attention to Politics	A factor variable constructed from five attentiveness variables (factor weightings in parenthesis): Active Interest in Politics(0.65), Read Politics (0.52), Political Information from Friends (0.37), Friend Interested in Politics (0.71), and Talk about Politics with Parents (0.64) . Cronbach's alpha = 0.72.	0.26***	0.21***
Activism Experience	A factor variable constructed from six activism variables (factor weightings in parentheses): Have Signed a Petition (0.49), Have Collected Signatures (0.60), Have Participated in a Demonstration (0.59), Have Written or Contacted the Prime Minister (0.76), Have Written or Contacted a Member of Parliament (0.79), and Have Written or Contacted the Media (0.66). Cronbach's Alpha = 0.70.	0.15**	0.18**
Political Efficacy	A factor variable constructed from four political efficacy variables (factor weightings in parentheses): Youth Have a Say in Government (0.69), Government Does Care What the People Think (0.83), Government is in Touch With the People (0.82) and Political Parties are Interested in People's Votes and Their Opinions (0.80). Cronbach's Alpha = 0.79.	0.08**	0.01
Political Freedoms	A factor variable constructed from three political freedom variables (factor weightings in parentheses): Citizens must be free to criticize government (84), It is good for the government to be frequently criticized (0.83), and Regular elections are necessary (0.66). Cronbach's Alpha = 0.67.	0.11***	0.11***
Human Rights	A factor variable constructed from three human rights variables (factor weightings in parentheses): Migrants should stand for elections and take part in politics (0.77), No matter what a person's nationality, if they are qualified for a job, then they should get it (0.82), and Women should have the same rights as men in every way (0.61). Cronbach's Alpha = 0.58.	0.04	0.22***

* p < 0.05

** p < 0.01

*** p < 0.001

Political Efficacy is measured by an alienation scale, which has been reverse coded. This scale is made up of four items that measure the extent to which the student feels that young people have some say in the decisions of government, and that generally politicians are responsive to young people's needs and views.¹¹ The correlations in Table 2 indicate that students who engage in

¹¹ The actual questions were as follows: 1) Young people like me don't have a say about what the Government does; 2) I don't think that people in Government care much about what young people like me think; 3) Those elected to Parliament in Canberra lose touch with the people pretty quickly; and 4) Political parties are only interested in people's votes and not in their opinions. There were four response categories, ranging from strongly agree to strongly

volunteer activities also feel more empowered ($r = 0.08$). This suggests that engaging in forms of volunteer activity is consistent with an empowered feeling of being noticed politically, and of being able to have an impact on the decisions of government and politicians. However having a sense of social responsibility, or wanting to help people in need, does not correlate with political efficacy.

Political Freedoms is a factor variable, which measures the extent to which the student endorses citizen freedoms with respect to the government. It consists of three questionnaire items concerning the freedom to criticize the government, the benefits of government criticism, and the necessity of regular elections. The reliability coefficient for these items is 0.67. Both prosocial variables correlate positively with Political Freedoms ($r = 0.11$ for both), indicating that students who volunteer, or whose life aim is to help others, endorse political or civic freedoms.

Finally, *Human Rights* is a factor variable, made up of three questionnaire items, which measures the extent to which the student endorses political and human rights for migrants and women. The reliability coefficient for the items is 0.58. Consistent with the findings of Niemi and his colleagues (2000), students who engage in volunteer activities are not more tolerant regarding the rights of women and minority groups. However students who have a strong sense of social responsibility do have a strong commitment to human rights ($r = 0.22$).

These six domains are relatively independent of each other, which means they measure different aspects of political culture. The inter-correlations between the six domains range from zero to a high of 0.29 (the latter is between Attention to Politics and Activism Experience). Therefore it is appropriate to treat each as a dependent variable, and compare the effects of the independent variables across all six. In this way, it will be possible to determine how school students differentially acquire, or engage with, different components of political culture. Finally, it will be possible to determine the independent effects of student prosocial behaviour, as defined here, on the domains of political culture.

The Multivariate Analysis

The same variables described in Table 1 constitute the empirical model for the multivariate analysis of the determinants of the domains of political culture. OLS multiple regression procedures are used to test the hypothesis that the prosocial behaviour variables, independent of the other variables in the model, do contribute to, or cause an increase in political culture. Thus, if volunteer activity and sense of social responsibility remain significant when the other variables also have been included in the analysis, it can be concluded that they exercise an independent effect on the various domains of political culture.

Missing data were excluded using the pairwise deletion procedure. The resulting sample size for each analysis varied from a low of 832 for the political knowledge domain to a high of 1041 for the political freedom and human rights domains. As is apparent in Table 2, much of the missing data occurred with the creation of the factor variables. However given the nature of the dependent variables, and the robustness of the regression procedure, it is unlikely that the results have been systematically affected.

The figures reported in Table 3 include both the unstandardised (metric) and standardised regression coefficients of the model for each of the six political culture domains.¹² The

disagree. The responses were summed to form an additive scale. (See Table 1.) A high score indicates a high level of alienation.

¹² Only the variables that were statistically significant are shown in Table 3.

unstandardised coefficients (B) are useful in comparing the effects of a particular variable across the six political culture domains. The standardised regression coefficients (beta) are important for comparing the relative effects of each independent variable within the same political culture domain. The results for the two prosocial behaviour variables, as the variables of interest, are presented at the top of the table for ease of interpretation.

Table 3: Regression Coefficients of Independent Variables on Selected Political Culture Variables (Standardised Coefficients in Parentheses)

	Political Culture Variables					
	Political Knowledge	Attention to Politics	Activism Experience	Political Efficacy	Political Freedoms	Human Rights
Variables of Interest						
Pro-Social Variables						
Volunteer Activity	0.188*** (0.098)	0.328*** (0.167)	0.183** (0.099)	n.s.	0.163** (0.084)	n.s.
Social Responsibility	n.s.	0.123*** (0.130)	0.137*** (0.153)	n.s.	0.119*** (0.127)	0.131*** (0.139)
Control Variables						
Background						
State (ACT)	0.455*** (0.232)	0.191** (0.094)	n.s.	n.s.	0.131* (0.066)	-0.157** (-0.078)
Year in School	0.107** (0.087)	0.190*** (0.150)	n.s.	0.082* (0.065)	0.077* (0.061)	n.s.
Sex of Student (Male)	0.326*** (0.166)	0.118* (0.058)	-0.175** (-0.092)	n.s.	0.139* (0.070)	-0.461*** (-0.230)
Australian Born	n.s.	-0.279*** (-0.099)	n.s.	n.s.	n.s.	-0.293*** (-0.105)
Father's Occupational Status	n.s.	0.001* (0.080)	n.s.	n.s.	0.001* (0.095)	0.001* (0.088)
Mother's Occupational Status	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Father's Education	n.s.	n.s.	0.076** (0.139)	n.s.	n.s.	n.s.
Mother's Education	n.s.	n.s.	n.s.	n.s.	0.090** (0.133)	0.080** (0.118)
School						
Private School	0.213** (0.096)	0.213** (0.093)	n.s.	n.s.	n.s.	n.s.
Taught About Aust Government	0.257*** (0.131)	0.239*** (0.119)	n.s.	0.139* (0.069)	n.s.	n.s.
Interaction with Teachers	n.s.	0.127** (0.079)	n.s.	n.s.	n.s.	0.155** (0.097)
Like School	n.s.	0.198*** (0.149)	n.s.	n.s.	n.s.	0.113** (0.085)
Achievement Index	0.011* (0.077)	0.012** (0.080)	n.s.	n.s.	n.s.	0.010* (0.067)
Social Psychological						
Australian Identity	0.066* (0.066)	n.s.	n.s.	n.s.	n.s.	-0.101*** (-0.100)
Trust Government	n.s.	n.s.	n.s.	0.583*** (0.417)	-0.187*** (-0.135)	0.094* (0.067)
God is Important in Life	n.s.	0.078* (0.062)	-0.085* (-0.072)	n.s.	n.s.	n.s.
Constant	-3.235***	-4.368***	-1.435***	-2.120***	-1.576***	-0.685
R ² (adj)	0.188	0.299	0.11	0.209	0.065	0.181

n.s. = coefficient not significant, * p > 0.05, ** p > 0.01, *** p > 0.001

RESULTS

The analysis produced different patterns across the six political domains, with the variance explained (adjusted R^2) ranging from 29.9 per cent for Attention to Politics to a low of 6.5 per cent for Political Efficacy. Furthermore, there is considerable difference in the variables that make a contribution to the explanations for each of the six domains. Finally, some variables, in particular the two prosocial variables, show significant effects for most of the political culture domains. In order to facilitate the discussion of the findings, the profile for each political culture variable is briefly summarized below, and important points noted.

Political Knowledge

The independent variables in the model explain 18.8 percent (adjusted R^2) of the total variance in political knowledge. After controlling for other variables, Volunteer Activity causes a significant independent increase in Political Knowledge (beta = 0.10), whereas Social Responsibility, as might be expected from Table 2, does not. The positive relationship between volunteer activity and political knowledge is consistent with the findings of Niemi, Hepburn and Chapman (2000).

It is easy to argue that Volunteer Activity does increase political knowledge, because as an activity it brings the student into contact with the wider community and the social and political issues found there. On the other hand, a sense of social responsibility, as a goal in life, does not of itself provide the experiential basis for the motivation to acquire political knowledge. Berman (1997) argues that a sense of social responsibility, without some form of subsequent action, is not sufficient for higher levels of political consciousness and political knowledge.

The other contributing variables to an increase in Political Knowledge, in order of size of impact, (see the beta coefficients in parentheses) are a) being in the ACT rather than South Australia, b) being male, and c) having been taught about the Australian Government in school. Having engaged in volunteer activity and attending a private school are the next two important contributors. Finally, the remaining but less important contributors to Political Knowledge are higher Year level, higher academic achievement, and a positive Australian identity.

It is important to note that in the context of the model none of the home background variables, school interaction variables, religious commitment, or trust in government, were significant in predicting the student scores on the political knowledge variable.

Attention to Politics

The variables in the analytical model were successful in explaining about 30 per cent of the variance in Attention to Politics. All but five of the 18 independent variables contributed significantly. Of these variables, Volunteer Activity was the most important (beta = 0.17), followed by Year in School (beta = 0.15), Like School (0.15) and Social Responsibility (0.13). Thus the prosocial variables were among the most important in explaining how much the student possessed a political consciousness by reading and talking politics with family and friends. As with Political Knowledge, later year males, who came from private schools and who were engaged with the school, were also more attentive to politics. They were also more likely to come from the ACT, from higher socio-economic backgrounds, held religious beliefs, and most surprisingly, were likely to be non Australian-born (beta = -0.10). It is not clear why migrant students should be more attentive to politics, unless migrant status generates a heightened interest in the political culture of the new homeland. A closer examination of ethnicity would be necessary in order to explain further this somewhat counter-intuitive finding.

What is most important, however, is that both prosocial variables were significant in contributing to the extent of interest and attentiveness to politics among this sample of school students. Students who are involved in forms of prosocial behaviour are surrounded by people interested in politics, pay more attention to politics, and they talk more about it. To the extent that awareness and attention to politics provide an opportunity for the production of politically informed and engaged adults, the benefits of prosocial behaviour for adult active citizenship is clearly indicated in these figures.

Activism Experience

The variables in the model explain only a modest amount of variance in the demonstrated possession of activism experience, with only 11 per cent of the variance explained.

The most important variable contributing to activism experience is a sense of social responsibility ($\beta=0.15$). What is more interesting, however, is the fact that in the context of this model, volunteer activity is also a significant contributor to activist experience ($\beta=0.10$). It can be inferred, therefore, that the experience of engaging in voluntary activities, which involves a looking outwards toward the community and society, does contribute to the development of the participation skills and activist experience necessary for political engagement. Therefore, students who have prosocial actions and sentiments are also more likely to have experienced signing petitions, writing letters, and possibly joined a demonstration in support of a protest group.

Other characteristics which explain the experience of activism are being female ($\beta = -0.09$), and coming from a family background where the father has a higher level of education ($\beta = 0.14$). It is interesting, and perhaps consistent with a kind of humanitarian sense of responsibility, that having a secular rather than religious commitment also contributes to these activist tendencies ($\beta = -0.07$). In this domain of political culture, secular rather than religious values seem to prevail.

Political Efficacy

The model is very successful in explaining the extent to which the students feel politically empowered, with almost 21 per cent of the variance in Political Efficacy explained. However, what stands out with respect to this political culture domain is that only three variables emerge as important, namely Trust in Government ($\beta = 0.42$), having been taught about the Australian Government ($\beta = 0.07$) and year in school ($\beta = 0.07$).

Political Efficacy, or a sense of political empowerment, is the only political culture variable, which is not influenced by either prosocial variable. Neither volunteer activity nor a sense of social responsibility makes a significant independent contribution to the variance explained. From Table 2, it is clear that Sense of Social Responsibility would not be expected to be important, as it does not correlate with Political Trust. However volunteer activity does correlate to a small extent ($r = 0.08$). It may be that the importance of trust in government overpowers volunteer behaviour and the other variables in the model. It may be that that without trust, volunteer activity on its own does not lead to stronger feelings of political efficacy. Neimi and his colleagues (2000) did find a positive link between community service and political efficacy, but they did not have a measure of political trust among their control variables.

On the other hand, studies have shown that both political trust and political efficacy are affected by school experiences (Berman 1997; Niemi and Junn 1998). Students who have studied about the government generally feel more empowered and in control of their political environment. The figures in Table 3 support this relationship and indicate that having been taught about the government has an independent effect on Political Efficacy. For this domain of political culture,

these findings underscore the importance of the school context rather than prosocial behaviour as a major influence. Prosocial activity alone seems to have little to do with feelings of political efficacy.

Political Freedoms

The multivariate model was least successful in predicting attitudes towards political freedoms, with only about seven per cent of the variance explained. However, even within this small amount of variation, both Volunteer Activity and Sense of Social Responsibility were significant contributors. In short, students who had been involved in volunteer work and who had a sense of social responsibility were also much more likely to hold views which endorse political freedoms regarding the government (betas = 0.08 and 0.13 accordingly).

The most important predictors for the support of political freedoms were the lack of trust of the government (-0.14), and having a better-educated mother (0.13). Other variables which made significant but smaller contributions were higher father's occupational status (0.10), being male (0.07), living in the ACT (0.07), and higher year level (0.06). One of the more interesting patterns in explaining support for political freedoms is the absence of effects by school and school-related variables. The suggestion from this pattern is that attitudes toward political freedom with respect to government are more a function of social background and life experiences than schooling. This is consistent with the cognitive development explanation for the increasing complexity of political reasoning and understanding among youth (Berman 1997).

Human Rights

The model was successful in explaining the extent to which students held expansive views regarding the rights of various racial and ethnic groups, migrants and women, the variance explained being 18.1 per cent. It is therefore somewhat surprising, but not inconsistent with the findings of Niemi and colleagues (2000), that Volunteer Activity does not contribute to a belief in human rights. However having a strong sense of social responsibility is a significant contributor, with a beta of 0.14.

The strongest contributor to variation in commitment to human rights is sex of student: girls are much more likely to hold expansive views about human rights than boys (beta = -0.23). Similarly, students with better educated mothers, and those who were engaged with school (they liked school more, they interacted more with teachers, and they made better grades), and those who trusted the government, also were more committed to an inclusive view of human rights.

What is particularly interesting and unique in the pattern for this political culture variable is that students from South Australia (beta = -0.08), who were not Australian-born (- 0.11), and who did not have a strong sense of an Australian identity (- 0.10) were more likely to hold strong attitudes towards human rights. This pattern may in part be related to the operationalisation of the variable (the questionnaire items explicitly mentioned both migrants and women). However it may also be a function of personal experience in that being a migrant or a female might make a person more sensitive to human rights issues and less likely to take them for granted.

DISCUSSION

Prosocial Behaviour and Political Culture

The findings reported in this analysis confirm that youth involvement in prosocial behaviour represents a powerful independent contributor to the acquisition of a wide range of political culture domains. It is clear that students who engage in volunteer activity, even measured in a

somewhat crude and arbitrary manner, manifest a higher level of political knowledge, higher political attentiveness, greater political participation experience, and a stronger commitment to political freedom. This is an impressive range of political culture domains, and given that the significant impact of volunteer activity persists in a multivariate model in which another prosocial characteristic (social responsibility) and 15 demographic, home background, school and attitudinal variables are controlled, adds considerable significance to the findings presented here. Even in the two political domains for which the multivariate model was least successful in terms of total variance explained, namely political activism experience and political freedoms, the positive impact of volunteer activity remained.

It is interesting, but also perplexing, that the lack of a relationship between volunteer activity and the concern for human rights is consistent with that of Niemi and his colleagues (2000). Although several explanations were put forward, the fact that even with the variations in the measurement of variables, the consistency in the findings between these Australian youth and Niemi's American sample suggests that a concern for human rights, or what they call tolerance, somehow represents a domain of political culture which differs markedly from the others described in both studies. However, the fact that having a sense of social responsibility is related to an endorsement of human rights suggests that at least some prosocial tendencies might be driven by altruistic motives.

The second prosocial variable, having a sense of social responsibility, also exerted independent effects on four political culture domains, namely attention to politics, activism experience, commitment to political freedoms and commitment to human rights. However, the desire to help others as a goal in life is not related to political knowledge or a sense of political efficacy. Given that a sense of social responsibility is a community or social-oriented tendency, the possession of political knowledge and political efficacy, both individual-level political domains, may not be necessarily present. However activism experience, attention to political events, belief in political freedoms, and the endorsement of human rights could be categorised as outward-looking and more related to wider community and social issues. Therefore the patterns found in these data do have a plausible explanation.

The single domain for which the two prosocial tendencies were not related is that of political efficacy. One would think that either volunteer activity or wanting to help others could not exist without some feeling of political empowerment. However, the finding here indicates that the single most powerful factor influencing political efficacy is whether the students said they could trust the government. Clearly without trust, there can be no feeling of having an impact on political matters, irrespective of a person's prosocial tendencies.

Other Determinants of Political Culture

There are additional findings in this analysis that should not be overlooked. The importance of sex of student, and in particular the difference between boys and girls in the acquisition of political culture, should be explored further. While boys emerge as dominant in political knowledge, political attentiveness and commitment to civic freedoms, girls are dominant in the experience of activism and the concern for human rights. These differences are consistent with findings reported elsewhere (Saha 2000b; Saha 2002) and clearly demonstrate that sex differences are related to specific political culture domains.

The consistent positive impact of year of school (and by implication, age) for four of the six political culture domains strongly underscores the cognitive developmental explanation for the acquisition of political culture. Family background, as measured here, exercises only a modest and somewhat random impact on political culture. However where family background variables are

important, the direction of impact is consistent: higher status and higher levels of parental education do result in heightened engagement with political culture. Aspects of schooling are particularly relevant for three of the six political domains, namely political knowledge, attentiveness to politics, and a commitment to human rights. What is particularly interesting is that no school variables have an independent effect on the acquisition of activism experience or a commitment to political freedoms, while both prosocial variables did have strong impacts. Having been taught about the Australian government emerges as independently important for three of the six domains, and its impact on the feeling of political efficacy should be noted.

Finally, the minimal and mixed results regarding the importance of religious commitment suggests that there is not much of an independent link between religion and a commitment to various political domains. However, religious values may have a strong impact on prosocial activities, a question that is not explored here, but one that merits further investigation.

CONCLUSIONS

Niemi and his colleagues referred to their findings as a “mixed bag” (2000). In some respects this also may be said of the present Australian findings. However, the consistency of the findings, and the fact that youth involvement in forms of prosocial activity does exercise independent and significant positive impacts on political culture domains, provides very important implications for parents, schools, and communities. These findings strongly support the efforts of these agents to facilitate, and create prosocial programs as a means for improving the level of political culture among youth. Insofar as the possession of political culture is a desirable goal in the preparation of youth for adult political life, these findings have enormous significance for family practices and educational policies regarding the extracurricular activities of young people.

Parents who encourage their children to participate in forms of volunteer activity, or who inculcate in them a sense of social responsibility towards others, do contribute to the development of young people who will have higher levels of political culture. They also contribute to the complex process whereby young people become politically literate and politically active adults, which is a prerequisite for the maintenance of a democratic society.

These findings also have some positive implications for schools that not only encourage, but also require, students to acquire a strong prosocial perspective, both by encouraging forms of volunteer behaviour, and by creating a curriculum which promotes a feeling of responsibility for the community and the desire to help others (Berman 1997). Whether required or not, these educational interventions can have positive and favourable impacts on the prosocial development of youth. As the results of this study confirm, the engagement in these prosocial behaviours and dispositions will produce adults who are better equipped with the skills and motivation to become active citizens in the political life of society.

REFERENCES

- Baldock, C. V. (1999) Seniors as Volunteers: An International Perspective on Policy. *Ageing and Society*, 19 (5) (September), 581-602.
- Beck, P. A. (1977) The Role of Agents in Political Socialization. In S. A. Renshon, (ed) *Handbook of Political Socialization*. (pp.115-141), New York: The Free Press.
- Berman, S. (1997) *Children's Social Consciousness and the Development of Social Responsibility*. Albany: State University of New York Press.
- Coleman, J. C. and Hendry, L. B. (1999) *The Nature of Adolescence*. London and New York: Routledge.
- Delli Carpini, M. X. and Keeter, S. (1996) *What Americans Know About Politics and Why It Matters*. New Haven: Yale University Press.

- Eisenberg, N. (1996). Development of Prosocial Behavior. In E. De Corte and F. E., Weinert (eds) *International Encyclopedia of Developmental and Instructional Psychology*. (pp.206-209), Oxford: Pergamon Press.
- Evans, M. D. R. and Kelley, J. (2000) Charity Work: International Differences and Australian Trends. *Australian Social Monitor* 3 (1), 15-23.
- Fleming, N. (2000) *Longitudinal Surveys of Australian Youth*, Melbourne: ACER.
- Frazer, E. (1999) Introduction: the idea of politics. *Oxford Review of Education* 25 (1 and 2), 5-22.
- Gamson, W. A. (1992) The Social Psychology of Collective Action. In A. D. Morris and C. M. Mueller (eds) *Frontiers in Social Movement Theory*. (pp.53-76), New Haven and London: Yale University Press.
- Jennings, M. K., and Niemi, R. G. (1974) *The Political Character of Adolescence: The Influence of Families and Schools*. Princeton, N.J.: Princeton University Press.
- Loeb, P. R. (1994) *Generation at the Crossroads: Apathy and Action on the American Campus*. New Brunswick, N.J.: Rutgers University Press.
- Nathan, J. A. and Remy, R. C. (1977) Comparative Political Socialization: A Theoretical Perspective. In S. A. Renshon (ed) *Handbook of Political Socialization: Theory and Research*. (pp.85-111), New York and London: The Free Press.
- Niemi, R. G., Hepburn, M. A., and Chapman, C. (2000) Community Service by High School Students. *Political Behavior* 22 (1), 45-69.
- Niemi, R. G. and Junn, J. (1998) *Civic Education: What Makes Students Learn*. New Haven, Conn.: Yale University Press.
- Nunner-Winkler, G. (1994) Moral Development. In Torsten Husen and T. N. Postlethwaite (eds) *The International Encyclopedia of Education: Second Edition*. Vol 7, 3914-3920, Oxford: Pergamon Press.
- Pancer, S. M. and Pratt, M. W. (1999) Social and Family Determinants of Community Service Involvement in Canadian Youth. In M. Yates and J. Youniss (eds) *Roots of Civic Identity: International Perspectives on Community Service and Activism in Youth*. (pp.32-55), Cambridge, UK: Cambridge University Press.
- Roker, D., Player, K. and Coleman, J. (1999) Exploring Adolescent Altruism: British Young People's Involvement in Voluntary Work and Campaigning. In M. Yates and J. Youniss (eds) *Roots of Civic Identity: International perspectives on Community Service and Activism in Youth*. (pp.56-72) Cambridge, UK: Cambridge University press.
- Saha, L. J. (2000a) Education and Active Citizenship: Prospects and Issues. *Educational Practice and Theory* 22 (1), 9-20.
- Saha, L. J. (2000b) Political Activism and Civic Education among Australian Secondary School Students. *Australian Journal of Education* 44 (2) (August), 155-174.
- Saha, L. J. (2002) Australian School Students and Social Movement Support. Paper presented to the World Congress of Sociology, Brisbane.
- Sears, D. O. (1969) Political Behavior. In G. Lindzey and E. Aronson (Eds.), *The Handbook of Social Psychology*. Vol. 5, 315-458. Reading, Mass.: Addison-Wesley Publishing Company.
- Sears, D. O. (1990) Whither Political Socialization Research? The Question of Persistence. In O. Ichilov (ed) *Political Socialization, Citizenship Education, and Democracy*. (pp.69-97), New York: Teachers College Press.
- Seginer, R. (1999) Beyond the Call of Duty: The Service of Israeli Youth in Military and Civic Contexts. In M. Yates and J. Youniss (eds) *Roots of Civic Identity: International Perspectives on Community Service and Activism in Youth*. (pp.205-224), Cambridge, UK: Cambridge University Press.
- Verba, S., Schlozman, K. L., and Brady, H. E. (1995) *Voice and Equality: Civic Voluntarism in American Politics*. Cambridge, Mass.: Harvard University Press.
- Wilson, J. and Musick, M. (1997) Who Cares? Toward an Integrated Theory of Volunteer Work. *American Sociological Review* 62 (5) (October), 694-713.

Yates, M. (1999) Community Service and Political-Moral Discussions among Adolescents: A Study of a Mandatory School-Based Program in the United States. In M. Yates and J. Youniss (eds) *Roots of Civic Identity: International Perspectives on Community Service and Activism in Youth*. (pp.16-31), Cambridge, UK: Cambridge University Press.

Yates, M. and Youniss, J. (eds) (1999) *Roots of Civic Identity: International Perspectives on Community Service and Activism in Youth*. Cambridge, UK: Cambridge University Press.

Youniss, J. and Yates, M. (1999) Introduction: International Perspectives on the Roots of Civic Identity. In M. Yates and J. Youniss (eds) *Roots of Civic Identity: International Perspectives on Community Service and Activism in Youth*. (pp.1-15), Cambridge, UK, Cambridge University Press.

APPENDIX: DESCRIPTION OF ITEMS IN POLITICAL CULTURE FACTOR VARIABLES

POLITICAL VARIABLES	VARIABLE DESCRIPTION
Political Knowledge	
Total Australian Names Listed	Total Australian Political Figures Named: None = 1, 1 = 2 etc to 5 = 6
Total International Names Listed	Total International Figures Named: None = 1, one = 2, etc to 5 = 6
Houses of Parliament	Name Houses of Parliament: None = 1, one correct = 2, two correct = 3
Attention to Politics	
Active Interest in Politics	Interest in Politics: 1 = Not at All, to 4 = Active Interest in Politics
Read Politics	Do You Read Politics as Leisure?: 1 = Rarely, to 4 = Almost Every Day
Friends Interested in Politics & Religion	Talk to friends about politics and religion (two items): 2 = never, to 12=almost every day
Political Info from Friends	“Where do you get your information about political matters? friends”. 1=none, to 4=most.
Talk Politics with Family (additive scale)	Talk Politics With Dad, Mum and Friends: 3 = Never, to 18 = Every Day (Cronbach's alpha = 0.83)
Activism Experience (Normative Activism)	
Have signed a petition	Yes = 2, No = 1
Have collected signatures	Same as above
Have participated in a demonstration	Same as above
Have written or contacted the Prime Minister	Same as above
Have written or contacted a member of Parliament	Same as above
Have written or contacted the media	Same as above
Political Efficacy (Empowerment)	
Youth have a say in government	Strongly Agree = 5, to Strongly Disagree = 2
Government does care what the people think	Same as above
Government is in touch with the people	Same as above
Political parties are interested in people's opinions	Same as above
Political Freedoms	
Citizens must be free to criticize the government	Strongly Agree = 4, to Strongly Disagree = 4
It's good for the government to be criticised	Same as above
Regular elections are necessary	Same as above
Human Rights	
Migrants should for elections and take part in politics	Strongly Agree = 4, to Strongly Disagree = 1
No matter what a person's nationality, if they are qualified for a job, then they should get it	Strongly Agree = 4, to Strongly Disagree = 1
Women should have the same rights as men in every way	Strongly Agree = 4, to Strongly Disagree = 1

Effects of the Cooperative Class Experiment Teaching Method on Secondary School Students' Chemistry Achievement in Kenya's Nakuru District

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Successful teaching and learning of chemistry depends partly on correct use of a teaching method whose activities target most learning senses. Though chemistry enhances students' learning of biology, physics and agriculture on which Kenyan industries and prosperity depend, most secondary school students in Kenya perform poorly on the subject. This study sought to examine how the co-operative class experiment (CCE) teaching methods affect students' achievement. Using a non-equivalent control group design with 521 randomly selected students, the study found that CCE method facilitated students' chemistry learning more than regular methods. Gender did not affect achievement. Neither did school type significantly affect girls' achievement when CCE method was used but it significantly affected boys' achievement with boys in boys' schools attaining higher scores. Since CCE method benefited students irrespective of school type, education authorities should encourage chemistry teachers to use it and teacher educators to make it part of the teacher-training curriculum.

Cooperative Class Experiment Teaching Method, Secondary School,
Chemistry Achievement, Kenya

INTRODUCTION

Though teachers with high morale, motivation and a mastery of knowledge, learner difficulties and capacity to facilitate learning are important (Grauwe, 1999; Zadra, 2000), correct use of an appropriate teaching method is critical to the successful teaching and learning of chemistry. Students may learn names and definitions of chemical substances theoretically. But to master chemical reactions, they need to mix the chemicals and observe subsequent reactions. Knowledge of how teaching methods affect students' learning may help educators to select methods that improve teaching quality, effectiveness, and accountability to learners and the public. It may also help them keep up with information technology, globalisation and to avoid the *status quo* (Foster, Pinkst and Husman, 1991).

During the last four decades, Kenya's secondary school students' chemistry achievement has remained low (KNEC, 1999) necessitating several curriculum reviews. The first post-colonial chemistry curriculum, developed soon after attaining independence in 1963, was teacher and book centred and therefore inappropriate because it neglected students' abilities, interests and potential (Kenya Government, 1976; Kimiti, 1984). Later curricula attempted to ensure appropriate teaching methods but were not implemented successfully for lack of qualified chemistry teachers

(Kimiti, 1984; Mullei, 1987). They include the 1967 UNESCO Chemistry Pilot Project, the 1970 School Science Project and the 1973 Kenya National Examinations Council Chemistry Syllabus.

With the introduction of the 8-4-4-education system in 1985, the study of chemistry became compulsory in Forms 1 and Form 2 but many schools now offered it from Forms 1 to Form 4. The chemistry syllabus encouraged small group teaching and teaching through experiments and projects and although curriculum developers wanted chemistry taught through these learner-based approaches, its teaching in secondary schools remained largely expository (KIE, 1992; Kiboss, 1997; Mullei, 1987). The class experiment teaching method involves supervised learning activities with students doing practical work individually or in-groups (Das, 1985) while the Cooperative Class Experiment teaching method (CCE) incorporates co-operative learning into class experiments.

Cooperative learning is a comprehensive approach to teaching that derives from a theory of education and encompasses key assumptions about what students should learn and how they learn (Duke, 1990). Lessons in the cooperative learning strategy are arranged so that each student, ranging from the fastest to the slowest learner, has a contribution to make (Sapon-Shevin and Schniedewind, 1990). Because the students, in this approach, tutor one another, they are likely to acquire greater mastery of the material than in the common individual study with recitation pattern. Furthermore, the shared responsibility and interaction are likely to generate better inter-group relations, and result in better self-images for students with histories of poor achievement (Joyce and Weil, 1980).

Kenya's need for trained chemistry teachers is being met by her public universities (Egerton, Maseno, Kenyatta, Nairobi and Moi) and diploma colleges (Kenya Science Teachers' College and Kagumo Teachers' College). However, having trained teachers does not necessarily improve the quality of education (Mullei, 1987) as students' poor results in the Kenya Certificate of Secondary Education (KCSE) Physical Science Examination demonstrate. In 1998, for instance, only 17 per cent of the candidates obtained grade D+ and above (KNEC, 1999) while in the 1995 KCSE Chemistry Examination, over 62 per cent of the candidates obtained grade D+ and below. This number rose above 74 per cent in 1996 (Kariuki, 2001).

STATEMENT OF THE PROBLEM

Kenya secondary school students' continued poor performance concerns many Kenyans particularly because knowledge of chemistry facilitates the learning of biology, physics and agriculture (KNEC, 1992 and 1999; Royal Society, 1986). Out of the 52,096 boys and 36,753 girls entered for the 1998 KCSE examination, for instance, only 14 per cent and 10 per cent respectively scored grade D+ and above. Effective teachers generate the greatest opportunity for students to learn and technically manage instruction but teaching methods that allow students to use hands, eyes, ears and the mind also enhance effective learning and students' achievement (Mills, 1991; Sogomo, 2001; Waihenya, 2000). Expository teaching encourages competition among students but students who compete and fail or who do not even try to compete, resent those who succeed (Dembo, 1994; Sapon-Shevin and Schniedewind, 1990). Cooperative learning, on the other hand, enables students to help one another to learn in small groups. However, grouping students and telling them to work together does not, in itself, produce cooperation and higher achievement because some students seek a so-called 'free ride' on others, while high ability students may take over in ways that benefit themselves at the expense of the lower achievers (Johnson and Johnson, 1990). Pressure to conform may also suppress individual efforts. For cooperative group work to benefit students, they should trust one another, communicate effectively, accept and support one another, and resolve conflicts constructively (Johnson and Johnson, 1990). Hence the need to determine how CCE method improves students' learning and achievement.

OBJECTIVES OF THE STUDY

The study sought to investigate how CCE method affected students' achievement, to ascertain whether the cognitive achievement of students taught through CCE was statistically different from that of students taught through regular teaching (RT) methods, and to examine whether gender and group composition affected students' achievement.

NULL HYPOTHESES

The following hypotheses were tested at 0.05 α -level.

- Ho₁ There is no statistically significant difference between the achievement scores of students exposed to CCE and those who are not so exposed.
- Ho₂ There is no statistically significant difference in achievement scores between boys and girls who are exposed to CCE.
- Ho₃ There is no statistically significant difference in achievement scores between girls exposed to CCE and those who are not so exposed.
- Ho₄ There is no statistically significant difference in achievement scores between boys exposed to CCE and those who are not so exposed.
- Ho₅ There is no statistically significant difference in achievement scores between girls in co-educational classes and girls in girls' classes.
- Ho₆ There is no statistically significant difference in achievement scores between boys in co-educational classes and boys in boys' classes.

The conceptual framework (Figure 1) of this study was based on the systems theory developed by Ayot and Patel (1987) and Gerlach and Ely (1980) that portrayed the teaching-learning process as dynamic with inputs and outputs. With the assumption that teaching methods that involved students' cooperation led to worthwhile learning (Hanrahan, 1998), the study involved guided discovery in which teachers played key roles in planning and facilitating learning. Unlike expository teaching in which teachers explain all the information that students must learn, discovery learning helped students to take responsibility for their learning, emphasized high-level thinking, focused on intrinsic rather than extrinsic motivation, and helped the students remember important information (Bruner, 1961; Dembo, 1994).

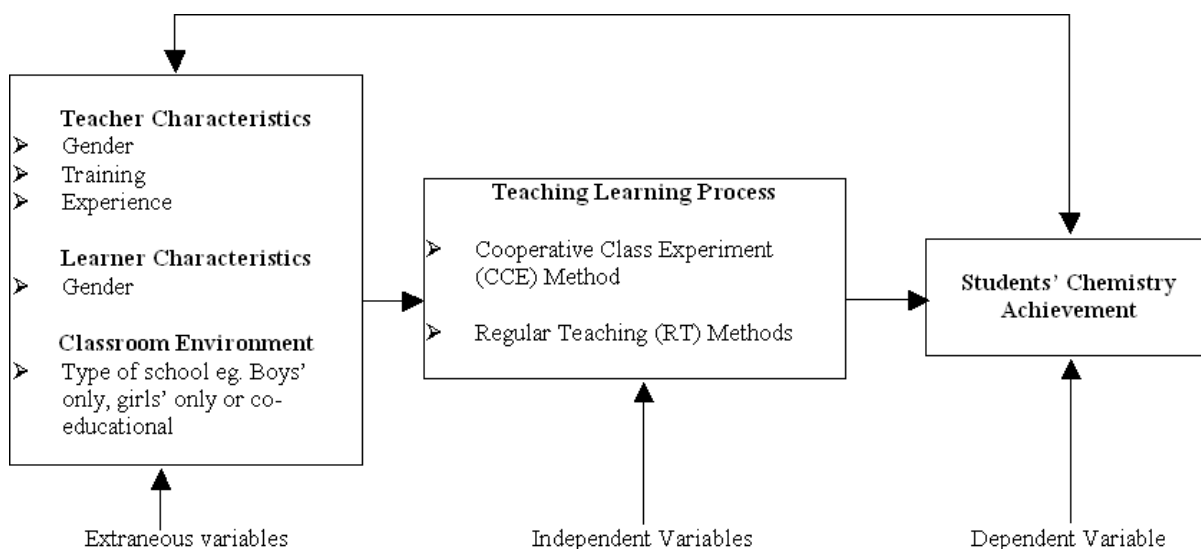


Figure 1. The conceptual framework used to investigate the effect of the CCE teaching method on students' chemistry achievement

RESEARCH METHOD

Since the classes existed as intact groups and could not, for ethical reasons, be re-constituted for research purposes, the study used Solomon's four-group, non-equivalent control group design, shown in Figure 2, which was rigorous enough for experimental and quasi-experimental studies (Borg and Gall, 1989). This design controlled all major threats to internal validity except those associated with interactions of selection and history, selection and maturation, and selection and instrumentation (Cook and Campbell, 1979). To control for teachers' gender, training and experience as sources of internal invalidity, only male teachers of equivalent training and experience were chosen. Form 1 students of approximately the same age were used to avoid the threat of maturity to internal validity.

Group 1 (N=142)	O ₁	X	O ₂	(Experimental Group)
Group 2 (N=129)	O ₃	*	O ₄	(Control Group)
Group 3 (N=120)	*	X	O ₅	(Experimental Group)
Group 4 (N=130)	*	*	O ₆	(Control Group)

Key: Pre-tests: O₁ and O₃; Post-tests: O₂, O₄, O₅ and O₆; Treatment: X

Figure 2. Solomon's Four Group, Non-Equivalent Control Group Design

Group 1 received the pre-test, X and post-test; Group 2 received a pre-test and post-test; Group 3 was not given the pre-test but received X and post-test; and Group 4 received the post-test only. Groups 2 and 4 were taught through the RT methods.

A stratified random sample of 12 schools, comprising four boys', four girls' and four co-educational schools was drawn from Nakuru District. The District Education Office (DEO) provided a list of secondary schools, information on Chemistry teachers' demographic characteristics, Form 1 class gender composition, school resources (science laboratory, chemicals, equipment and library), and students' ability based on their KCPE examination results while school records provided information on class composition and learner characteristics. Only schools with adequate apparatus and chemicals for teaching acids, bases and indicators were selected.

The four schools in each category were randomly assigned to treatment and control conditions. Each group had one boys', one girls' and one co-educational school. Randomly assigning the schools to the four groups controlled interaction between selection and maturation while interaction between selection and instrumentation was controlled by ensuring that administration of the instruments across schools was kept as similar as possible (Zechmeister and Shaughnessy, 1994). The instructional materials used were those approved by Kenya Institute of Education (KIE) and contained descriptions of chemistry experiments, safety precautions and two manuals, one for teachers and one for students. A 30 short answer Chemistry Achievement Test (CAT) whose Kuder-Richardson K-R20 reliability coefficient was 0.82 (Popham, 1990), which is above the 0.70 threshold for acceptable reliability (Fraenkel and Warren, 1990), tested knowledge, comprehension and application of acids, bases and indicators. Before administration, the CAT was pilot tested in girls', boys' and co-educational schools that were not part of the study but with similar characteristics.

Before pre-tests, teachers trained students in the experimental Groups 1 and 3 for two months on cooperative learning. Each week during the five-week treatment period had one lesson of 80 minutes in which students performed experiments and one of 40 minutes in which they discussed the topic or performed additional experiments. Students in the control Groups 2 and 4 were taught

through regular methods whose experiments involved teacher demonstrations. A post-test was given soon after the treatment ended supervised by one of the researchers. ANOVA was used to estimate differences in the four means of post-test scores while an F-test tested whether the differences were significant. For two means, a t-test was used because of its superior power in detecting differences between two means while ANCOVA was used to detect initial differences in the treatment and control groups (Borg and Gall, 1989; Coolican, 1994).

RESULTS

The CAT pre-test mean scores for Groups 1 and 2 and for male and female students were not significantly different, implying that the groups had comparable characteristics and therefore suitable for the study (Table 1 and 2). The independent sample t-test of CAT pre-test scores, based on school type, showed that students in co-educational schools were weaker compared with students in boys' and girls' schools (Table 3). ANCOVA was used to correct for initial group differences.

Table 1. Independent Samples t-test of Pre-test Scores on CAT

Variable	Group	Mean	Std. Dev.	t-value	p-value
CAT	1 (N=142)	5.32	2.4	0.40	0.69 (ns)
	2 (N=129)	5.19	3.0		

ns = not significance at $p < 0.05$ level; CAT maximum score = 50

Table 2. Independent Samples t-test of Pre-test Scores on CAT Based on Gender

Variable	Gender	Mean	Std. Dev.	t-value	p-value
CAT	Male (N = 152)	5.14	2.24	0.85	0.40 (Ns)
	Female (N = 119)	5.42	3.22		

Table 3. Independent Samples t-test of Pre-test Scores on the CAT Based on School Type

Gender	School Type	N	Mean	Std. Dev.	t-value	p-value
Male	Boys'	98	5.88	2.16	6.15	0.00 (s)
	Co-ed	54	3.79	1.69		
Female	Girls'	81	6.53	3.28	6.33	0.00 (s)
	Co-ed	38	3.05	1.16		

Effect of CCE on Students' Achievement

One-way ANOVA was used on students' post-test CAT scores to estimate the effect of CCE on student's chemistry achievement (Table 4 and 5). The differences in achievement among the four groups were significant ($F(3, 517) = 14.17, p < 0.05$).

The Least Significant Difference (LSD) test shows that the CAT mean scores of Groups 1 and 2, 1 and 3, 1 and 4, and 2 and 3 were significantly different at 0.05 α -level but the mean scores of groups 2 and 4, and 3 and 4 were not significantly different. Using students' KCPE examination scores as covariates (Table 6 and 7), ANCOVA confirmed that the differences between the means were significant at 0.05 α -level ($F(1, 516) = 23.27, p < 0.05$). The post hoc pair-wise comparisons based on the ANCOVA show significant differences between Groups 1 and 2, 1 and 4, 2 and 3 and 3 and 4. Differences between Groups 1 and 3, and 2 and 4 were not significant. The mean scores of Groups 1 and 3 were almost similar but higher than for Groups 2 and 4 (Table 6). The pre-test did not interact significantly with treatment and did not affect students' learning. The use of CCE resulted in higher students' achievement compared to the RT methods since Groups 1 and 3 obtained significantly higher scores. Therefore, H_{01} was rejected.

Table 4. Students' CAT Post-test Mean Scores

Group	1	2	3	4	Total
N	142	129	120	130	521
Mean Score	27.95	21.03	23.64	22.00	23.76

Table 5. ANOVA of Post-test Scores on the CAT

	Sum of Squares	df	Mean square	F	p value
Between Groups	3861.44	3	1287.15	14.17	0.00
Within Groups	46972.55	517	90.86		
Total	50833.99	520			

Table 6. Adjusted CAT Post-test Mean Scores for ANCOVA with KCPE Mark as Covariate

	N	Adjustment CAT Mean Score
Group 1	142	26.45
Group 2	129	21.58
Group 3	120	26.20
Group 4	130	20.74

Table 7. ANCOVA of the Post-test Scores on the CAT

	Sum of Squares	df	Mean Square	F	p-value
KCPE	201912.46	1	20912.46	414.075	0.00
GROUP	3526.08	3	1175.36	3.27	0.00
Error	26060.10	516	50.50		

Table 8 shows adjusted CAT post-test mean scores for ANCOVA with pre-test CAT as Covariate while Table 9 shows ANCOVA of the CAT post-test scores with CAT pre-test as Covariate. The difference between Groups 1 and 2 is highly significant ($F(1, 268) = 37.73, p < 0.05$). Since Group 1 was taught through CCE while Group 2 was taught through RT methods and the CCE method resulted in higher achievement, H_{01} was rejected.

Table 8. Adjusted CAT Post-test Mean Scores for ANCOVA with Pre-test CAT as Covariate

Group	N	Mean	Std. Error
12	142129	27.8321.16	0.7490.786

Table 9. ANCOVA of the CAT Post-test Scores with CAT Pre-test as Covariate

	Sum of Squares	df	Mean Square	F	p-value
CAT (Pre-test)	7462.36	1	7462.36	93.69	0.00
GROUP	3005.49	1	3005.49	37.73	0.00
Error	21346.47	268	79.65		

Table 10 shows the mean gain between students' CAT pre-test scores and post-test scores, which was higher for the experimental than the control group. The paired samples t-test between pre-test and post-test mean scores indicated that both Group 1 and 2 ($t(141) = 38.33, p < 0.05$, $t(128) = 16.03, p < 0.05$), gained significantly from the teaching. However, the CCE group had a higher mean gain than the control group implying that the CCE method resulted in higher achievement than the RT method.

Table 10. A Comparison of Students' Mean Scores with their Mean Gain in the CAT

	Overall (N = 271)	Group 1 (N = 142)	Group 2 (N = 129)
Pre-test Mean	5.26	5.32	5.19
Post-test Mean	24.66	27.95	21.03
Mean Gain	19.40	22.63	15.84

Effect of CCE on Gender

There was no significant difference between the 145 boys and 117 girls exposed to the CCE method (Groups 1 and 3) but girls had a slightly higher mean score than boys did (Table 11) ($t(260) = 0.62, p > 0.05$). An ANCOVA done to account for initial differences in achievement, showed no significant difference between boys and girls ($F(1, 259) = 1.36, p > 0.05$), implying that when exposed to the CCE method, the boys and girls performed equally well (Table 12). Therefore, H_{02} was retained.

Effect of CCE on Girls' Achievement

ANCOVA done on girls' post-test scores (Tables 13 and 14) shows that the 117 girls taught through CCE method did significantly better than the 119 girls, in the control condition, taught through the RT methods ($F(1, 233) = 5.26, p < 0.05$). Therefore, H_{03} was rejected.

Table 11. Independent Samples t-test of Post-test CAT scores of Boys and Girls Exposed to CCE

Gender	N	Mean	Std Dev.	t	df	p-value
Boys	145	25.69	8.6	0.62	260	0.54
Girls	117	26.33	8.0			

Table 12. ANCOVA of Post-test CAT scores of Boys and Girls Exposed to CCE

	Sum of Squares	df	Mean Square	F	p-value
GENDER	65.18	1	65.18	1.36	0.25
KCPE	5683.21	1	5683.21	118.46	0.00
Error	12425.33	259	47.97		

Table 13. ANCOVA of Post-test CAT Scores of Girls Exposed to CCE and Girls in the Control Condition (KCPE Score as Covariate)

	Sum of Squares	df	Mean Square	F	p-value
KCPE	14118.07	1	14118.07	307.65	0.00
GROUP	241.16	1	241.16	9	0.02
Error	10692.07	233	45.89	5.25	

Table 14. Girls' Adjusted CAT Post-test Mean Scores (KCPE Score as Covariate)

Treatment	N	Mean	Std. Error
CCE	117	26.89	0.63
Control	119	24.86	0.62

Effect of CCE on Boys' Achievement

Boys exposed to CCE performed significantly better ($F(1, 282) = 89.53, p < 0.05$), than boys in the control groups (ANCOVA: Tables 15 and 16). Therefore, H_{04} was rejected.

Table 15. ANCOVA of the Post-test CAT Scores of Boys Exposed to CCE and Boys in the Control Condition with KCPE Scores as Covariates

	Sum of Squares	df	Mean Square	F	p-value
KCPE	6416.84	1	6416.84	132.37	0.00
GROUP	4340.23	1	4340.23	89.53	0.00
Error	13670.80	282	48.48		

Table 16. Boys' Adjusted CAT Post-test Scores with KCPE Score as Covariate

Treatment	N	Mean	Std Error
CCE	145	25.86	0.58
Control	140	18.05	0.59

A Comparison of Girls' Achievement Between Co-educational and Girls' Classes

There were 82 girls exposed to CCE in girls' schools and 35 in co-educational schools (Tables 17 and 18). The girls' mean score in co-educational schools was higher than in girls' schools but the difference was not significant ($F(1,114)=1.86, p > 0.05$), implying that the CCE method is more beneficial to girls in co-educational than in girls' schools. However, this finding was not conclusive and therefore, H_{05} was retained.

Table 17. Girls' Adjusted CAT Post-test Mean Scores in the Experimental Groups

Schools' Type	N	Mean	Std Error
Girls'	82	25.79	0.64
Co-ed	35	27.60	1.06

Table 18. ANCOVA of Girls' CAT Post-test Mean Scores in the Experimental Groups Based on School Type

	Sum of Squares	df	Mean Square	F	p-value
KCPE	3184.96	1	3184.96	107.68	0.00
SCHOOL TYPE	54.859	1	54.86	1.86	0.18
Error	372.03	114	29.58		

A Comparison of Boys' Achievement Between Co-educational and Boys' Classes

Eighty-eight boys in boys' and 57 boys in co-educational schools were exposed to the experimental condition (Tables 19 and 20). The boys' mean score in boys' schools was significantly higher than that of boys in co-educational schools ($F(1,142)=8.79$, $p<0.05$). Consequently, H_{06} was rejected.

Table 19. Boys' Adjusted CAT Post-test Mean Scores in the Experimental Groups

School Type	N	Mean	Std Error
Boys'	88	27.34	0.85
Co-ed	57	23.15	1.07

Table 20. ANCOVA of the Boys' CAT Post-test Mean Scores in Experimental Groups Based on School Type

	Sum of Squares	df	Mean Square	F	p-value
KCPE	883.05	1	883.05	14.82	0.00
SCHTYPE	523.68	1	523.68	8.79	0.00
Error	8463.38	142	59.60		

DISCUSSION

Students taught through the CCE method performed significantly better than those taught through the RT methods. This implies that the CCE method enhanced students' achievement more than the RT methods did. A comparison of lecture and cooperative learning on students' chemistry achievement at the university undergraduate level found no significant difference (Banerjee, 1997). However, in Banerjee's study, chemistry experiments were not performed during the teaching process and the cooperative learning class did not get enough time to adjust to the new learning strategy. Students need sufficient time to develop the confidence and social skills necessary for effective participation in a cooperative-learning class (Johnson and Johnson, 1990). In this study, the researchers exposed students in the experimental groups sufficiently to the characteristics of cooperative learning before starting treatment.

Slavin (1990) cautions teachers who believe students can simply be placed in-groups, given interesting materials or problems to solve and allowed to discover information or skills. Successful cooperative learning should always include direct instruction because cooperative activities supplement, but do not replace, direct instruction. However, they involve individual accountability because group success depends on members' contribution to a team task. This study was done with these issues in mind and the results show that use of CCE method leads to better students' achievement than the RT methods.

Positive interdependence is critical to successful application of the CCE teaching method. It benefits both the weak and bright students because group memberships and interpersonal interaction are not, in themselves, sufficient to produce higher achievement and productivity.

Weak students benefit from interaction with brighter students and when bright students explain their ideas to others, they learn the material they are explaining in more depth and remember it longer (Johnson and Johnson, 1992; Johnson, Johnson and Smith, 1998). In a cooperative group, bright students are also seen as resources and are valued by team-mates. The CCE method exhibited these qualities. Hence the higher achievement reported.

Effect of CCE on Boys' and Girls' Achievement

There was no significant difference in achievement between boys and girls exposed to CCE method but both performed significantly better than those taught through RT methods. The Forum for African Women Educationists (FAWE) (1999) indicates that science achievement for girls in Kenya was lower than for boys partly due to their poor attitudes towards science and discouragement by their teachers. Some teachers assumed, for instance, that girls could not answer certain questions or perform certain tasks. They made remarks that indicated their biased beliefs or feelings that girls were unintelligent and lazy while using positive reinforcement more on boys than on girls (FAWE, 1997). The CCE method helped chemistry teachers to balance classroom interaction between boys and girls enabling them to give similar attention to both sexes, which led to improved achievement by both. It could be used to reduce gender disparity in achievement at KCSE chemistry examination.

A Comparison of Students' Achievement Between Co-educational and Boys' or Girls' Classes

According to the pre-test, students in co-educational schools were significantly weaker, before treatment, than students in boys' or girls' schools. Post-test results indicated that the CAT mean score for girls exposed to CCE in the co-educational schools was higher than for girls in girls' schools but the difference was not significant at the 0.05 α -level. In the control condition, the co-educational girls' post-test mean score was lower than that of girls in girls' schools. It was therefore noted that the CCE method enhanced girls' achievement in co-educational classes by a large margin implying that it was particularly beneficial to girls in co-educational schools.

When boys' achievement in co-educational classes was compared with that of boys in boys' classes, the CAT post-test mean score of boys exposed to CCE in co-educational classes was significantly lower than that of boys in boys' classes. The CAT pre-test results also show that boys in boys' classes were initially better than those in co-educational classes. Use of CCE method did not change this situation for boys but boys' achievement in both types of schools improved more than for boys in the control condition implying that the method was beneficial to boys in boys' and co-educational schools. It could therefore be argued that the effect of CCE method depended on students' gender and class composition. Girls in co-educational schools benefited most from the CCE method probably because they were initially weaker than girls in girls' classes were. If the CCE method were used longer, girls' achievement in co-educational schools would probably have been better than that of girls in girls' schools.

Sadker and Sadker (1986) and Wasanga (1997) found girls in co-educational classes less active than boys and noted that boys asked more questions in class and were called upon by teachers to answer questions or to help in experiments more often. The CCE method improved girls' confidence in conducting experiments especially in co-educational schools and although FAWE (1997) recommended construction of more girls' schools in Kenya to improve their performance, establishment of girls' classes might not be necessary if the CCE method were used in teaching. This method makes positive interdependence and individual accountability key factors in learning, leading to higher students' achievement.

CONCLUSIONS

The CCE method facilitates students' chemistry achievement more than the RT methods do. While using this method, gender does not affect students' chemistry achievement. Neither does school type significantly affect their achievement but it significantly affects boys' achievement with boys in boys' schools attaining higher achievement than those in co-educational schools do.

IMPLICATIONS OF THE STUDY

Students taught through the CCE method performed better than those taught through the RT methods irrespective of gender and school type, implying that the CCE method would be suitable for teaching both male and female students whether the school was single sex or co-educational. Therefore, education authorities in Kenya should encourage chemistry teachers to use this method and teacher education institutions to make it part of their teacher training curriculum content.

In this analysis of the data, no consideration has been given to students being nested within classrooms and schools. Since the sampling and treatment conditions occur at the school level the use of ANOVA and ANCOVA can be argued to be inappropriate. As a consequence the findings reported in this otherwise excellently conducted and well-reported study must be viewed with some caution because the errors used in testing for statistical significance are inappropriately estimated (Editor, IEJ).

REFERENCES

- Ayot, H.O. and Patel, M.M. (1987). *Instructional methods*, (pp.34-53). Nairobi, Kenya: Kenyatta University.
- Banerjee, A.C. (1997). Effects of lecture and co-operative learning strategies on achievement in chemistry in undergraduate classes. *International Journal of Science Education*, 19 (8), 903-910.
- Borg, W.R. and Gall, M.D., (1989). *Educational research: An introduction*, (5th ed. pp. 668-737). White Plains, NY: Longman.
- Bruner, J. (1961). The act of discovery. *Harvard Educational Review*, 31, 21-32.
- Cook, T.D. and Campbell, D.T. (1979). *Quasi-experimentation: Design and analysis issues for field settings*, (pp. 19-21). New York, NY: Rand McNally.
- Coolican, H. (1994). *Research methods and statistics in Psychology*, (2nd ed. pp. 278-292). London: Hodder and Stoughton Educational.
- Das, R.C. (1985). *Science teaching in schools*, (pp.47-79). New Delhi: Sterling Publishers Ltd.
- Dembo, M.H. (1994). *Applying educational psychology* (5th ed. pp.170-186) White Plains, NY: Longman Publishing Group.
- Duke, D. L. (1990). *Teaching: An introduction*, (pp. 89-106). New York, NY: McGraw-Hill Publishing Co.
- FAWE (1997). *Teachers' attitudes to the study of science, mathematics and technical subjects by girls in secondary schools. Report Number 7* (pp. 7-16). Nairobi, Kenya: Self.
- FAWE (1999). *Improving performance of girls in schools*. (pp. 8-10). Nairobi, Kenya: Self.
- Foster, R. M., Pinkest, J. J. and Husman, D. E. (1991). *Self-perception of gender bias among agriculture teachers*. Proceedings of the 18th. Annual National Agricultural Education Research Meeting. Los Angeles, CA.
- Fraenkel, J.R. and Wallen, N.E. (1990). *How to design and evaluate research in education*, (pp.230-270). New York, NY: McGraw-Hill Inc.
- Gerlach, V.S. and Ely, D.P., (1980). *Teaching and media: A systematic approach*, (pp.2-39). New Jersey, NJ: Prentice-Hall Inc.
- Grauwe, A. D. (1999). The challenges for the school of the future: *International Institute for Educational Planning, XVII* (4), 10 and 11.
- Hanrahan, M. (1998). The effect of learning environment factors on students' motivation and learning. *International Journal of Science Education* 20(6), 737-753.
- Johnson, D.W. and Johnson, R. T. (1990). Social skills for successful group work. *Educational Leadership* 47 (4), 29-33.

- Johnson, D.W. and Johnson, R.T. (1992). *Creative controversy: Intellectual challenge in the classroom*. Edina, MN: Interaction Book Company.
- Johnson, D.W., Johnson, R.T. and Smith, K. (1998). *Active learning: Cooperation in the college classroom*, (pp. 47-49). Edina, MN: Interaction Book Company.
- Joyce, B. and Weil, M. (1980). Models of teaching, (pp. 374-380). New Jersey, NJ: Prentice-Hall.
- Kariuki, W. (2001, February 26). Teachers alarmed as standards go down. *The Daily Nation*, (p.17) Nairobi, Kenya: Nation Media Group Ltd.
- Kenya Government (1976). *Report of the national committee on education objectives and policies*, (pp. 69-72). Nairobi, Kenya: Government Printer.
- Kenya Institute of Education (1992). *Secondary education syllabus volume 7*, (pp. 25-41). Nairobi, Kenya: Kenya Literature Bureau.
- Kenya National Examinations Council (1992). 1990 KCSE examination report, (pp. 82-96). Nairobi, Kenya: Self.
- Kenya National Examinations Council (1999). *The performance of students in KCSE science and mathematics from 1994 to 1998*. Nairobi, Kenya: Self.
- Kiboss, J.K. (1997). *Relative effects of a computer-based instruction in physics on students attitudes, motivation and understanding about measurement and perceptions of classroom environment*. Unpublished Ph.D. Thesis, University of Western Cape, Bellville.
- Kimiti, D.K. (1984). *Chemistry curriculum in Kenya Secondary Schools since independence*. Unpublished PGDE Report, Nairobi, Kenya: Kenyatta University.
- Mills, H. R. (1991). Teaching and training: A handbook for instructors (3rd ed., pp. 154-166). London: Macmillan Publishers.
- Mullei, V.M. (1987). *Comparative analysis of attitudes towards inquiry and non-inquiry science teaching methods between pre-service and in-service secondary school science teachers*. Unpublished Ph.D. Thesis, Kenyatta University, Nairobi, Kenya.
- Popham, W.J. (1990). *Modern educational measurement: A practitioner's perspective*, (2nd ed. pp. 120-145). Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Royal Society (1986). Science for everybody. In B. G. Atwood (Ed.) *Education in science*, (pp. 25-30). Norfolk: Association for Science Education.
- Sadker, M. and Sadker, D. (1986). Sexism in the classroom: From grade school to graduate school. *Phi Delta Kappan*, 67, 512-515.
- Sapon-Shevin, M. and Schniedewind, N. (1990). Selling cooperative learning without selling it short. *Educational Leadership*, 47 (4), 63-65.
- Slavin, R. (1990). Cooperative learning: Here to stay or gone tomorrow? *Educational Leadership* 47 (4), 3.
- Sogomo, B. (2001, February 24). Improving maths and science teaching. *East African Standard*, (p.17) Nairobi, Kenya: The Standard Ltd.
- Waihenya, K. (2000, March 6). Maths syllabus under scrutiny. *Daily Nation*, (p. 21). Nairobi, Kenya: Nation Media Group Ltd.
- Wasanga, C.M. (1997). *The attitude towards science among primary and secondary school students in Kenya*, (pp. 1-14). Nairobi, Kenya: Academy of Science Publishers.
- Zadra, E. (2000, April-June). Learning as a gateway to the 21st century. *International Institute for Educational Planning Newsletter*, 18 (2), 14.
- Zechmeister, E.B. and Shaughnessy, J.J. (1994). *A practical introduction to research methods in psychology*, (2nd ed. pp. 169-173). New York, NY: McGraw-Hill, Inc.

Peer Victimization and Conflict Resolution Among Adolescent Girls in a Single-sex South Australian School

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This study investigated the peer victimisation and conflict resolution experiences of adolescent girls attending a single-sex school. A modified version of the Direct and Indirect Aggression Scales (DIAS, Björkqvist, Österman, and Kaukiainen, 1992) and conflict resolution scales, drawn particularly from the work of Feldman and Gowen (1998), were administered to 325 students in Years 8 to 11. Girls in all year levels experienced more indirect and verbal than physical victimisation, and older girls were subject to more indirect and verbally aggressive behaviours than younger girls. Non-victims used less overt anger and avoidance than victims. Collectively, the girls used more compromise, avoidance, social support and obliging than overt anger. The results advance our understanding of the behaviours of adolescent girls in conflict with each other in a single-sex setting.

Victimisation, aggression, conflict resolution, adolescent, girls

INTRODUCTION

For a long time it was thought that males were the more aggressive sex (Maccoby and Jacklin, 1974). Past research, however, failed to include behaviours other than direct physical or verbal, specify the context (e.g., school, work, groups, or individuals) and type of encounter (e.g., cross-sex or same-sex), and used mostly observational methods that favoured the recognition of physical aggression salient to boys (Björkqvist, Österman, and Lagerspetz, 1994). The aggressive behaviours that exist outside the traditional direct physical and verbal forms are now widely recognised (e.g., Cairns, Perrin, and Cairns, 1985; Crick, 1995; Owens, 1996; Galen and Underwood, 1997; Lagerspetz, Björkqvist, and Peltonen, 1988); however, a number of terms including indirect, relational and social, have been coined to accommodate slightly different perceptions of them (for recent debate see Archer, 2001; Björkqvist, 2001; Underwood, Galen, and Paquette, 2001a; Underwood, Galen, and Paquette, 2001b). The term indirect aggression has been adopted here to encompass distinctly covert behaviours (e.g., spreading rumours), as well as behaviours considered more direct (e.g., dirty looks), exhibited in ways that may or may not involve social manipulation. An important characteristic of all the behaviours recognised as indirectly aggressive in the current study are their “covered” (Björkqvist, Österman, and Kaukiainen, 1992) nature whereby they are masked to not appear aggressive (e.g. gossip regarding a so called true fact) or can be explained away as not being aggressive (e.g., a dirty look could be explained as having been imagined or misdirected). With the recognition of indirectly aggressive behaviours, research reveals that adolescent girls use more indirect and verbal than physical aggression in same-sex (Björkqvist, Lagerspetz, and Kaukiainen, 1992; Lagerspetz and Björkqvist, 1994) and mixed-sex interactions (Russell and Owens, 1999) in co-educational schools. It is therefore the nature of aggression that differs between the genders, rather than aggressiveness being a predominantly male trait.

Although there is a large pool of conflict resolution research, surprisingly few studies have combined adolescent victimisation in educational settings with that of overcoming conflict arising from problems such as victimisation (for exceptions see Lindeman, HaraKka, and Keltikangas-Jarvinen, 1997; and Österman et al., 1997). Conflict is generally conceptualised as at least one incident of mutual opposition and so its resolution requires actions that terminate the oppositional exchange (Collins and Laursen, 1992; Jensen-Campbell, Graziano, and Hair, 1996). The strategies employed to overcome conflict commonly encompass the categories of overt anger, compromise, avoidance, social support, obliging and distraction (Bird and Harris, 1990; Feldman and Gowen, 1998; Gross and Guerrero, 2000; Maccoby, 1988, 1990). The current study aimed to investigate the links between victimisation and conflict resolution strategies.

Without a male audience, girls attending a single-sex girls' school may behave differently toward each other than if male peers were present. In the absence of boys, it may be that girls feel less restrained by gender role expectations and utilise more overt forms of aggression. However, research by Watson (1997) suggests that all-girls schools may strengthen female gendered norms, which oppose overt displays of aggression. Similarly, Eagly and Wood (1991) argued that the presence of an audience, which is perceived to support social norms, is likely to affect an individual's behaviour in favour of conforming to those norms. It is possible then, that girls attending a single-sex school may behave differently toward one another than those in a coeducational environment. The current research investigated the forms of aggression and conflict resolution used by girls in a single-sex school.

The power assertion associated with overt anger often aggravates conflicts and tends to destroy relationships. Resolving conflicts using compromise, however, facilitates the sharing of power needed to preserve the interconnectedness within voluntary relationships (Jensen-Campbell et al., 1996; Leyva and Furth, 1986). Accordingly, compromise has been found across both adolescent peer romantic relationships (Feldman and Gowen, 1998; Laursen, Finkelstein, and Betts, 2001) and same- and mixed-gender specific friendships to be the preferred conflict resolution strategy (Jensen-Campbell et al., 1996; Laursen et al., 2001; Österman et al., 1997; Owens and Daly, 2002). Avoidance, social support, obliging and distraction, like compromise, may serve partly to meet other people's needs in conflict situations. Consequently, they are more constructive (Jensen-Campbell et al., 1996) and so their use is heightened when maintaining harmonious relationships is important, such as in that of girls' peer friendships (Feldman and Gowen, 1998). They also meet the peaceful female gender-role convention in comparison to overtly angry responses (Alson and Romer, 1996).

Avoidance may be likened to some forms of indirect aggression (e.g., ignoring) which adolescent girls are reputed to use in their deliberate attempts to manipulate peer relationships and inflict pain (Owens, Shute, and Slee, 2000). Adolescent girls are also likely to use avoidance strategies (Feldman, Fisher, Ransom, and Dimiceli, 1995) as well as seek social support (Bird and Harris, 1990; Feldman et al., 1995) when involved in family problems. Obliging behaviours, like putting others' needs ahead of their own (Alson and Romer, 1996; Laursen et al., 2001), and seeking the support of friends (i.e., social support) (Österman et al., 1997; Stark, Spirito, Williams, and Guevremont, 1989) are also considered typical conflict resolution strategies for females. They are consistent with female gender-role expectations of showing compassion, kindness and providing help (Eagly and Crowley, 1986), e.g., when acting as go-betweens in reconciling conflicting parties (Nilan, 1991). However, because distraction is not associated with the emotional expression and the connectedness distinctive of female friendships, it is more attributable to males who have a preference for autonomy in their relationships (Feldman and Gowen, 1998; Lagerspetz and Björkqvist, 1994). Consequently, to resolve conflicts within same-sex peer relationships,

girls' may use more compromise, avoidance, social support and obliging, and less overt anger and distraction.

Research by Owens and Daly (2002) in a co-educational secondary school revealed that non-victims used more compromise than victims of same-sex aggression, while victims used more overt anger, avoidance and distraction. Similarly, in a study by Jensen-Campbell et al. (1996), pre-adolescents who reported high levels of agreeableness when describing themselves (using personality and self-concept scales) in response to hypothetical conflict scenarios were found to endorse compromise. In contrast, those found to be less agreeable displayed an acceptability of power assertion. The preference of compromise by non-victims and those more agreeable in conflict situations may again support the notion that compromise is more successful at resolving adolescent peer conflicts than overt anger, which may aggravate conflict. It may also be indicative of more mature social reasoning (i.e., higher social intelligence) used to prevent conflicts before they become overt (Österman et al., 1997). Like compromise, avoidance and distraction may partly meet other people's needs. However, they may also be a consequence of victims not knowing what to do (i.e., lacking the social intelligence) to resolve conflicts. Consequently, as for overt anger, the use of avoidance or distraction may mean that conflict is ongoing rather than resolved, and so victims may be prone to further victimisation.

Many forms of indirectly aggressive behaviours require both the social skills and the cognitive capacity, or social intelligence, to predict social outcomes. Research supports this developmental concept with older adolescent girls using, and so also experiencing, more indirect aggression than younger girls in co-educational contexts (Björkqvist, Lagerspetz et al., 1992; Lagerspetz and Björkqvist, 1994; Owens, 1996). An age-related decline in power assertion (i.e., overt anger) during adolescence also gives way to more complex, adult-like resolution techniques (Collins and Laursen, 1992). Leyva and Furth (1986) found that, in response to hypothetical conversation dialogue, constructive compromise increased with the age of both adolescent boys and girls. Feldman et al. (1995) also found that compromise and social support were most closely correlated with older than younger adolescents in their romantic relationships. Lindeman et al. (1997) revealed particularly that, with age, adolescent girls use more withdrawal type strategies like avoidance. Consequently, developmental trends suggest that the use of compromise, avoidance and social support is likely to be higher for older than younger adolescent girls.

To address the issues in the preceding discussion the following hypotheses were investigated

- a) girls experience significantly more indirect and verbal than physical victimisation;
- b) girls use significantly more compromise, avoidance, social support and obliging than overt anger and distraction;
- c) non-victims use more compromise and less overt anger, avoidance and distraction than victims;
- d) older girls experience significantly more indirect aggression than younger girls; and
- e) older girls use significantly more compromise, avoidance and social support than younger girls.

METHOD

Participants and Procedure

A total of 325 students in year levels 8 to 11 from a single middle-class, all-girls school in metropolitan Adelaide, South Australia, participated in the study (with 140, 54, 69 and 62 participants representing the respective year levels). The responses from 11 students in Year 8 and one student in Year 9 were excluded because they consisted entirely of missing or zero values. The average age of the participants by year level was 13.0, 14.1, 15.1 and 15.7 years old

respectively. All students had parental consent to participate and their confidentiality and anonymity were preserved.

Two self-report pencil-and-paper questionnaires using a five-point Likert scale were employed. Self-report may be considered problematic because some strategies have a greater social acceptance than others, and so some behaviours are less likely to be revealed than others. Accordingly, research has failed to find significant correlations between girls' self- and peer-estimated reports of indirect aggression (Björkqvist, Lagerspetz et al., 1992; Lagerspetz et al., 1988; Laursen et al., 2001). However, self-reporting overcomes ethical concerns associated with asking students to nominate and estimate the aggressiveness of their peers. In addition, given that the participants would otherwise need to infer how their named peers resolved conflict, or make inferences through observational techniques whereby some conflict resolution strategies like avoidance (and some indirectly aggressive behaviours) may not be clearly observable (Bryant, 1992), self-estimation was considered to be a more appropriate option. The use of self-reporting is further supported by its development and application in other aggression (e.g., Olweus, 1996; Rigby and Slee, 1995) and conflict resolution research (e.g., Charlton, 2001; Feldman and Gowen, 1998).

The Victimization Instrument

The frequency that adolescent girls experienced peer victimisation within the current year and school context was measured using a modified version of the Direct and Indirect Aggression Scales (DIAS) originally developed by Björkqvist, Österman et al. (1992). The current modifications included the rewording of items to allow self-estimation and the merging of similar items to allow the addition of others that reflect current emerging issues, such as "receiving nasty anonymous electronic messages from other students". Presented in a random sequence to the participants, 18 items represented the scales of direct physical (e.g., hitting), direct verbal (e.g., yelling), and indirect aggressive behaviours (e.g., spreading rumours). Table 1 specifies the items delineating the three scales and reveals their reliability assessment using Cronbach's alpha compared to those reported by Björkqvist, Österman et al. (1992). The lower alphas in the present study may be due to the instrument's adaptation as a self-estimation tool and the modifications outlined above.

Table 1. Cronbach's Alpha for the Victimization Questionnaire Scales in the Current Study and Björkqvist, Österman et al. (1992)

Scales	The current study		Björkqvist et al. (1992)
	Alpha (α)	*Scale Items	Alpha (α)
Physical	0.68	being hit; being kicked; being tripped; being pushed or shoved; having things taken from you	0.93
Indirect	0.84	having bad or false things said behind your back (e.g., rumours); being left out or excluded from the group; having nasty notes written or spread about you; receiving nasty anonymous electronic messages from other students (e.g., mobile phone text messages or emails); having your secrets told to other people (breaking confidences); receiving prank telephone calls (from other students); being ignored; being the object of "daggers" or dirty looks	0.92
Verbal	0.81	being yelled at; being called names; being insulted (e.g., about your clothing or appearance); being teased; being threatened	0.93

Note. *scale items are modified from those in Björkqvist, Österman et al. (1992) study.

The Conflict Resolution Instrument

A 28-item questionnaire based on Feldman and Gowen (1998) and Charlton (2001) and adapted from Rands et al. (1981) and Straus (1979, cited in Feldman and Gowen, 1998), was employed to estimate the frequency with which the participants used the conflict resolution strategies with their school peers in the current year. The items represented six different scales: overt anger, compromise, avoidance, social support, obliging and distraction, and were administered in a random order. The violence scale of the original questionnaire was removed due to its overlap with the direct physical and verbal aggression items in the victimisation questionnaire. A three-tactic obliging scale was incorporated based on behaviours outlined by Gross and Guerrero (2000) and Maccoby (1988, 1990) and its inclusion by Charlton (2001). In an attempt to improve the reliability of the social support scale, the suggestion by Charlton (2001, p. 62) to include the item “seeking help from a friend” saw the incorporation of four new items: “bring in or try to bring in a friend”, “talk to a friend”, “talk to a parent” and “talk to a teacher”. Also, as recommended by Charlton (2001) to improve reliability, the item “distract yourself or the other person through entertainment or relaxation” was included in the distraction scale. Table 2 locates each item into their respective scales and reports the Cronbach’s alpha reliability for each scale in the present study along side those reported in Feldman and Gowen (1998) and Charlton (2001). The new items incorporated in the social support and distraction scales may explain their greatly improved reliabilities.

Table 2. Cronbach’s Alpha for the Conflict Resolution Questionnaire Scales in the Current Study, Feldman and Gowen (1998), and Charlton (2001)

Scales	The current study		Feldman and Gowan (1998)	Charlton (2001)
	Alpha (α)	Scale Items	Alpha (α)	Alpha (α)
Overt anger	0.85	get angry and yell; hurt other person’s feelings; get sarcastic; get angry and walk away; make other person feel bad; get angrier the more I talk; stay angry a long time	0.84	0.93
Compromise	0.81	try to reason; listen and try to understand; try to work out a compromise; try to smooth things over	0.74	0.82
Avoidance	0.64	clam up and hold my feelings inside; walk away and discuss later; get cool and distant / give cold shoulder; try to avoid talking about it	0.67	0.65
Social support	0.72	talk to a brother or sister; bring in or try to bring in a friend; talk to a friend; talk to a parent; bring in or try to bring someone (to help); talk to a teacher	0.18	0.29
Obliging	0.66	put the other person’s needs first; apologise to other person; give in to what other person wants	n/a	0.57
Distraction	0.61	try to be funny and make light of it; tell myself it is not important; watch TV or play video games; distract yourself or the other person through entertainment or relaxation	0.26	0.33

Note. Italicised items are new additions to the scales used by Feldman and Gowen (1998) and Charlton (2001).

Determination of Victim Status

A procedure derived from Crick (1995) and Crick and Grotpeter (1995) to identify relationally aggressive children from non-relationally aggressive children was used to identify victims from non-victims. Total victimisation scores were obtained by calculating the mean of all 18 items on the victimisation scale. The victim group included those participants whose total mean victimisation score was at least one standard deviation above the overall sample mean. The rest were classified as non-victims.

RESULTS

The means and standard deviations for each victimisation and conflict resolution scale, as calculated from the 0 (never) to 4 (very often) Likert scale responses, are reported by year level in Tables 3 and 4. Although data collected using Likert scales are “almost always analysed by parametric tests” (Harris, 1998, p. 479), the data from this study violated the assumptions of parametric testing. The data were not normally distributed and the variances of each scale were not similar. Consequently, non-parametric testing was employed.

Related samples were analysed using the Friedman test followed by Wilcoxon post-hoc analyses. The Kruskal-Wallis test was employed for independent samples and the Mann-Whitney U test used for post-hoc analyses. The Friedman test is favourably compared to the most powerful equivalent parametric test, the F test, and likewise “the Kruskal-Wallis test seems to be the most efficient of the non-parametric tests for k independent samples” (Siegel, 1956, p. 194). The Mann-Whitney U test is “an excellent alternative to the t test” (Siegel, 1956, p. 126) because its power efficiency is comparably high, as is the power efficiency of the Wilcoxon test, when the assumptions for parametric testing cannot be met.

Table 3. Means and Standard Deviations for Victimization Scales by Year Level

Year Level	Physical	Verbal	Indirect
	M (SD)	M (SD)	M (SD)
8	0.24 (0.32)	0.40 (0.49)	0.49 (0.51)
9	0.25 (0.35)	0.60 (0.52)	0.72 (0.53)
10	0.27 (0.42)	0.71 (0.67)	0.68 (0.56)
11	0.25 (0.39)	0.67 (0.75)	0.79 (0.70)

Note: N=312

Table 4. Means and Standard Deviations for Conflict Resolution Scales by Year Level

Year Level	Overt Anger	Compromise	Avoidance	Social Support	Obliging	Distraction
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
8	0.93 (0.73)	2.00 (1.05)	1.33 (0.76)	1.38 (0.80)	1.56 (0.93)	1.41 (0.92)
9	1.28 (0.71)	2.00 (0.21)	1.42 (0.76)	1.33 (0.71)	1.62 (0.66)	1.55 (0.82)
10	1.31 (0.90)	1.99 (0.84)	1.49 (0.84)	1.39 (0.74)	1.66 (0.85)	1.69 (0.79)
11	1.40 (0.78)	1.96 (0.84)	1.71 (0.84)	1.33 (0.72)	1.64 (0.86)	1.63 (0.68)

Note: N=313

Overall Differences

Hypothesis 1: Girls experience more Indirect and Verbal than Physical Victimization

Friedman analysis revealed an overall significant difference between the victimisation scales ($\chi^2(2) = 187.1, p < 0.05$). Bonferroni-corrected Wilcoxon post-hoc analyses confirmed that the girls experienced significantly more Indirect ($N = 312$) (z -score = -11.8, $p < 0.017$) and Verbal (z -score

= -10.1, $p < 0.017$) than Physical victimisation. The post-hoc analyses also revealed that significantly more Indirect than Verbal victimisation occurred (z -score = -3.49, $p < 0.017$).

Hypothesis 2: Girls use more Compromise, Avoidance, Social Support and Obliging, than Overt Anger and Distraction

A Friedman analysis performed on the six conflict resolution scales yielded a significant result ($\chi^2(5) = 217.8$, $p < 0.05$). Bonferroni-corrected Wilcoxon post-hoc analyses, reported in Table 5, confirmed the prediction that girls use significantly more Compromise, Avoidance, Social Support and Obliging than Overt Anger, and significantly more Compromise than Distraction. However, contrary to the hypothesis, there was no significant difference between Avoidance or Obliging and Distraction, and there was significantly less Social Support used than Distraction.

Table 5. Results of Wilcoxon Post-Hoc Analyses for Conflict Resolution Scale Interactions

Comparison	Z-score	Significance
Overt Anger with		
Compromise	-10.67	0.000
Avoidance	-6.68	0.000
Social Support	-4.16	0.001
Obliging	-7.08	0.000
Distraction with		
Compromise	-7.76	0.000
Avoidance	-1.82	0.069
Social Support	-3.45	0.001
Obliging	-1.35	0.176

Note. N = 313

Hypothesis 3: Non-victims use more Compromise and less Overt Anger, Avoidance and Distraction than Victims

Due to small sample sizes for the Victim groups by year level, Victims and Non-victims from each year level were combined (see Table 6). The Mann-Whitney U test, confirmed that Non-victims used less Overt Anger and Avoidance than Victims (z -score_{overt anger} = -5.95, z -score_{avoidance} = -4.03, $p < 0.05$). However, there was no significant difference between the Victim and Non-victim groups' use of Compromise or Distraction. The means and standard deviations are reported in Table 7.

Table 6. Sample Size of the Non-Victim and Victim Group by Year Level

Group	Year Level				Total
	8	9	10	11	
Non- Victims	121	41	58	49	269
Victims	8	11	11	13	43

Table 7. Means and Standard Deviations of Non-Victims and Victims for Conflict Resolution Strategies

Conflict Resolution Strategy	Non-Victims (n = 269)		Victims (n = 43)	
	M	(SD)	M	(SD)
Overt anger	1.05a	(0.73)	1.90b	(0.86)
Compromise	1.99	(0.95)	2.04	(0.71)
Avoidance	1.38a	(0.79)	1.91b	(0.70)
Distraction	1.49	(0.84)	1.81	(0.77)

Note. Different superscripts represent a significant difference between the means a < b ($p < .05$).

Age-Related Differences

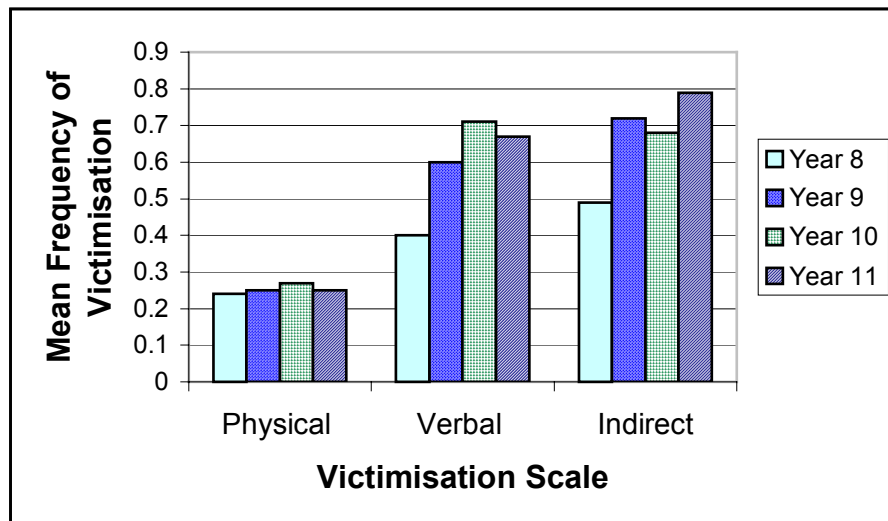
Hypothesis 4: Older Girls experience more Indirect Victimisation than Younger Girls

Kruskal-Wallis analyses yielded significant differences between the year levels for Indirect victimisation ($\chi^2(3) = 17.1, p < 0.001$), and Verbal victimisation ($\chi^2(3) = 17.4, p < 0.001$). Mann-Whitney U post-hoc analyses (Bonferroni-corrected $p < 0.008$), confirmed the hypothesis (see Table 8 and Figure 1). Year 9, 10 and 11 girls experienced significantly more Indirect victimisation in comparison to those in Year 8. In addition, Year 9, 10 and 11 girls experienced significantly more Verbal aggression than girls in Year 8.

Table 8. Mann-Whitney U Test Post-hoc Results (z-scores) From Year-Level Comparisons of the Verbal and Indirect Victimisation Scales

Scale	Comparison					
	Yr8/Yr9	Yr8/Yr10	Yr8/Yr11	Yr9/Yr10	Yr9/Yr11	Yr10/Yr11
Indirect	-3.07**	-2.78**	-3.24*	-0.42	-0.23	-0.58
Verbal	-2.81**	-3.63***	-2.61***	-0.68	-0.18	-0.79

Note. * $p < 0.01$, ** $p < 0.005$, *** $p < 0.001$.



Note. Scale: 0 = never to 4 = very often

Figure 1. Self estimates of victimisation experienced by year level.

Hypothesis 5: Older Girls use more Compromise, Avoidance and Social Support than Younger Girls

Kruskal-Wallis analyses revealed that older girls (i.e., those in later year levels) did not use significantly more Compromise, Avoidance or Social Support than younger girls.

DISCUSSION

Using a modified version of the Direct and Indirect Aggression Scales (DIAS) originally developed by Björkqvist, Österman et al. (1992) and conflict resolution scales, drawn particularly from the work of Feldman and Gowen (1998), the current study investigated adolescent girls' peer victimisation and conflict resolution experiences in a middle-class, single-sex school in metropolitan Adelaide, South Australia. Consistent with past research in co-educational settings (Owens, 1996; Russell and Owens, 1999), girls in year levels 8 to 11 experienced more indirect

and verbal than physical victimisation. Also corresponding with previous research (Björkqvist, Lagerspetz et al., 1992; Lagerspetz and Björkqvist, 1994; Owens, 1996), as the age of the adolescent girls increased, so too did their experience of indirect victimising behaviours. Unlike past findings in secondary school co-educational settings however, older girls were also privy to more direct verbal victimisation than younger girls.

The greater prevalence of indirect and verbal victimisation pertains to physical aggression being socially unacceptable for females (Lagerspetz et al., 1988). The importance adolescent girls place on close, intimate peer relationships (Cairns et al., 1985; Adler, Kless, and Adler, 1992) offers an ideal opportunity to inflict pain through the use of the indirect strategies by which girls can mask their aggressive intentions and comply with the social etiquette of the non-aggressive female (Alson and Romer, 1996; Björkqvist, Lagerspetz et al., 1992; Lagerspetz et al., 1988). Using indirectly aggressive behaviours that conform to feminine social expectations may be of even greater importance without a male audience (Eagly and Wood, 1991; Watson, 1997). The social skills necessary for indirect victimisation are found to increase with age, which explains the greater reporting of indirect victimisation by older adolescent girls (Björkqvist, Lagerspetz et al., 1992; Lagerspetz and Björkqvist, 1994; Owens, 1996).

More verbal aggression by older girls may be unique to the particular specific single-sex school context of the current study. In addition to using effective and socially acceptable indirect behaviours, perhaps in the absence of boys, older girls (i.e., Years 9 to 11) may feel more comfortable with openly assertive, direct verbal displays of aggression in single-sex as opposed to co-educational contexts. Accordingly, the younger (i.e., Year 8), and hence newer girls to the single-sex school may perceive themselves as having less power and social status. As a result, they may suppress their use of direct, verbally aggressive behaviours as compared to the older adolescent girls who are more familiar with, and dominate the school environment. Alternatively, perhaps younger girls felt more embarrassment or shame in admitting to experiencing socially discouraged overt displays of aggression, or had a greater desire to protect their self-pride and deny being victims than did the older girls.

Overall, compromise was favoured in preference to overtly angry responses and distraction. This may be attributed to adolescent girls' interest in maintaining small, intimate peer relationships where power is shared, while conforming to the harmonious social expectations of females (Cairns et al., 1985; Kaukiainen et al., 2001). However, the results did not show the predicted difference in the use of avoidance, social support, or obliging and distraction strategies. In fact, social support was employed less than distraction.

Although avoidance may be likened to some forms of indirect aggression (Owens et al., 2000), and so is expected to be used more than distraction by adolescent girls, perhaps the dismissive potential of avoidance means that adolescent girls are as unsatisfied with it as they are with the disconnection from emotional expression characteristic of distraction behaviours (Feldman and Gowen, 1998). Likewise, the nature of obliging behaviours and giving in to others' needs may do little to affirm mutually adolescent girls' all-important relational bonds. By obliging, an equal exchange of ideas and the give-and-take involved when compromising would not occur. Consequently, the resulting connectedness is more likely to be one-sided on behalf of the obliged.

An explanation for the unexpected lesser use of social support compared to distraction may be found in unpublished research findings of the present study (James, 2002). In a letter writing exercise, a sample of 39 15-year old girls who had completed the victimisation and conflict resolution questionnaires, reported that although some girls sought peer support as a response to conflict, many were also concerned about the pain of potential backstabbing. The threat of peers

using disclosed information about a conflict against them at a later time might be the reason that the girls reported using less social support than distraction when resolving peer conflicts.

Contrary to the predicted outcome, the older and younger adolescent girls used compromise, avoidance and social support in similar amounts. Although Leyva and Furth (1986) found constructive compromise to increase with age, the largest increase was evident between the ages of 11 and 13 years. As the youngest age group in the current study was on average 13 years old, it is possible that the expected significant increase in constructive compromise was not evident due to comparisons being made with girls of older ages. Consistent with Leyva and Furth's (1986) findings for compromise, Österman et al. (1997) found that overall conflict resolution peaked at age 11 years. Again, because this peak was at a lower age than that measured in the current study, it provides a possible explanation for finding out that no differences were evident between older and younger girls in the use of compromise, avoidance or social support. However, this is inconsistent with Lindeman et al.'s (1997) research where, in mixed-sex relationships, girls in later adolescence used more withdrawal strategies than in pre- or mid-adolescence. Further research is necessary to confirm if the current findings are characteristic of adolescent girls' conflict resolution behaviour only within the context of a single-sex school.

As predicted, results of the current study confirmed that non-victims used less overt anger and avoidance compared to victims (Owens and Daly, 2002). However, there was no difference in non-victims' and victims' use of compromise or distraction. The significantly lower use of overt anger and avoidance by non-victims than victims suggests that overt anger and avoidance are not preferred strategies for amicably resolving conflicts for non-victimised adolescent girls. Power assertion, like that associated with overt anger, is known to often aggravate conflict, while compromise facilitates the sharing of power needed to preserve the interconnectedness within girls' peer friendships (Jensen-Campbell et al., 1996; Leyva and Furth, 1986). The similar levels of compromise estimated by victims and non-victims may be because all the girls try initially to resolve conflict using reasoning approaches. However, after unsuccessful attempts at compromise, the victims resort more quickly to using overt anger. This may be indicative of victims' less mature social reasoning, or a poorer understanding of how to resolve conflicts using more sustained attempts at socially acceptable strategies such as compromise. The similar frequency of distraction strategies by victims and non-victims is more difficult to explain. It contradicts research by Owens and Daly (2002) who found that victims in a co-educational school used more distraction than non-victims. It is not logical in the current study that victimised girl's use more avoidance but **not** more distraction during peer conflict resolution.

Concluding Comments

Adolescent girls' peer victimisation experiences and conflict resolution strategies in a single-sex school were consistent with the expectations that girls hide their aggressive intentions with indirect behaviours and favour conflict resolution techniques that preserve their intimate friendships. The present results indicate the possibility that, in the single-sex context, girls are more comfortable using overt verbal aggression in trying to resolve conflicts. There were some surprising results including: girls preferring distraction to social support, and victims' usage of compromise and distraction. Although it was not the purpose of this study to explore the implications of the findings for teachers and the broader school community, it does provide awareness that victimisation and conflict resolution may be different in all girl contexts. In contributing toward an understanding these phenomena in a single-sex environment, the findings are available for further comparison to similar and co-educational secondary settings. The conclusions of this study are tentative because the sample comes from only one school. In addition, while the choice of self report is defended, this study may be endangered by shared method variance - by employing the same methods to measure both predictor and outcome

variables, the associations between victim status and the conflict resolution tactics may be inflated. The results found in the present study are worth testing across a number of schools representing different socio-economic groups using a range of data collection procedures.

REFERENCES

- Adler, P. A., Kless, S. J., and Adler, P. (1992). Socialization to gender roles: popularity among elementary school boys and girls. *Sociology of Education*, 65, 169-187.
- Alson, S., and Romer, N. (1996). Girls and school conflict resolution. *Reclaiming Children and Youth*, 5(2), 87-89.
- Archer, J. (2001). A strategic approach to aggression. *Social Development*, 10(2), 267-271.
- Bird, G. W., and Harris, R. L. (1990). A comparison of role strain and coping strategies by gender and family structure among early adolescents. *Journal of Early Adolescence*, 10(2), 141-158.
- Björkqvist, K. (2001). Different names, same issue. *Social Development*, 10(2), 272-274.
- Björkqvist, K., Lagerspetz, K. M. J., and Kaukiainen, A. (1992). Do girls manipulate and boys fight? Developmental trends in regard to direct and indirect aggression. *Aggressive Behaviour*, 18, 117-127.
- Björkqvist, K., Österman, K., and Kaukiainen, A. (1992). The development of direct and indirect aggressive strategies in males and females. In K. Björkqvist and P. Niemela (Eds.), *Of Mice and Women: Aspects of Female Aggression* (pp. 51-64.). San Diego, CA: Academic Press.
- Björkqvist, K., Österman, K., and Lagerspetz, K. M. J. (1994). Sex differences in covert aggression among adults. *Aggressive Behaviour*, 20, 27-33.
- Bryant, B. K. (1992). Conflict resolution strategies in relation to children's peer relations. *Journal of Applied Developmental Psychology*, 13, 35-50.
- Cairns, R. B., Perrin, J. E., and Cairns, B. D. (1985). Social structure and social cognition in early adolescence: Affiliative patterns. *Journal of Early Adolescence*, 5(3), 339-355.
- Charlton, K. (2001). Patterns of conflict resolution in adolescent peer relationships. Unpublished Honours Thesis, Flinders University, Adelaide, Australia.
- Collins, W. A., and Laursen, B. (1992). Conflict and relationships during adolescence. In C. U. Shantz and W. W. Hartup (Eds.), *Conflict in child and adolescent development* (pp. 216-241). Cambridge: Cambridge University Press.
- Crick, N., and Grotpeter, J. (1995). Relational aggression, gender, and social-psychological adjustment. *Child Development*, 66, 710-722.
- Crick, N. R. (1995). Relational aggression: The role of intent attributions, feelings of distress, and provocation type. *Development and Psychopathology*, 7, 313-322.
- Eagly, A., and Wood, W. (1991). Explaining sex differences in social behaviour: A meta-analytic perspective. *Personality and Social Psychology Bulletin*, 17, 306-315.
- Eagly, A. H., and Crowley, M. (1986). Gender and helping behavior: A meta-analytic review of the social psychological literature. *Psychological Bulletin*, 100(3), 283-308.
- Feldman, S., and Gowen, C. (1998). Conflict negotiation tactics in romantic relationships in high school students. *Journal of Youth and Adolescence*, 27(6), 691-705.

- Feldman, S. S., Fisher, L., Ransom, D. C., and Dimiceli, S. (1995). Is "What is good for the goose good for the gander?" Sex differences in relations between adolescent coping and adult adaptation. *Journal of Research on Adolescence*, 5(3), 333-359.
- Galen, B. R., and Underwood, M. K. (1997). A developmental investigation of social aggression among children. *Development and Psychopathology*, 33(4), 589-600.
- Gross, M. A., and Guerrero, L. K. (2000). Managing conflict appropriately and effectively: An application of the competence model to Rahim's organisational conflict styles. *International Journal of Conflict Management*, 11(3), 200-226.
- Harris, M. B. (1998). *Basic statistics for behavioural science research* (2nd ed.). Needham Heights: Allyn and Bacon.
- James, V. H. (2002). *Adolescent peer victimisation and conflict resolution in an all-girls school*. Unpublished Honours Thesis, Flinders University, Adelaide, Australia.
- Jensen-Campbell, L. A., Graziano, W. G., and Hair, E. C. (1996). Personality and relationships as moderators of interpersonal conflict in adolescence. *Merrill-Palmer Quarterly*, 42(1), 148-164.
- Kaukiainen, A., Salmivalli, C., Björkqvist, K., Österman, K., Lahtinen, A., Kostamo, A., and Lagerspetz, K. (2001). Overt and covert aggression in work settings in relation to the subjective well-being of employees. *Aggressive Behaviour*, 27, 360-371.
- Lagerspetz, K., Björkqvist, K., and Peltonen, T. (1988). Is indirect aggression typical of females? Gender differences in aggressiveness in 11-to 12-year-old children. *Aggressive Behaviour*, 14, 403-414.
- Lagerspetz, K. M. J., and Björkqvist, K. (1994). Indirect aggression in boys and girls. In R. Huesmann (Ed.), *Aggressive behaviour: Current perspectives* (pp. 131-150). New York: Plenum Press.
- Laursen, B., Finkelstein, B. D., and Betts, N. T. (2001). A developmental meta-analysis of peer conflict resolution. *Developmental Review*, 21, 423-449.
- Leyva, F. A., and Furth, H. G. (1986). Compromise formation in social conflicts: The influence of age, issue, and interpersonal context. *Journal of Youth and Adolescence*, 15(6), 441-452.
- Lindeman, M., Harakka, T., and Keltikangas-Jarvinen, L. (1997). Age and gender differences in adolescents' reaction to conflict situations: Aggression, prosociality, and withdrawal. *Journal of Youth and Adolescence*, 26(3), 339-351.
- Maccoby, E. (1990). Gender and relationships, A developmental account. *American Psychologist*, 45(4), 513-520.
- Maccoby, E., and Jacklin, C. (1974). *The psychology of sex differences*. Stanford, CA: Stanford University Press.
- Maccoby, E., and Jacklin, C. (1980). Sex differences in aggression: A rejoinder and reprise. *Child Development*, 51, 964-980.
- Maccoby, E. E. (1988). Gender as a social category. *Development and Psychopathology*, 24(6), 755-765.
- Nilan, P. (1991). Exclusion, inclusion and moral ordering in two girls' friendship groups. *Gender and Education*, 3(1), 163-182.
- Olweus, D. (1996). *The revised Olweus bully/victim questionnaire*. Bergen, Norway: Research Center for Health Promotion (HEMIL Center): University of Bergen.

- Österman, K., Björkqvist, K., Lagerspetz, K., Landau, S., Fraczek, A., and Pastorelli, C. (1997). Sex differences in styles of conflict resolution: A developmental and cross-cultural study with data from Finland, Israel, Italy, and Poland. In D. P. Fry and K. Björkqvist (Eds.), *Cultural variation in conflict resolution: Alternatives to violence* (pp. 185-197). New York: Lawrence Erlbaum.
- Owens, L., Shute, R., and Slee, P. (2000). 'I'm in and you're out...' Explanations for teenage girls' indirect aggression. *Psychology, Evolution and Gender*, 2(1), 359-376.
- Owens, L. D. (1996). Sticks and stones and sugar and spice: Girls' and boys' aggression in schools. *Australian Journal of Guidance and Counseling*, 6, 45-55.
- Owens, L. D., and Daly, T. (2002). *Sex and age differences in victimisation and conflict resolution among adolescents in a South Australian school*. Paper presented at the International Society for Research on Aggression XV World Meeting, Montreal, Quebec.
- Rigby, K., and Slee, P. T. (1995). *Manual for the peer relations questionnaire (PRQ)*. Adelaide: University of South Australia.
- Russell, A., and Owens, L. D. (1999). Peer estimates of school-aged boys' and girls' aggression to same- and cross-sex targets. *Social Development*, 8(3), 364-379.
- Siegel, S. (1956). *Nonparametric statistics for the behavioral sciences*. New York: McGraw-Hill Book Company.
- Stark, L. J., Spirito, A., Williams, C. A., and Guevremont, D. C. (1989). Common problems and coping strategies I: Findings with normal adolescents. *Journal of Abnormal Child Psychology*, 17(2), 203-212.
- Underwood, M., Galen, B., and Paquette, J. (2001). Hopes rather than fears, admirations rather than hostilities: A response to Archer and Björkqvist. *Social Development*, 10(2), 275-280.
- Underwood, M. K., Galen, B. R., and Paquette, J. A. (2001). Top ten challenges for understanding gender and aggression in children: Why can't we all just get along? *Social Development*, 10(2), 248-266.
- Watson, S. (1997). Single-sex education for girls: Hetrosexuality, gendered subjectivity and school choice. *British Journal of Sociology of Education*, 18(3), 371-383.

The Thai Community Curriculum as a Model for Multicultural Education

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The notion of a community curriculum in Thailand comes from widespread recognition that Thai society has been greatly influenced by the west in its development and modernization. According to many Thais, community curricula are needed to encourage young people to preserve Thai culture and revive local ways of thinking about 'development' through gaining respect for local culture and history. This paper discusses an active research project through which Northern Thai teachers conducted research about the local histories of three Tai Yai minority communities. Unlike many multicultural education programs, this one was firmly based on activities that required teachers, members of the majority group, to conduct research about the histories of minority group community members, which included their own students. The active participation of both majority and minority group members encouraged cultural learning. This paper describes the research process, summarizes the teacher-researchers' findings, analyzes participants' learning and shares lessons learned.

Thailand, multicultural education, community, curriculum, action research

INTRODUCTION

Before, the school told us what to do. Now they are asking us about our history and we are teaching at the school, too. A woman from Lai village.

Getting to this point is not easy, but it is possible. This paper will tell the story of how it happened. It is the story of teachers, students and residents in three Tai Yai communities in the northernmost provinces of Thailand who began this elementary school curriculum project by collecting data about local histories. Two and a half years later, they produced far more than three local history books. They engaged in a process of cultural and multicultural learning. The Tai Yai minority individuals, young and older, learned about their own culture and history and the teachers, majority Northern Thais, learned about themselves and their Tai Yai students, their relatives and their neighbours.

We suggest that this community curriculum project is a model for cultural and multicultural learning because it both encouraged positive identity development for members of the Tai Yai minority group and reduced their stereotyping by members of the Northern Thai majority group. This happened because members of both groups were participants who learned through doing and interacting. They didn't study or read about each other. Instead they brought the information and feelings forth themselves. Including the students, teachers and community members in researching and writing local histories highlighted and provided instances of points of view in history, beliefs and feelings. This learning required multi-generational and multi-ethnic participation. It also required that the activity mirror the desired outcome. So the teachers became people who didn't

know and needed to ask questions of villagers, people who did know. This role reversal encouraged learning to occur because participants were asked to do what was intended for them to learn.

What occurred was not only formative, but also transformative and participatory in Wenger's (1998) sense of the terms. It was the activity and interaction of research that helped to transform the thinking and feelings of teachers, students and villagers. While it is possible to develop multicultural education programs by adding modules about various ethnic and minority groups to existing curricula, or even finding texts that include multiple points of view, we have found that having communities and schools write their own texts and pull together their own curricula create processes of participation that have far more potential to engage and help develop the cultural and emotional imaginations of teachers, students and community members.

In the following pages we will describe the activities of the project and the learning processes of participants. We will also discuss those features and outcomes of this project – role reversal for teachers and villagers, multigenerational participation, multiple points of view, identity development and stereotype reduction – which we believe contain useful information that can inform cultural and multicultural learning in other settings. First, we need to contextualize the project by providing important background information.

Thailand is a small, tropical country in Southeast Asia that shares borders with Laos, Cambodia, Burma and Malaysia. It has a monsoon climate, with hot, wet and cold seasons. A Buddhist country and constitutional monarchy, Thailand is headed by a deeply beloved king and governed by a prime minister and parliament. While once counted as an Asian tiger, with an economy growing at record pace, the financial crisis of the 1990's, and other problems have caused a slowing of economic growth. Among the country's greatest problems today are poverty, HIV AIDS, drug use, production and trafficking, prostitution and deforestation. The Tai Yai people who participated in this project are quite poor and suffer, to varying degrees, with all of these problems.

This project was funded by the Thai Research Fund (a Thai government agency) as one of four pilots designed to encourage community members to rely more on themselves and each other, and less on the government. These projects fit into a larger, long-term government and non-governmental (NGO) agenda that encourages rural residents to work together and build community-based businesses. The government sees this as necessary because there are poverty, drug and prostitution problems in Tai Yai and other rural communities nationwide. As did her colleagues, the researcher conceptualized the project as action research. However, this was the only project of the four in which teachers, students and community residents would work together. In this case, they would study local village history, focusing on migration and Tai Yai identity. The rationale was that by encouraging people to focus on how life has changed for their ancestors and themselves, villagers young and old would develop a sense of their own histories and identities as they also built their lives as minority group members in Thai society. The hope was that Tai Yai villagers, young and old, would become multicultural, much like the Punjabis whom Gibson (1987) described as “dressing to please the people and eating to please themselves”. In other words, the villagers would become able to navigate Thai society and still hold on to their Tai Yai identities. It was also hoped that through conducting research teachers would develop a greater appreciation for their roles in Tai Yai oppression.

THE THREE TAI YAI VILLAGES – LAI, HUAY AND PONG

Three, small, Tai Yai villages were chosen as project sites. Lai, Huay and Pong,¹ are inhabited by predominantly Tai Yai individuals, many of whom immigrated to Thailand from nearby Burma (Myanmar). There have been continuous waves of migration from Burma in all three villages. Some of the Tai Yai migrants arrived in Thailand as long as 120 years ago, with others arriving as recently as last year. The Tai Yai recognize the difference by calling people Tai Yai *cow* (old-timer Tai Yai) and Tai Yai *mai* (newcomer Tai Yai). Their migration to Thailand has resulted from and fuelled many centuries of strained relationships between Thailand and Burma. The Tai Yai people have been at the centre of many of the conflicts and continue to fight for their independence. They are a people who once ruled a large kingdom that reached from Yunnan, China, through eastern Burma and into Chiang Mai, Thailand. Like many peoples who have experienced a golden age in their history, the Tai Yai want to recapture the prestige and power they once had. They feel they have a right to self-determination and to their own nation state.

Two of the project villages, Lai and Pong have long been haven to and supported by the Tai Yai military. In Pong, Tai Yai military control and support have been especially strong. This village is near the Ta Tawn Bridge over the Mae Kok River, which forms part of the border between Burma and Thailand. This bridge is a rallying point for Tai Yai independence from Burma, and because of this there are many Tai Yai villages in this area. About 50 years ago, when Burma won its independence from Britain, many intellectuals, soldiers and other Tai Yai people migrated across the Mae Kok River and settled Pong. Over the years, the intellectuals left and soldiers took over leadership of the village. Ten years ago, Pong's major patron, a high-ranking soldier, died, and with him died the outside support for the village. Since the area is very dry, it is hard for the villagers to grow enough food to support themselves, and many have turned to drugs and prostitution to make a living. The annual Pong *wai kru* (respect for teachers) festival of gift-giving, dancing, music and feasting, supported by the military and also used as a cover for strategic military meetings, ended with this patron's death.

The school in Pong is quite separate from the community. Part of the reason is that the village is deep in the forest, part way up a mountain and thus barely accessible by a dirt or mud road in the rainy season of June through September – roughly half of the school year. Because of this, all of the teachers and administrators live in a nearby town. In addition, the principal was assigned to Pong School as a punishment. The teachers all went to work there straight from university. They had little choice in their assignments in a Thai teacher placement system based on seniority.

Lai village has also been supported and inhabited by Tai Yai soldiers. However, even more important to understanding this village is to know its geography and role as an opium, gambling and prostitution rest stop for Silk Road caravans of British, Burmese, Thais and others. A long, narrow town strung along a road very close to the Burma border, Lai is still on an active drug route. Like Pong, Lai is very poor, except for soldiers' families who have enough left over from subsistence to buy the uniforms and supplies needed for their children to attend school. Like Pong, the teachers at the Lai School do not live in the village, rather in the nearby *amphoe*, or district capital town. Both the old and new principals are businessmen, with more interest in city politics and business than in administering and improving the school. Like the teachers in Pong, Lai School teachers were also assigned to this remote school soon after graduation.

Huay is different from the other two villages because it was originally settled by Tai Yai villagers escaping their burning village in Burma. Villagers walked together in a caravan a hundred or more strong through highland mountain jungle and founded this village very deep in the forest. They

¹ The names of the towns are pseudonyms.

chose the area because they heard of its fertility. Unlike the other two villages, Huay lacks a road or trail to Burma. Huay villagers talk of how difficult life was when they arrived. They started out planting vegetables and dry rice, at the same time preparing fields to plant paddy (wet) rice. These paddies took three years to produce an adequate yield and some, unable to wait for the rice, went back to Burma during these first few years. Also unlike the other villages, the principal of Huay School is devoted to the school's development. Though the school is quite poor, the principal encourages teachers' creativity and supports them in their efforts. One teacher has many wealthy friends in Bangkok who have made regular donations to the school. Another important difference in this village is that the Tai Yai and Northern Thai both have neighbourhoods in the village, albeit on separate lanes. Consequently, the teachers and principal live in the village in fairly close proximity to their students and the Tai Yai community.

An important issue in all three villages is that of the old timers and newcomers. The old timers have established themselves; they speak Northern Thai (the local Thai dialect) and Central (Bangkok) Thai. They have adapted to life in Tai Yai villages in Thailand. The newcomers are less acclimated and therefore, more in need of participating in the project. Many of those who arrived ten years or more ago are citizens, while newer-comers are not. Thai citizenship becomes important for freedom of travel and sometimes employment. Literacy in Thai and the languages of many neighbouring, minority highland groups, such as Lisu, Lahu and Karen are also important for Tai Yai residents to make a living in the multicultural and multilingual marketplace of Northern Thailand. While these minority languages need to be learned through interpersonal experience, Tai Yai parents have long seen the Thai schools as critical for teaching Thai language literacy to their children. At the same time, they have also been wary of the schools because they have had little direct involvement. What involvement they have had has confirmed their fears that they are thought to be culturally inferior and in need of the school to inform their children about Thai culture.

TAI YAI ON THE INSIDE, THAI ON THE OUTSIDE

The culture and standards to which the Tai Yai begrudgingly aspire are those of the majority population in Northern Thailand, the *khon muang*, or the town's people. These people have also been referred to as the Tai noi (the little Tai) as compared with the Tai Yai (big Tai) who are the residents of the project towns. The relationship among these two groups is a rather complicated one. While the Northern Thais are noi (small children) in terms of ancestry, they are the majority population who have long been associated with the Thais in Bangkok as citizens of the nation state of Thailand. While the Tai Yai are older in terms of cultural ancestry, they are relative newcomers to Thailand. In addition to lacking citizenship and language skills, they also bring with them a form of the Tai culture that is older and more traditional than the Tai culture of the majority population, the Thais.²

This comparison is significant to the people involved because being modern is highly valued by the Thai people from Bangkok in the centre to Chiang Mai in the North, from Korat in the Northeast to Songkhla in the South. The focus on being modern or up-to-date, *than samay*, is reflected in everyday discourse. This Thai way of talking about being modern in dress, household goods, food, technology and values is applied as much in everyday speech as in the Thai and international media. Mills' (1997) study of the lives and dreams of young, migrant factory workers in which a *than samay* lifestyle of nice clothes, TV sets and refrigerators provides a sharp

² Thai is a nationality; i.e., the people of Thailand. Tai is a larger, Southeast Asian group of peoples who share wet rice cultivation practices, Buddhism and spirit worship, ancestry and self-designation as Tai. The Tai Yai are Tai as are the Thais. See O'Connor (1999) for an exploration of the meaning of the Tai.

picture of how this value competes with a more long-standing Thai value of caring for one's parents.

This tension and values competition is reflected in a nation-wide movement back to Thai roots. Many Thais have been feeling that the West and more developed Asian countries, especially Japan, have been exerting so much influence toward globalisation that it is time to begin saving Thai culture from extinction. There are Thai Studies Programs and Centres at most major universities with the explicit purpose of *anurak*, or preserving, Thai culture. There are other institutionalised programs to preserve Thai culture as well. The most notable are the widespread practice of 'wearing local clothes to work on Friday' and a number of highly valued festival parades, which include historical local dress, food, music, dancing and drama. It is unclear how much effect these cultural preservation activities have on more essential expressions of Thainess such as values, beliefs and behaviour. However, deep the preservation goes, it has turned out to have some important meaning for the Tai Yai people. Even though they are looked down on as being less modern and less civilized, they are still the cultural ancestors of the Northern Thais, so that their culture also warrants preservation. In order to understand the balance of these Thai views as experienced by the Tai Yai, though, it is necessary only to look to their economic position, which in most cases, is far worse than that of the majority group.

A project that aims to bring teachers, students and community members together to write a local history of the people of a town is one that squarely addresses this current Thai movement toward cultural preservation. This push for local cultural preservation alongside globalisation emanates from Bangkok, and also includes the provinces of the north, northeast and south. Secondly, villages and towns are much changed by this globalisation which entails vast labour migrations back and forth from Bangkok and other Thai cities from the many small villages and towns that dot the countryside. It is not uncommon to hear people talking about their hometowns as having only old folks and children for much of the year when the young adults are working in the cities. The Tai Yai are no exception to this. In fact, they say that all of the young adults have gone to the city.

EDUCATIONAL REFORM IN THAILAND – A POTENTIAL CATALYST FOR CULTURAL AND MULTICULTURAL LEARNING

Also important to understanding this project is the Thai government's ambitious educational reform effort which is propelled by the Thai Educational Reform Act of 1999. The goal of the reforms, which reach from nursery to graduate school, is to produce learners capable of solving problems. The reform strategies include decentralizing administration and curricula and shifting the focus in classrooms from one of teaching content to one of producing life-long learners. A ministry of the Thai Government, the Office of the National Education Commission (ONEC), is funding a variety of research and development projects for teachers, administrators, university faculty and others to improve administration, curricula and teaching methods. There are model teacher programs (*kru ton baap* and *kru hang chat*), school-based teacher training programs, and the development of both longer teacher training programs (increasing from four to five years) and a national licensing for teachers. ONEC is also pushing the parliament for an increase in beginning teachers' salaries from about 6,000 Baht or 143 US\$ per month, to 8,000 Baht or 190 US\$ per month.³

The part of the government's educational reform that has the most direct bearing on this project is the mandate that each school should develop its own local curriculum to supplement the national

³ These US dollar equivalencies are based on the April, 2003 exchange rate of 42 Baht to 1 US dollar.

curriculum. This local curriculum is defined as including content about the local area, people and environment, making sure that local people are involved with the school and that students and teachers also work in the local community. It is hoped that through the development and use of these local curricula, schools will become community centres that make use of the talents of the community members, and meet the educational needs of adults and children. It seems that policy-makers are dreaming of the neighbourhood Buddhist temple school of old that served all of these functions.

Some teachers in city schools are bewildered by this notion of a local curriculum because their students' homes are not near the schools. But for the teachers in project schools in Lai, Huay and Pong, the need to get to know and become known by the Tai Yai townfolk surrounding their schools makes a lot of sense. These teachers, like many others in Thailand, work in schools quite far from their hometowns. Like the situation at many rural Thai schools, especially in the North, the teachers do not share the same ethnic background as the students and community members. In this project, the teachers are majority Northern Thai and the community members and students are predominantly minority Tai Yai.

This project is an educational one on several levels. First, it is intended to produce content and materials for local curricula. Second it encourages teachers, administrators, students and community members to learn about culture and history through researching history and working together.

THE PROJECT: PROCESSES AND SUMMARY OF RESEARCH FINDINGS

The project was carried out by a senior researcher, a research assistant, teachers from schools in the three towns, their students and people who live in the communities where the schools are situated. In the end, each of the three schools and communities produced a book about local, Tai Yai history. The hope is that in the future, teachers in these three village schools will use the local history books to build local curricula.

This was an action research project that used research as a learning tool for participants. In addition to collecting data, as all researchers do, the teacher, student and community researchers also learned about their own and others' cultures and histories. What follows is a description of the project's work followed by what was learned by participants. Some of the findings about local history are included, but because our goal here is to discuss the learning processes of participants, we focus far more on process.

The project had four phases. During the first six months the researcher and assistant contacted village leaders, residents, administrators, teachers and NGO workers to develop support for the project by recruiting teachers and key community members. Phase Two, the data collection phase of the project, lasted for about 12 months. During the next six months, Phase Three had teachers working with NGO workers to learn about and then encourage and empower villagers. During Phase Four, the last six months, teachers and the researcher wrote local history books.

Phase One – First Six Months – Contacts, Permissions, Initial Meetings

The senior researcher began work in February 2001. She chose sites based on relationships formed during past research projects in Tai Yai communities. She hired a research assistant. She visited community leaders and gained permissions. These leaders also shared census information and maps with her. One of the leaders was far easier to convince than the other two because he was the leader of a village where the researcher had worked in the past. This was the only village where she was able to convene an initial meeting with leaders, residents and teachers. In the other

two villages, she got permissions but held no meetings. She also contacted NGO workers and shared information with them.

The researcher went to a school in each community and discussed the project with teachers and administrators. All of them were worried about research and afraid of the researcher, a professor from the city. She knew that the teachers were so used to being told what to do that she needed to use particular tactics in recruiting them for the project. So, she reminded them that they would have to develop a local curriculum and that this project would help them to do that. In the end she got volunteer teachers from all three schools – three from Lai, eight from Huay and four from Pong.

Teachers, students, community members, the researcher and assistant met to discuss the research project. The researcher introduced the two research topics of migration and ethnic identity and encouraged teachers to begin by asking each of their students to interview two adults by asking them where they were from and the meaning of Tai Yai. It was hoped that the elementary school students would act as a bridge between the teachers and communities.

The researcher, assistant and some of the teachers who had volunteered met for a three day meeting to follow up the meeting with all participants. Experience had the researcher predict that this would be both training in research methods and cultural conscious-raising. She began the workshop asking for the teachers' views on doing research and about the Tai Yai community members. Teachers made comments such as, "We can't do research." "The Tai Yai are not like us, they are dirty, have free sex and do drugs, just like other tribal people." "They are Burmese – our enemy-- so why should we help them?" With her predictions confirmed, the researcher began to demystify the research process and the Tai Yai people. She decided not to provide initially too much information about either the people or research processes because she wanted the teachers to learn through experience and discovery. She knew that she would meet the teacher many times, and would have chances to coach them little by little.

The researcher also knew that she had to give the teachers enough information for them to get started conducting research. She gave them a primer on questioning techniques that included examples and role-play. All of the teachers asked questions in role-play sessions. However, all of them were far more focused on their questions than on informants' answers. She also showed *The God's Must Be Crazy*, a film about contact between two societies to encourage discussion about the difference between a researcher and native's point of view. What the teachers saw was that people who live in the forest live a more natural life than those in the city. While this was not the most sophisticated analysis of the film, it was better than saying that the villagers in the film were uncivilized. The researcher knew that the teachers had much to learn.

Phase Two – Next Twelve Months – Data Collection

The researcher knew that the teachers would need feedback as they collected data, so she built frequent workshops into the project design. Over the first 12 months of the project, she met with the teachers 15 times. Since they sent data through diskettes and email, she had even more frequent contact with them. The researcher also decided early on that she would assist teachers with research methods as needs arose. As she remembers the data collection phase of this project, she recounts four areas in the teachers' learning process.

Data collection

At first, teachers had little idea about how to collect data. They asked simple questions about where people were from and who the Tai Yai were. When the teachers asked these kinds of questions, they got short, simple answers, like, "Tai Yai are brave". "I was born in Thailand".

Since they didn't know how to continue the dialogue, their data was quite thin. This problem was raised in many meetings and continued throughout the year of the most intense data collection. Bit by bit the teachers gained questioning skills, and by the end of the project, the four teachers who remained were able to conduct interviews. Their skill levels, however, were not equal. Also of interest is that the teachers located key informants. These key informants were those community members who were able to remember and reconstruct their history and give meaningful details.

Integrating data and questions with larger, research questions

At first, teachers did not think about the larger research questions as they interviewed informants. Even though their questions were about where informants were from and who they were, the teachers did not link this with the larger research questions about migration patterns and ethnic identity. This problem, like the first one, was most intense at the beginning and lessened as time went on. This issue was also discussed in the many meetings during the data collection year. In the end it was no longer a large problem. The teachers were increasingly able to integrate and organize their data around the project's themes.

Additional interviews

The teachers realized that the data they collected initially was superficial as the researcher began to ask questions about Tai Yai history. For example, the researcher asked about the British in Burma and what kind of effect colonization had on the villages. The teachers realized that this was missing from their data so they asked about it. Teachers continued to need this kind of direction throughout the project.

Note-taking

At first, the teachers didn't take any notes, they just told about what they heard as they talked with informants. When the researcher asked them to write detailed notes they tried, but the notes were incomplete and sometimes contained analysis. For example, in writing about a change in leadership in one village, the teacher wrote, "The headman was replaced by an elder. This, however, was not a formal and official designation." Teachers needed to be reminded that this kind of analysis—'formal', 'official', should be left out of notes. It was difficult for most of the teachers to keep their own views out of their notes. For one teacher, this problem persisted until the end of the project. Others became more able to understand that informants often have different points of view from researchers.

In Pong, the teachers never collected any data because during the course of the project, relationships among Tai Yai village leaders and Thai officials broke down and there was a revocation of citizenship for 200 residents. This caused distrust and made communication between the community and the school, another arm of the state, quite tense.

Phase Three – Next Six Months – Checking Data and Empowering Community Residents

During the next six months, the teachers worked with a locally active Non-governmental organization (NGO) whose focus was on helping community members to make enough money to improve their health and standard of living and avoid prostitution, drug production, use and trafficking. Two of the villages have a long history of drug involvement. Pong is on an active drug-trading route and Lai has a history of being an opium, gambling and prostitution pit-stop on a caravan route once used by Chinese, British and other Silk Road travellers and traders. The teachers observed NGO workers and also assisted them in encouraging the villagers' economic

endeavours. They held meetings to encourage local pride and also provided funds and other assistance for small businesses.

After observing the ways in which the NGO workers encouraged the villagers, the teachers also held meetings to encourage the villagers to discuss their history and current situations. The Lai villagers said that they should hold one of the meetings just before a festival because they would already be gathering. But when the time came, only the children and a few old folks could attend because the villagers were all busy with work to prepare the festival. This turned out to be a great experience for the kids who had the opportunity to talk to the old folks and ask questions that were important to them.

During these six months the teachers organized several more meetings at local temples in Lai and Huay. Their goal was to encourage villagers to develop more confidence. History was their tool for encouraging villagers to be proud of their past and develop strategies to deal with current problems. The last meeting they held was most effective because the villagers, who had been reticent in the beginning, really aired their opinions. They disagreed with teachers' characterisations of their history and also shared ideas about the schools. This disagreement was significant for people who had previously been quiet both to show respect and avoid upsetting teachers on whom they depended for their children's education.

During the course of the project, relationships among Tai Yai village leaders in Pong and Thai officials broke down to the point where school-run (Thai-run) meetings to encourage villagers to develop ethnic pride and businesses became impossible.

Phase Four – Last Six Months – Writing Reports

During the last six months of the project the teachers wrote monograph-length reports about the local histories of Lai and Huay. The young, Tai Yai men who had conducted the research in Pong also wrote a report about Pong's history.

CULTURAL AND MULTICULTURAL LEARNING

The Teachers

The teachers had a great deal of difficulty conducting this research. Even though some of them had been teaching in the schools for years, they did not know the villagers. They had trouble understanding their language, which is close to Northern Thai, but not the same. This cultural and linguistic unfamiliarity, coupled with Tai Yai reservations about sharing information about their journeys through China and Burma, made it very hard for the teachers to collect complete data. At one of the many meetings, they asked the researcher for a questionnaire that contained all of the questions. They were sure this would help them to get the job done. The researcher attributed this request to Thai teachers' experiences of always being told what to do. They had trouble understanding how to ask a question, listen to the answer and then follow up with another, related question. In retrospect, the researcher argued that some of these problems might have been avoided with additional training in research methods, especially questioning techniques.

Teachers knew that they were collecting historical data in order to build a local curriculum. They were confused about how this could possibly be the case since they knew local, cultural curricula to include language, food, dance, festivals, music and other artifacts. This notion of culture as folklore devoid of history was much like that of the Tai Yai.

Thai teachers were overworked and underpaid like most of their colleagues around the globe. In government schools, all of the employees, including teachers, were government employees who

were paid 6,000 Baht or 143 US\$ per month at the entry level. While teachers with seniority or advanced degrees earned more than that, it was not nearly enough to live the middle-class lifestyle to which most aspired. Almost all teachers had gone deeply into debt. Many had second jobs or small businesses to earn extra money. Professors and teachers all got paid to do research, one of the least lucrative, second jobs. However, since new standards that came with the educational reforms had teachers being evaluated not only in terms of their teaching effectiveness, but also their community involvement and research, this research project provided added benefits. Their experience in the communities, the research work and the books they had written also help them to develop the local curricula, which they were required to do. Had this project not been such a good provider of ways to do these newly required job tasks, it was not likely that teachers would have participated.

We had more data about the teachers' learning processes than the other groups because they had the most contact with the researcher. Because of this we were able to sketch the differences in cultural learning among the four teachers who worked with the project all the way through. These four teachers had different experiences and learned different things.

There were two teachers from Huay who completed the project. One teacher, Noi, tried to understand her Tai Yai students before the project ever began. As she learned about the Tai Yai, she wanted her students to develop a strong ethnic identity as Tai Yai only. She thought that they should not have to 'pretend' to be Thai. As the project progressed, she realized that for the students to make a living in Thailand, they would have to assimilate and become Thai, at least in part. She also became overwhelmed by the numbers of Tai Yai and the amount of assistance that she came to realize was needed. At the same time, she saw that many Northern Thais were also poor and in need of assistance. She developed mixed feelings about who the Thai government ought to help.

The other teacher from Huay, Lek, taught her Tai Yai students that they had a debt to Thailand because Thailand took them in when they had nowhere else to go. She taught them that they had to show some reciprocity and give something back to Thailand. She came to realize that this made some of the kids angry because it caused them to deny their Tai Yai identities. She softened a bit as she learned how hard the kids' lives were.

There were also two teachers who completed the project in Lai. One of them was so quiet that the researcher never really learned what she thought. The other one was just the opposite. A singer and dancer who also had a business selling various things, Jeep said that she really cared for her students but the researcher said that it was hard to find evidence of this. Jeep was always busy with other things. In addition, she really dressed up all the time to teach in this poor, remote village. In the end, Jeep said that she understood much more about the Tai Yai, but her behaviour did not change. Their book about Lai's history was disconnected and very poorly written. Perhaps the fact that both teachers lived outside the village and that Jeep was so busy with other things caused them not to have time to collect enough data and appropriately analyze and write it up.

We have discussed the political problems in Pong. There were no teachers who completed the project there. The history book was written by community members.

Community members

Tai Yai people knew quite well that the Northern Thais discriminated against them. So at first, when older folks were interviewed, they told children and teachers that they were born in Thailand. They tried to guess what the teachers wanted to hear and then told them that. They lied to please teachers whom they saw as essential to helping their children. As the research progressed and the teachers started showing more understanding of their culture, the Tai Yai grew to trust

them more and more. They opened up and started talking about journeys through China and Burma. As trust grew, some villagers told all. They told stories of hardships in Burma and China and more personal things as well, like their teeth falling out during a certain part of the journey, and crossing various rivers. They used these personal events to arrange other events in chronological order. They also told of coming to Thailand and needing to invest three years in preparing paddies, planting and harvesting the first crop of rice. Many of these older folks remembered using horses and wagons for transport up until WWII when the Japanese built roads which were followed by an increasing availability of trucks and motorbikes. Some old folks told of their troubles adjusting to life in Thailand. One gave the example of having to change her oil from sesame oil to pork lard. She said it was a long time before food tasted good to her. These older residents also told of more recent history, of their adult sons and daughters leaving the villages for nearby cities. Now, they said, they waited for checks from the city.

The old folks were happy to teach the children. If left to their own devices, they tend to focus on the Tai Yai 12 months of festivals, what they considered to be important in Tai Yai culture. They said that they needed to teach the children and their parents as well because the parents were all working and had no idea of Tai Yai customs. One problem, here, was that while the old folks had always been willing to teach, not many people of any age had been willing to listen. This was a significant problem for Tai Yai, Northern Thai and other cultural groups. The kids just hated to listen because the old folks told them what to do and lectured them about things they did not find important. If the kids asked too many questions, the old folks were bothered and either did not respond to the kids or scolded them for talking out of turn. There was a broad generation gap. Over the course of the project, this gap lessened for some older and younger villagers. Community meetings were key in this development. The villagers had the chance to discuss their difficulties and successes in life and came to the realization that while they used to have land and planted rice and vegetables, they now had little land and have to work for others. Even though this was their everyday experience, it was quite a revelation for them to talk about it.

Another problem for the villagers was that at first they did not believe that they had a history. What they had was a culture, with language, festivals, foods, dance and other artifacts. They were sure that history was the province of kings, princes and other royals. Little by little, as they began to piece together their own migration experiences, they came to understand that they did have a history. In the end, they realized it was quite rich, too, as it filled a whole book. One headman who had been sceptical at the beginning of the project said at the end, "Your book is fine, but I think I will write my own since I have so much information."

Students

As we have said, the elementary school students were instrumental early on in conducting interviews with adults in their villages. This was an awkward task for them because like their parents, they wanted to appear to be Thai so they could fit into Thai society. They were also very young, so that as the lowest members of the hierarchy, they had little power to probe or refute anything. They asked questions and accepted all answers, short, untrue or otherwise.

The Tai Yai children just listened to their Thai teachers because they wanted to fit in and be Thai. They tried to forget that they were Tai Yai because they were ashamed of being a member of a minority group that was poor and looked down on. During the course of the project, these students came to appreciate their Tai Yai history and the struggles of their ancestors. They developed increased ethnic pride. This was exactly what the project and the elders intended – that the Tai Yai kids not be ashamed of who they were. The researcher and elders shared the idea that this kind of shame would be debilitating for the youth.

One of the benefits to the students was their growing appreciation of the old folks in their villages. Some of them developed close relationships with these elders and came to understand why the elders were so proud of being Tai Yai, even though they were currently poor and looked down on by their Thai neighbours. They learned that the Tai Yai had been the *pīi yai*, or the ultimate elders of all Tai peoples, including the Thais. They learned of tiger kings and brave soldiers who conquered a vast kingdom that included parts of China, Thailand and Burma. They learned that Tai Yai Buddhism differs from Thai Buddhism because their beliefs and practices are more important to them. They also learned of the Tai Yai reputation as good salespeople. All of these things helped them to gain a bit more pride in being Tai Yai. Some students said that they had to appear to be Thai in speech and dress, but also had to remain Tai Yai inside because that was whom they really were. Several students went even further, saying that the Tai Yai were actually better than the Thais because the Thais were dirty and lazy.

CONCLUSIONS – LESSONS LEARNED

In the beginning of this paper we said that this project was a model for others to follow because it encouraged multicultural learning in transformative ways by engaging students, teachers and community members in researching and writing local histories. The process encouraged teachers to consider multiple points of view, and villagers young and older to develop increasing ethnic pride. The key to the project's success was in its design which required multi-generational and multi-ethnic participation. As is always the case, everything did not go as planned and this project encountered many problems. These problems and successes contributed to the lessons we learned. In the hopes that these lessons might be useful to others developing multicultural education programs, we summarize them below.

Necessity is important

This may seem like an obvious thing to say, but we think that necessity may be the most important contextual feature for success in multicultural education programs. It would have been much easier for villagers, children and teachers to maintain the *status quo* and hold onto their views, however counterproductive we found them to be, than to engage in cultural learning. For the villagers, participation was necessary to please teachers whom they saw as key to their children's success. The children found it necessary to please both their teachers and their parents. Teachers knew that no matter how busy they were that they would have to develop a local curriculum within the next few years. They saw this project as helping them to do something that was required. This project demanded a great deal of time and energy from participants. While we do not mean to argue that self interest is wholly to credit for all of this work, it is clear to us that were there neither need nor benefit, participation would have been hard to come by.

A supportive process is important

The researcher knew that this project would lead to realizations that would not be easy for teachers, children and villagers. She built in meetings for everyone, especially focusing on the teachers who had both role models in the NGO workers and support for conducting research. No one told the teachers how to conduct research and how to ask questions. At the same time, the researcher met with them and provided guidance and coaching as problems arose in data collection, note taking and interviewing. For the children and villagers, the community meetings where they shared information about local history were very important to building inter-generational relationships and ethnic pride. These community and teacher meetings were key to encouraging participation. Without them, we imagine that the teachers would have collected data, taken notes and then written manuscripts. As it was, the meetings provided forums for support and the sharing of points of view.

Individual differences are important

All people do not become multiculturally literate at the same pace. This is not a new idea, but it is worth restating and instantiating. See Hollan (2002) for example. We wish we had more data about the children and villagers, but the data we do have and have summarized here about the teachers is evidence enough that individuals come to multicultural education projects with different ideas. Each individual also draws different information from these projects. Success cannot be measured by the development of a desired amount of pride on the part of minority individuals or a precise reduction of stereotypes held by majority individuals. Participation, though imprecise, is probably the best measure of success. Once participation becomes a common occurrence the door is open for continued ethnic identity development for majority and minority individuals. The importance of pride and the development of a positive ethnic identity for minority individuals is included as the cornerstone of most multicultural education programs. See, for example, Banks and Banks (1997) and Lee, (2002). However, we found that it was also important for majority individuals also to develop their own identities in relation to what they learned about minority group members. The teachers who seemed to learn the most became increasingly able to listen to the Tai Yai point of view without feeling that their own identity and point of view were being overlooked.

Local points of view are important

In summarizing effective multicultural education programs Lee (2002) says that all curriculum materials must be free of bias and stereotypes. We agree that stereotypes are never useful, but also disagree that bias should be removed. In this project, local bias was, in fact, the goal for the local histories. It was essential, really, that each community should develop a monograph about its own history from its own point of view. It is important that multicultural education materials come from many points of view. In fact, point of view is one of the issues we hoped participants would encounter and grapple with.

We also realize that developing local histories might have the effect of putting local ethnicities in boxes. In our case, writing Tai Yai histories and not incorporating these into the broader histories of Thailand and Southeast Asia could have such an effect. While using a local history alongside a more inclusive national or regional history might compartmentalize and trivialize local cultures, we think that this can be avoided through critical reflection and is well worth the risk. In addition, the process of collecting and writing the history is in many ways more educational than the finished product, so we encourage the writing and re-writing of local history as a method of multicultural education.

Teachers going to parents is important

According to Lee (2002) and many others, successful multicultural programs must include teachers and administrators encouraging parents from ethnic minorities to participate in school events. This is so that the school can include everyone, not only majority students and parents. Lee does not talk about teachers going into communities to serve or to learn about them. This is probably what is necessary to encourage parents who already have negative feelings toward the schools, for example, disenfranchisement, limited experience with education and oppositional identity to education as discussed by Ogbu (1997) and others.

In addition, if we are to aim for inter-generational participation in our cultural education programs, then we need to get beyond the school-centred notion of multicultural education. Wenger (1998) makes the strongest case for this, saying that education should transform us, thereby encouraging us to develop our own identities and listen to the points of view of others.

This local curriculum project moved in this direction by including older and younger Tai Yai villagers and majority group member teachers who all worked together to research and write about local histories. The researcher used both schools and Buddhist Temples for meeting sites and the teachers went into the villages and interviewed community members. Thinking beyond the school and curriculum is essential if we are to encourage inter-generational participation and identity-building processes in multicultural education.

When teachers and students conduct local research, they learn about culture

At the risk of being repetitive, we would like to say a few more words about the potential of teachers and students as researchers conducting local research. The most obvious benefits are that the teacher learns about the local community and the local community members, including the students, are seen as knowing something of value to the teacher. What we would like to stress, though, is that the process was just as important as what was learned. This process of doing research, brought the teachers into frequent, prolonged and meaningful contact with villagers. Research is what created participation. Not only did the teachers learn about the village and villagers' history, they got to know people and their personal stories. They also became known to the villagers. In addition, the teachers developed research and writing skills, both essential to their helping their students learn to think analytically.

Actions speak louder than words

The secret, of course, is that mind is an extension of the hands and tools that you use and of the jobs to which you apply them. (Bruner, 1996, p. 151)

This project packed a powerful punch of activity, participation and multicultural learning. Unpacking Bruner's little gem of a sentence explains why. We learn from doing. Our project was focused on learning by doing research. Both the tools and the tasks shaped that learning. The researcher presented the teachers, villagers and children with a task – to learn about local history, a topic which had everyone looking at how people have come to where they are today. The tools were human resources in the form of asking and answering questions, telling and recording stories and the developing trust that made the questions and stories increasingly personal and meaningful to participants. The activities and roles for teachers, students and villagers were different, so the tasks were also different. Teachers and students asked questions and listened. Villagers answered questions and told stories. Since teachers were members of the majority group, the Northern Thais, this turned normal activity on its head. Instead of telling villagers and children what to do, they were asking about the Tai Yai minority experience and point of view. Everyday affairs were also turned upside down for the Tai Yai minority group members who usually listened to the teachers rather than telling them about their own views and experiences. These activities, tasks and tools describe a learning process that mirrors the desired outcome. In other words, participants were asked to do what they were intended to learn. That's why the project was so effective.

The Lai villager whom we quoted at the beginning of the paper said it most clearly:

Before, the school told us what to do. Now they are asking us about our history and we are teaching at the school, too

Wenger (1998) would likely describe the effectiveness a bit differently. He would say that it was the participatory character of the research that encouraged participants to develop their identities, and it was this personally meaningful knowledge and feeling that motivated learning and transformation.

For whichever reason, this project was more effective in reducing the stereotyping that comes from the fear of the unknown than just exposure to individuals from unfamiliar cultures alone

would have been. While we do not mean to belittle the effect that reading a book can have on a person, we have found that writing one is far more powerful. This is because writing is far more active and requires more effort and much more investment of oneself than reading does. Research is also an active approach to building knowledge and experience.

Through our experience, we have come to feel strongly that multicultural education programs will be far more effective if they include activities that mirror intended outcomes. We found research, as this project arranged it, to be one such activity.

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REFERENCES

- Banks, J.A. and Banks, C.A.M. (eds.) (1997) *Multicultural Education: Issues and perspectives*. Boston: Allyn and Bacon.
- Bruner, J. (1996) *The Culture of Education*. Cambridge, MA: Harvard University Press.
- Gibson, M. (1987) Punjabi immigrants in an American high school. In G. Spindler and L. Spindler (eds.) *Interpretive Ethnography of Education at Home and Abroad*. (pp.281-210), Hillside, NJ: Lawrence Earlbaum Associates.
- Hollan, D. (2000) Constructivist models of mind, contemporary psychoanalysis, and the development of culture theory. *American Anthropologist*. 102 (3), 538-50.
- Lee, G. (2002) Realities and challenges facing multicultural education. *Multicultural Education*. 9 (4), 36-37.
- Mills, M. (1997) Contesting the Margins of Modernity: Women, Migration, and Consumption in Thailand. *American Ethnologist* 24 (1) 37-61.
- O'Connor, R. (1999) Who are the Tai: A Discourse of Place, Activity and Person. In Y. Hayashi and G. Yang (eds.) *Dynamics of Ethnic Cultures Across National Boundaries in Southwestern China and Mainland Southeast Asia: Relations, Societies and Languages*. Chiangmai, Thailand: Ming Huang Printing House.
- Office of the National Education Commission (ONEC), Royal Thai Government. (1999) *National Education Act*. Author. (English version)
- Ogbu, J. (1987) Variability in minority responses to schooling: Nonimmigrants vs. immigrants. In G. Spindler and L. Spindler (eds.) *Interpretive Ethnography of Education at Home and Abroad*. (pp.255-278), Hillside, NJ: Lawrence Earlbaum Associates.
- Wenger, E. (1998) *Communities of Practice: Learning, Meaning and Identity*. New York: Cambridge University Press.

An Australian Co-educational Boarding School: A Sociological Study of Anglo-Australian and Overseas Students' Attitudes from their own Memoirs

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Subjugated to the anachronistic rhetoric of nineteenth century literature, Australian boarding schools are habitually depicted as the remanence of a pre-colonial era. These images continue to be dominated by the paradigm of cruelty popularised by Tom Brown's School Days. This paper analyses the aspirations and attitudes of a study group of Anglo-Australian and overseas secondary students at a co-educational boarding school through their own memoirs. The theoretical framework of humanistic sociology, as developed by the Polish-American sociologist Znaniecki combined with Smolicz's theory of personal and group social systems was adopted for this purpose. The humanistic sociological approach asserts that a researcher must accept cultural phenomena from the viewpoint of the participants. The lineation and delineations of data revealed that respondents believed the boarding houses in the research school encouraged independence from the primary group system of the family and that the school provided the atmosphere to achieve this cultural becoming. The study revealed an attitudinal shift in the group that welcomed the multiculturalism of the school and acknowledged the cultural monism of the home. Lastly, cultural data revealed that the boarding house represented an adjunct to the home as the source of primary group social value, not necessarily replacing the role of the family but co-existing with it, as part of the secondary social system of the boarding school.

boarding, co-education, independent schools, humanistic sociology, multiculturalism

INTRODUCTION

Defining a boarding school and a boarding house in Australia

Defining a boarding school in Australia is problematic due to the limit of sociological studies undertaken in this country (Stewart, 2001). Rich (1989) asserts that boarding in Australia is a colonial reinterpretation of the architecture, educational philosophy and structure of the public schools of Great Britain such as Eton, Harrow, and Winchester. However, in order to find an appropriate definition it is necessary to refer to studies completed in Great Britain and the United States.

An American study asserts that Rousseau is the originator of boarding school education (Cookson and Hodges-Persell, 1985). However, it is more widely accepted that the Western tradition of boarding school education owes its origins to the rule and monasticism of St Benedict. This position is supported when we consider the foundation of Eton by Henry VI in 1440. Here the monarch endowed the college with many religious relics, including a fragment of the True Cross, so that it would not only become a seat of learning, but also pilgrimage. Another example is the English Benedictine Abbey at Downside. Founded in 1605, today this boarding school remains an integral part of religious life originally established for the education of the sons of the Roman

Catholic aristocracy. Sociologists Fox (1985), Kalton (1966), Lambert (1966; 1968; 1969; 1970; 1975), Punch (1977), Wakeford (1969), Walford (1986) and Weinberg (1967) concur that a boarding school is a non-profit organisation built for the specific purpose of residential education and benefit of the adolescent, often founded on religious principles, with a group of expert adults, who form the basis of a 'total community' as defined by Goffman (1961) where the whole community is subject to the authority of a single body, and live a regulated life.

Weinberg (1967) argues that in order for a *school* to be called 'boarding' there must be a residential population of at least 75 per cent. Conversely, Kalton (1966) suggests 50 per cent as a figure. In Australia there are a number of boarding houses which are attached to Independent Schools, however, the percentage of students who are boarders as part of the overall percentage of the school population is minimal. The research school for this paper fulfils Weinberg's definition, but is one of the few schools in Australia that does. The senior school comprises of seven senior boarding houses of approximately 65 students and two-day houses of about 70 students.

Humanistic sociology

Adopting the humanistic sociological approach to the collection and interpretation of cultural data as developed by Polish-American sociologist Znaniecki this paper investigated the attitudes of secondary school students towards boarding school education in the multi-ethnic context of Australia. This study asked the research question: 'What impact does the experience of boarding school education have upon the social system of the student?'

The present study collected and analysed responses to an extended questionnaire written by students of predominantly rural and urban Anglo-Australian, and non-English speaking backgrounds. The respondents were asked the following questions.

- To what extent does boarding school life change you?
- To what extent does boarding school prepare you for life after school?

Znaniecki's approach to sociology presumes that individuals are active contributors in their social and cultural framework – or that the individual and his or her milieu represent one unity (Smolicz 1999, p.302). Consequently, humanistic sociology rejects the methodological unity of science. A humanistic approach needs a method that allows data collection from a participant's point of view thereby minimizing the influence of the researcher on the data assembled. Accordingly the analysis of personal documents such as letters, diaries and memoirs becomes the defining difference of Znaniecki sociology of *Verstehen* (Helle, 2000). This method permits the participants to express their ideas, beliefs, observations and values, aspirations and feelings, reflecting upon themselves, their situations as they perceive them, and their actions within a social system.

As Smolicz (1999) notes it was through the so called 'humanistic structuralisation' of natural phenomena that a researcher's active involvement begins at the point of analysis of data for the purpose of interpreting a participant's actions and situation with what Znaniecki (1963) refers to as the 'humanistic coefficient'. That is to say in the context of this study, how these cultural facts appear to the human individuals who actually experience them in the boarding school as a cultural system (Halas, 1985).

Znaniecki notes that a researcher needs to accept human values and activities as facts, just as human agents themselves accept them. Furthermore, he asserts that personal documents permit imaginative reconstruction of an individual's experiences and hence open up the possibility of the analysis of an unique human dynamic in social and cultural life.

Therefore according to the humanistic approach, if a researcher and reader accept these human values as facts we are able to share in the experiences of the respondents. Kloskowska further notes that memoirs reveal “the extent of individual variation within a cultural group”. From her observations she argues that autobiographical material is among the best data for “grass roots level research” which examines the “personal experience of individual, ordinary people” (Kloskowska, 1996, pp.466-467).

Concrete and cultural facts in the analysis of memoirs

Mokrzycki (1971) says that imaginative reconstruction occurs when analysing other people’s experiences from their own writing at the same time as considering everything that is known about them. Humanistic sociologists refer to two types of data available from memoirs known as concrete and cultural facts (Smolicz, 1974; 1979; 1999 Smolicz and Secombe, 1981; 1989).

Confirmable facts or *concrete facts* include information such as the gender of respondents, their age, date-of-birth, and ethnic background, languages spoken and place of residence. The concrete facts collected in this study provide information about family background, if there was a previous connection with the school, present circumstances and life experiences. Sometimes this material is presented in the memoir. In this study a separate section which specifically asked these types of questions was included based on the practice of similar studies (Smolicz and Secombe, 1981; 1990). Table 1 summarises the data of respondents for this study.

Primarily the humanistic sociologist is interested in data that can only come from the respondents themselves. These data may include a description of their life, their fears, their hopes, their social situation, and their aspirations. Such material is referred to as ‘cultural facts’. These facts represent the verbalization of a respondent’s imaginative reconstruction in a social system at a particular time.

Table 1. Concrete Fact Profile of Memoir Writers

Memoir reference letter	Sex	Year started boarding	Age at time of writing	Residence	Place of birth	Languages spoken at home other than English	Ethnic identity	Religious affiliation
A	M	1996	18	Singapore	Singapore	-	American	Catholic
B	M	1996	18	Benella, Victoria	Hereford, UK	-	Australian	Anglican
C	M	1997	17	Gisborne, Victoria	Gisborne, Vic	-	Australian	Atheist
D	M	1998	16	Melbourne	Adelaide	-	Australian	Anglican
E	M	1997	16	Mt Gambier	Mt Gambier	-	Australian	Anglican
F	F	1998	16	Tokyo, Japan	Tokyo	Japanese	Japanese	Buddhist
G	F	1997	16	Bangkok, Thailand	Thailand	Thai	Thai	Buddhist
H	F	1998	17	Brunei	Brunei	-	Australian	Anglican
I	F	1999	17	Bangkok	Thailand	Thai	Thai	Buddhist
J	M	1997	16	Thailand	Thailand	Thai	Thai	Buddhist
K	M	1996	17	Geelong	Sth Africa	-	Australian	Anglican

In terms of research outcomes the researcher was a teacher at the school during the study, thus the role of participant-observer was adopted. The limitations of this type of data collection are that some students may feel compelled to write what they believe they *ought* to say, rather than what they truly believe as fact for fear of a member of the school reading their complete responses. On the other hand the memoir method permits respondents to reflect on their answers unlike the time-consuming and expensive approach of recorded-interviews (Smolicz and Secombe, 1986). However, the most coherent of memoirs provide an excellent impression of the respondents’ social and cultural context at boarding school through their own eyes.

As Znaniecki (1930) notes in *Cultural Sciences* this method of data collection permits the researcher to trace the cultural ‘becoming’ of respondents through their written comments – or imaginative reconstructions. Znaniecki clarifies this by using the metaphor of a frozen stream of water to represent an individual’s consciousness as part of the social system of a stream of water. Znaniecki wrote that consciousness appears:

...as a freezing stream, on the surface of which smaller or larger lumps of ice are forming, floating with the current, coagulating, dissolving, but presenting while afloat a more or less solid bulk. Znaniecki (1930, p.378)

Znaniecki observes that an individual’s awareness, like the stream of water is an incessantly developing super-organic body. Through the analysis of memoirs it is possible to see that whilst being part of a boarding school an individual’s consciousness appears to freeze, melt, and change depending on the physical environment and the relationships between social systems. In memoir analysis cultural facts are recognised in the form of attitudes that are directly expressed by the memoir writers in relation to their particular social situations and experiences. They are often prefaced with phrases such as ‘I think’, ‘I feel’, and ‘I hope’. This is best embodied by two memoirs:

... it [boarding school] has changed me but I think that I have developed more. I also think that boarding school has given me an environment to mature within. (Student A)

Another example:

I think that the most positive aspects [of boarding school] are the relationships and friendships one develops. (Student B)

From this type of cultural data it is possible to reconstruct individual and group consciousness. Furthermore by adopting Znaniecki’s imagery of human consciousness as being a “frozen stream” we can see that the respondents’ memoirs in this study parallel this metaphor. Through concrete data the researcher is presented with “the surface” which is made up of “smaller or larger lumps of ice” that are still forming. Some memoirs are “floating with the current, coagulating, dissolving”. However, when analysed together they present a “more or less solid bulk” representing the social system of the boarding school.

Cultural facts articulate the experience of being or becoming a “lump of ice” in the “stream” of boarding school. These memoirs caught in a moment of stasis represent the experiences of individuals either “floating”, “coagulating” or “dissolving” as part of the social system. The significant achievement of humanistic sociology is that the so-called ‘humanistic coefficient’ which permits the researcher to analyse these facts at a moment in time.

The present study

The rationale when considering this set of memoirs by boarders in a co-educational boarding school is to reconstruct as authentically as possible their school milieu as seen by the writers who have lived and acted in it. In Australia the method of collecting and analysing memoirs has been used to study the experiences of various ethnic groups (Smolicz and Secombe, 1981; 1982); for investigating the nature of core values in minority ethnic groups (Smolicz, 1987; 1992; Smolicz and Secombe, 1986; 1989; Smolicz, Lee, Murugaian and Secombe, 1990; 1997); and more recently ‘cultural becoming’ amongst university graduates (Hudson, 1995). In some of these studies there was a modification of the memoir method, in that participants were not required to supply full-scale life histories.

The data for this study was collected in two sections in July 2000 and July 2001. All respondents took part in this study voluntarily. The selection criteria for respondents was:

- all respondents were in Years 11 and 12;
- all respondents were between 15-18 years of age;
- all respondents were boarders at the school at least one year before completing the questionnaire.

From the initial data it was decided that students of a non-English speaking background would be targeted to provide a more representative picture of the cross-cultural student context. With the help of a colleague who taught English as a Second Language this was achieved. All students were given three weeks to complete the questionnaire and all students received the same questions.

All respondents were required to complete 26 questions which provided concrete data and 23 which provided the source of cultural data. The personal statements which formulated the cultural data section of the questionnaire can be taken as memoirs in the Znaniecki sense, in that the participants were given the freedom to answer the question in whatever manner they chose. The data collected were limited in that respondents were asked to write on their experiences at boarding school rather than their whole lives. In length, the memoirs ranged from approximately 2,000 to 5,000 words, with the majority being around 2,500 words.

The analysis of these memoirs was based on humanistic sociological theory as applied to the study of culturally plural societies (Znaniecki, 1968; Smolicz, 1979; 1990; 1997). Each national, or ethnic, group was seen as having its own more or less unique set of cultural and social systems. These were referred to as *group social systems* to distinguish them from *personal cultural systems* which individual members constructed for themselves to meet their particular life situations. Individuals developed their personal systems in order to suit the group values available to them at the time. The concept of a personal cultural system recognised both the reality of the inner personal world of individuals and the fact that it is made out of the cultural values they learned as a group (Smolicz, 1979, pp.1-46; 1990b, pp.60-66; Smolicz and Secombe, 1981; 1989; 1990, p.20).

An Australian boarding school

In 2002, the research school for this study described itself as an ‘Anglican School for girls and boys’. Hansen (1971) completed a small sociological and historical account of the school before it became fully co-educational in 1976. Founded in 1855 as a boarding school in the tradition of the Public Schools of Great Britain it was described in 1889 as a ‘thoroughly English public school, of the type of Winchester, Shrewsbury, or Cheltenham’.

Since Hansen’s study the school has grown to four campuses. The student population of the main campus is 808 and incorporates students from Years 5-12 located on a natural bay in rural Victoria. Year 9 is spent entirely at a campus in the Victorian High Country where the student population is 210. There are two small preparatory schools; one in the local rural city with a student population of 114 taking students from Early Learning Centre – Year 4, which acts as a feeder school to the main campus; and a preparatory school in Melbourne with a student population of 372 with an Early Learning Centre – Year 8. The overall school’s student gender ratio is 844 girls to 889 boys. Hansen (1971, pp.3-4) described the school’s physical environment:

... the clock tower ... is squat and solid ... The quadrangle complex is of red bricks; all school buildings are of a piece in that the material has a pleasing homogeneity. The

other senior school boarding houses ... are not unlike some of the Winchester's houses in a late nineteenth century upper-middle class mode. A graceful war memorial cloister leads ... to the chapel. The chapel is rather elegantly plain in its interior, with a single rose window at the east, a tapestry reredos and a simple dark wood rood screen. There is an air of the English village church about it and, indeed, this is the village air of the school environment. Set within private property of some one thousand acres ... with a railway station almost its own, the place is in itself insulation against the wider world. Boys [and girls] see staff wives wheeling prams or escorting toddlers to nursery school, all within the context of [the college] ... Between periods and outside school hour's boys [and girls] move about with an unhurried easy nonchalance, shirts open at neck, perhaps wearing a house pullover...

The school is managed by a Council comprising of 18 individuals. Three positions are *ex officio*; the President, who is the Anglican Archbishop of Melbourne, the Archdeacon of the local diocese and the President of the Old Scholars' Association. Of these council members 7 attended the school as boarders. The other members of the Council are current and past parents of students of the school.

The Council is responsible for the appointment of the position of Principal (formerly Head Master) who functions as *pater scholaris* in the School. The Principal in turn is responsible for the appointment of academic staff. Over 90 per cent of the teachers is resident at the School. There are 60 male academic members of staff and 49 female academic members of staff. All staff hold bachelor degrees or higher and diplomas or degrees related to teaching. Besides formal academic responsibilities members of staff are required to be a tutor in one of the boarding houses at the school – which include formal boarding house duties, coaching at least one sport during the year, and being involved in the extensive co-curricular programme.

A student's day

As summarised in Table 2 a typical student's day commences at 6.20am with a bell which summons student to get up, shower and make their beds. Students are expected to be at roll call at 7.00am with their beds ready for inspection of dormitories completed by a member of staff and a Prefect-on-Duty. At 7.15am students move to the main dining hall for breakfast. Once breakfast is completed students returned to their House by 7.45am to complete House jobs. At 8.00am students commence a morning preparation (homework) session before Chapel at 8.40am.

Table 2. A senior student's weekday timetable at the school

6.20 am	Bell, wake-up, shower, make bed
7.00 am	Roll call and dormitory inspection
7.15 am	Breakfast
7.45 am	House jobs
8.00 am	Morning prep. session
8.40 am	Chapel
9.00 am	Classes
10.40 am	Morning tea
11.10 am	Classes
12.50 pm	Luncheon
1.50 pm	Classes
3.30 pm	Sport
5.30 pm	Dinner
7.00 pm	Roll call and evening assembly
7.20 pm	1st evening prep. session
9.00 pm	Break – 2nd prep. session
10.00 pm	Lights out for Years 10 and 11
10.15 pm	Year 12s may work in rooms – lights out before 11.00pm

At 9.00am classes commence until morning tea when students return back to Houses before lessons start again at 11.10am until lunch. If a student is not involved in an activity, school band or school choir, lunch is taken in the dining hall at a leisurely pace. Academic classes end at 3.30pm whereafter student take part in compulsory sport, or activities. After this students change back into formal uniform for dinner (known as Number Ones) in the dining hall. Free time is enjoyed until 7.00pm assembly and evening prep. from 7.20 – 9.00pm. A break, showers, supper and then second prep is completed until 10.00pm. Lights Out are at 10.15pm for Years 10 and 11. Year 12 students work quietly in their own studies.

This timetable remains relatively unaltered except on the weekends where students have far more free time. All students must attend either compulsory morning Mass in the School Chapel or Benediction in the evening.

OVERVIEW OF MEMOIRS

The breadth of attitudes towards boarding school

Of the 45 respondents all noted that individual and group change took place at boarding school. The difference between individual's previous school and boarding school was noted in all 45 memoirs. These observations were evenly distributed as having both negative and positive impact on their perception of boarding school and life beyond it. The majority of respondents believed that boarding school had a positive impact on their ability to 'get ahead' after school. The most common description of boarding was that it made a student 'independent' from the primary social system of the home. These comments were often coupled with the context of learning how to tolerate and live with their peers for an extended period of time. The following example written by a Year 12 student from rural Victoria articulated this point:

Boarding school makes you a more independent, free thinking person. Your parents are not around to tell you what to do, or to tidy up after you. However, it only works for those who enjoy it ... It makes you adapt more to the outside world. Some say that it shelters you – but not really. For it provides a smaller 'mock' community with everything going on ... It makes you more capable (it has made me) of coping with being on your own and doing things for yourself and more socially capable too.
(Student C)

The notion that the system of boarding school 'makes you more capable' was a recurrent theme. Respondent C was one of only three students who noted that boarding school represents a smaller community.

Some respondents noted that boarding school made them aware of other individuals as forming part of a new social system that they had entered:

Boarding school life does change you significantly. Mainly because you are living so close to so many people. This tends to make you far more aware of those around you and the need for you to treat them well. I also believe that boarding school changes your perception of others, in that whilst you are boarding – you realise that everyone around you has at least one talent or goal that they are focused on. (Student D)

Coupled with the phenomena of individuality was a sense of being 'empowered' which suggested that respondents believed they would be able to deal with others in potentially stressful situations as a consequence of the totality of a boarding school community:

... you are better equipped at dealing with people in stressful situations and perhaps better at figuring out what people want you to say. I think it also helps you form a core

of friends which you can rely upon outside of school for support. From my experience it gives you enough confidence to believe that you can achieve anything you want, but not without working for it. (Student E)

This phenomenon was not only mentioned by students who identified themselves as being Anglo-Australian. One female student from Thailand wrote that since being at boarding school:

I am more confident, more responsible. I can look after myself better than before. Boarding school helps you to understand others and care for others. It teaches me how to respect others and listen to their opinions. It is good because it prepares me for when I leave the school for the bigger world. (Student F)

A female Anglo-Australian living in Brunei commented that boarding school life:

... has changed me to an extent that I am now able to cope with life ahead. Where I can't depend on my parents to make decisions for me and can independently go and find what I really want in life. It has changed the way that I think about people. It has also changed some of my ways of living, to live in a group, a community where we have to respect as well as be responsible for our actions there we do, in the eyes of our peers ... to care and look out for one another. (Student G)

She clarified this stating that:

It has really helped me [being at boarding school] in decision making and also prepared me for life without my parents. The fear of never seeing my parents ... I have now overcome as ... I have realised that I can always keep in touch with them, even though I am so far away ... It has also helped me to realise what I would like to achieve after school. (Student G)

These positive comments about individualism and independence were countered by one student who noted that:

There is a lot of 'hype' about boarding school making you become independent but I don't think it's true. Many students are pampered by teachers or friends. To a certain extent boarding school prepares you. If there is one thing you can use from boarding school, it would probably just be your experience with handling others. (Student I)

Evidence of shifting attitudes towards boarding school

An advantage of the memoir approach to the collection of cultural data is the ability to trace evidence of cultural change through analysis. Znaniecki (1968) notes that cultural change can be seen by observing the dynamic tension between individual attitudes and social values as articulated in memoirs when compared to each other (Halas, 2000). This study observed change in the attitude of respondents towards boarding school, including the factors which influenced the change in these attitudes. Most of these changes in attitudes noted that the privilege of attending boarding school was positive.

For example one respondent wrote:

Before I came to the school it was obvious that I needed independence and a little more structure in my life. I don't think that I had many problems with interacting with people although I had a slight temper. Now that I look back and you've asked me about the likes and dislikes of my old school I've realised that I am very fortunate – and I've never really appreciated what I had ... There is no doubt in my mind that boarding school in my mind has helped me tremendously in learning to deal with people in a variety of circumstances. (Student A)

Another recorded the change in his perception towards boarding school once he was in Year 12, House Captain and a School Prefect:

I was struggling academically at my old school – I was not a bright cookie at all! I only got into my old school on the interview. Here I've realised that the people in my House when I was in Year 10 were not actually people I got on with (at first). Now I am a lot more willing and open to new people and ideas. I think it's because I've been given a position of responsibility within the school ... I want to do well, lead etc, but in my own different way. (Student B)

One overseas student noted that:

During my first few weeks at boarding school, I was mostly homesick or actually sick. It became a disadvantage because everyone was getting to know each other I was in bed. When I started boarding I had no idea how I would communicate or interact with strangers because my old school never had new people. But I think coming here developed my social skills and confidence. (Student E)

Attitudes towards cultural pluralism at boarding school

Due to the tuition fees required to attend the research school the student population was not representative of the socio-economic population of Australia at large. This observation paralleled the findings of sociological studies carried out at American and English boarding and American Prep. schools (Cookson and Hodges-Persell, 1985: Fox, 1985: Kalton, 1966: Lambert, 1966; 1968; 1969; 1970; 1975: Punch, 1977: Wakeford, 1969: Walford, 1986: Weinberg, 1967). However, the student population of the school was culturally plural and reflected the multicultural population of Australia. Of the 45 memoirs (17 written by girls and 28 by boys) analysed for this study 28 writers identified themselves as Australian, five as Thai, four as Chinese-Malay, four as Chinese, one as Malaysian, and one as American. Twenty six per cent of the respondents lived in rural Australia, 40 per cent lived overseas and inter-state, 20 per cent lived in metropolitan Melbourne. The students came from nine senior boarding houses within the school and recorded the association of the house as a personal group system in the case of each of the respondents. The respondents came to regard the members of their house in the same light as they regarded members of their family, namely, they provided their personal primary values.

Through concrete and cultural data it was possible to conclude that cultural monism existed in the great majority of the primary social systems of the students' homes. As a result of the social secondary group system provided by the schools offering the International Baccalaureate, teaching Chinese, French, German, Japanese and Spanish, having an Overseas Students Committee, holding Overseas Students Day, and Festive Lunches in the Dining Hall many personal statements acknowledged the existence of cultural monism in the primary social systems of the home. It was at this point, that some memoirs revealed the possibility of the secondary social system of the boarding school becoming an adjunct of the primary social system of the home. Because of the particular kind of intimacy of the boarding houses, a number of students came to regard it as virtually a primary group system, analogous to their family. In this case the school students, who initially formed a secondary social system, came to acquire personal primary connections if they resided in the same boarding house.

This observation was noted by both Anglo-Australian and overseas students. Therefore it was possible to assert that boarding school as a social system has significant potential in cultivating positive attitudes towards multiculturalism. The majority of Anglo-Australian memoirs articulated positive statements about the cultural pluralism that existed in this institution. In particular,

reference was made to language as an example of cultural identity. Anglo-Australian attitudes were summed up by one respondent who wrote:

I think it [language] is quite important as it is part of a person's personal cultural connection. Most overseas students have particularly strong friendships with their fellow expatriates. This is reinforced by the fact that they have their own language. (Student C)

An American student reflected on the role of language for students of a non-English speaking background stating that:

... language is a barrier in boarding school and there is no way of getting around it unless you're willing to take risks, explore and want to meet people who are essentially different to yourself ... (Student A)

A Thai student reflected stating that:

Language is quite an important part of personal identity. Many people come together because they speak the same language and have a similar cultural background. It's easier to find interest in the other person and start a friendship. (Student I)

The intricacy of this issue was acknowledged by another Thai respondent who wrote:

A lot of teachers would say to us speak English. I know that sometimes it is rude to speak Thai in some places. (Student G)

A male Thai student wrote of his uneasiness with the experiences of this cultural pluralism when he wrote that they sometimes felt:

Insecure and stayed away from everybody ... only close to friends that ... speak my native language. (Student J)

Nonetheless, six Anglo-Australian memoirs appeared to remain ambiguous in their attitudes towards cultural pluralism. One such memoir noted that:

... whether you live on as farm or not does not determine if your friends are going to be from the country. For instance, you may live in Hamilton but you can come to this school to escape the country life. (Student E)

This was clarified by one stating that:

People will ... be classified by their language in the School. (Student J)

The acceptance of cultural pluralism by the boarding school was supported by values clearly articulated in the majority of personal statements of the overseas and Anglo-Australian students that collected.

Evidence that the boarding house acts as a primary social system or a second home

Smolicz (1999) acknowledged the use of memoirs to analyse cultural phenomena as the defining characterization of Znaniecki's humanistic sociology. The act of writing a memoir not only documents an individual's cultural context and experiences through their own eyes, but also revealed to what extent an individual felt part of a given cultural group, or their cultural becoming of a group.

Znaniecki's (1939) theory on social systems was significantly developed by Smolicz (1979, pp.146-147) which followed his crystallisation of the writings of Cooley (1909) and Gordon

(1964) when he claimed that it was possible that social systems could be divided into 'primary personal' and 'secondary personal' types. Elaborating further, Smolicz cited the home or family as a primary personal and group system. A school, a university or an office represented a secondary group social system.

Humanistic sociology asserts that individuals acquire cultural meaning and social values through their primary and secondary personal cultural systems. At first it appeared that from the material documented in the cultural data of students' memoirs the phenomenon of 'independence' from the primary social system of the home appeared to come from their experiences of a supportive secondary system of the school.

However, when Smolicz's theoretical framework was applied (See Table 3) an anomaly appeared which suggested the emergence of an alternative primary group social system to that found in the original theory. Smolicz observed that relationships which took place in primary social systems were personal, intimate and on-going. Conversely, the secondary social system developed relationships which tended to be more formal, distant and spasmodic. In this research study it was discovered that individuals formed two kinds of personal primary bonds, one drew some of their personal values from the family and the other from the boarding house.

Table 3. Classifications of social systems in a co-educational boarding school
(adapted from Smolicz (1979, p. 149) *Culture and Education in a Plural Society*)

Type of System	Primary	Secondary
personal	primary personal system	secondary personal system
group	primary group system <i>(family)</i> ----- <i>(boarding house)</i>	secondary group system <i>(School)</i>

From cultural data collected the social system of the boarding house for the majority of respondents represented an adjunct to the primary social system of the home within the secondary group system of the school itself. This proposition was supported by extracts of three memoirs which commented on the relationship between students and the academic staff who acted as boarding house tutors *in loco parentis* with some of them actually providing virtual primary personal values for the students, or even perceiving themselves in this way. An Anglo-Australian student wrote that:

I have found that you have to understand that staff are human too ... (Student A)

This observation was personal and intimate. It revealed an appreciation of the flaws and complexities of a member of staff faces when working in the primary group system of the boarding house on one hand and the school on the other. Another boarder adroitly noted:

It is a difficult position for both teachers and students at boarding school. It must be hard ... to develop a friendship with a student and maintain professionalism at the same time ... (Student B)

Another stated:

Some ... teachers here are ... inspirational ... a lot of this depends on personal relationships ... I think of some teachers as friends because they have helped me

through difficult times. I think I trust some of them as much as any other student.
(Student C)

CONCLUSION

In conclusion, the boarding school presented a formalised occupational structure which framed the initial relationships between students and teachers. Here at school, relationships are more formal or controlled in the sense that they are part of an occupational dialogue – the student and the teacher – the educator and the educand as discussed by Znaniecki (1998, pp.154-160).

From the personal statements collected it was possible to see that the relationships among students and among students and staff, in the boarding house tended to be personal, informal, and involve the entire human personality. These memoirs concurred with Americans Hillman and Thorn (1996, p.3) claim that boarding school ‘is just a microcosm of all social life’.

From the cultural data shown it appeared that the pedagogical success of boarding school was in the personal atmosphere, support and comfort of the boarding house. The boarding house acted as a primary personal system to that of the family co-existing with it rather than replacing it. The boarding house acted as a community belonging to a larger collegiate body and hence formed part of the school as a secondary social system, but it transcended that role when it assumed primary connotation in the lives of boarders. Hence, the attitude of ‘independence’ readily discussed in memoirs was the result of an apparently symbiotic social system which interacted with the family.

The memoir methodology of Znaniecki permitted the researcher to analyse the comments of individual students and showed what they believed to be the central points about boarding school. Overall their comments were positive and revealed boarding school as a critical social system for the transition of the new values embodied by the multiculturalism they experienced in their lives at boarding school. It also revealed a number of Anglo-Australian and overseas students who were in the process of re-evaluating and re-interpreting the advantages and disadvantages of boarding school as a social system as transmitted to them by parents, friends, family and teachers. These comments showed how they believed that the experience of boarding school was significant in fostering independence and an attitudinal shift towards embracing multiculturalism as experienced in the secondary social system of the school – which for some students became just as, if not more important, than the more culturally monistic primary social system of the home.

REFERENCES

- Adamski, W.W. (1982) *Memoir Based Sociology between Institution and Qualification. Sisyphus Sociological Studies 2*, Polish Scientific Publishers, 95-116.
- Bautman, Z. (2000) Florian Znaniecki – Our Contemporary. In E. Halas (ed) *Florian Znaniecki's Sociological Theory and the Challenges of the 21st Century*. Frankfurt am Main: Peter Lang Verlag.
- Bean, C.E.W. (1950) *Here My Son: An Account of the Independent and Other Corporate Boys' Schools in Australia*. Angus and Robertson; Sydney
- Bierstedt, R. (ed) (1969) *Florian Znaniecki: On Humanistic Sociology*. The University of Chicago; Chicago.
- Cookson, P.W. Jn. and Hodges-Persell, C. (1985) *Preparing for Power: America's Elite Boarding Schools*, Basic Books, New York.
- Cooley, C.H. (1909) *Social organizations: a study of the larger mind*. Scribner; New York.
- Czarnocki, B. (1989) Znaniecki as a Sociologist of Polish-German Relations. In B. Czarnocki and A. Kwilecki (eds) *The Humanistic Sociology of Florian Znaniecki. Polish Period 1920-1939*. Warszawa: Polish Academy of Sciences, Poland.
- Dancy, J. (1963) *The Public Schools and the Future*. Faber and Faber; London.
- Duffell, N. (2000) *The Making of Them. The British Boarding Attitude to Children and the Boarding School System*. Lone Arrow; London.
- Dulczewski, Z. (1992) *Florian Znaniecki: Life and Work*. Adam Mickiewicz University; Poznań.

- Dulczewski, Z. (2000) The Relevance of the Methodological Note. In E. Halas (ed) *Florian Znaniecki's Sociology and the Challenges of the 21st Century*. Peter Lang; Frankfurt.
- Duncan, B. (1990) The Integration of Aboriginal and Torres Straight Islander Primary and Secondary Students within Non-Government Boarding Schools in Queensland. In *Ngulaig: Monograph No. 2 1990*. Aboriginal and Torres Straight Islanders Studies Unit. University of Queensland; Queensland.
- Fox, I. (1985) *Private Schools and Public Issues: The Parents' View*. Macmillan; London.
- Gardner, B. (1973) *The Public Schools: A Historical Survey*. London: Hamish Hamilton.
- Gathorne-Hardy, J. (1977) *The Public School Phenomenon (pp.597-1977)*. Hodder and Stoughton; London.
- Goffman, E. (1959) *Presentations of Self in Everyday Life*. Anchor; New York.
- Goffman, E. (1961) *Asylums: Essays on the Social Situation of Mental Patients and Other Inmates*. Penguin; New York.
- Halas, E. (ed) (2000) *Florian Znaniecki's Sociology and the Challenges of the 21st Century*. Peter Lang Verlag Frankfurt; .
- Halas, E. (1991) The Humanistic Approach of Florian Znaniecki. In H. J. Helle (ed) *Verstehen and Pragmatism*. Peter Lang Verlag; Frankfurt
- Hansen, I.V. (1971) *Nor free nor secular: Six independent schools in Victoria: A first sample*. Oxford University Press; Melbourne.
- Helle, H. (2000) Similarities in the Work of Simmel and Znaniecki. In E. Halas (ed) *Florian Znaniecki's Sociology and the Challenges of the 21st Century*. Peter Lang Verlag; Frankfurt.
- Hickson, A. (1995) *The Poisoned Bowl: Sex Repression and the Public School System*. Constable; London.
- Hillman, T. and Thorn, C. (eds) (1996) *Second Home. Life in a Boarding School*. Avocus Publishing; Gilsum.
- Honey, J.R. de S., (1977) *Tom Brown's Universe: The development of the public school in the 19th century*. Quadrangle/New York Time Books; New York.
- Hudson, D. (1995) *Cultural Becoming in a Multicultural Australia: A Study of the Education and Cultural Experiences of a Group of Adelaide Higher Degree Students*, Unpublished Ph.D. thesis, University of Adelaide; Adelaide.
- Hughes, T. (1885) *Tom Brown's School Days – by an old boy*. Macmillan; London.
- Hughes, T. (1926) *Tom Brown at Oxford*. Macmillan; London.
- Kalton, G. (ed) (1966) *The Public School: A Factual Survey*. Longmans; London.
- Lambert, R. (1966) *The State of Boarding. A Factual Report on the Present Provision of Boarding Education by the Local Authorities in England and Wales*. Methuen; London.
- Lambert, R., Hipkin, J. and Stagg, S. (1968) *New Wine in Old Bottles? Studies in the Integration within Public Schools*. Occasional Papers on Social Administration, No 28. Bell; London.
- Lambert, R. with Millham, S. (1969) *The Hothouse Society: An Exploration of Boarding-School life through the boys' and girls' own Writings*. Weidenfield and Nicolson; London.
- Lambert, R., Bullock, R. and Millham, S. (1970) *Manual to the sociology of the school*. Weidenfield and Nicolson; London.
- Lambert, R., Bullock, R. and Millham, S. (1975) *The Chance of a Lifetime? A study of boys' and coeducational boarding schools in England and Wales*. Weidenfield and Nicolson; London.
- Mokrycki, E. (1969) Two Concepts of Humanistic Sociology. *Polish Sociological Bulletin*, (2), 32-47.
- Mokrycki, E. (1971) The Operation of Verstehen. *Quality and Quantity*, (5), 339-352.
- Punch, M. (1977) *Progressive retreat: A sociological study of Dartington Hall School 1926-1965 and some of its former pupils*. Cambridge University Press; London.
- Rae, J. (1981) *The Public School Revolution 1964-1979*. Faber and Faber; London.
- Rich, P.J. (1989) *Elixir of Empire: the English public schools, ritualism, freemasonry, and imperialism*. Regency Press; London.
- Secombe, M.J. (1997) *Cultural Interaction in the Experience of some 'mainstream' Australian Graduates of Anglo-Celtic Cultural Background*. Ph.D. Thesis Department of Education, University of Adelaide; Adelaide.
- Smolicz, J.J. (1974) *Humanistic Sociology: A Review of Concepts and Methods*, La Trobe Department of Sociology; Melbourne.
- Smolicz, J.J. (1977) *Sociology of Independent Schools*. National Council of Independent Schools; Canberra.
- Smolicz, J.J. (1979) *Culture and Education in a Plural Society*. Curriculum Development Centre; Canberra.

- Smolicz, J.J. (1981) Core Values and cultural identity. *Ethnic and Racial Studies*, 4, 75-90.
- Smolicz, J.J. (1999) *J. J. Smolicz on Education and Culture*. In M.J. Secombe and J. Zajda (eds). James Nicholas Publishing; Melbourne.
- Smolicz, J.J., Lee, L., Murugaian, M. and Secombe, M.J. (1990) Language as a Core Values of Culture amongst Tertiary Students of Chinese and Indian Origin in Australia. *Journal of Asia Pacific Communication*, 229-246.
- Smolicz, J.J. and Secombe, M.J. (1981) *The Australian School Through Children's Eyes*. Melbourne University Press; Melbourne
- Smolicz, J.J. and Secombe, M.J. (1982) The Australian School through Polish Eyes: A Sociological Study of Student Attitudes from their own Memoirs. *The Polish Review*, XXVII (3-4), 84-111.
- Smolicz, J.J. and Secombe, M.J. (1986) Italian language and culture in Australia: Perceptions of Italian-Australian students in their own memoirs. In C. Bettoni (ed) *Italians Abroad – Altro Polo*. Frederick May Foundation for Italian Studies, University of Sydney; Sydney.
- Smolicz, J.J. and Secombe, M.J. (2000) Znaniecki's Memoir Methodology and Changing Attitudes to Cultural Pluralism. In E. Halas (ed) *Florian Znaniecki's Sociology and the Challenges of the 21st Century*. Peter Lang Verlag; Frankfurt.
- Stewart, C. (2001) Borderline – the slow death of boarding schools. *The Weekend Australian Magazine*, 1-2 September.
- Thomas, W.I. and Znaniecki, F. (1927) *The Polish Peasant in Europe and America*. Alfred Knopf; New York.
- Wakeford, J. (1969) *Cloistered elite: a sociological analysis of the English Public Boarding School*. Macmillan; London.
- Walford, G. (1986) *Life in Public Schools*. Methuen; London.
- Weinberg, I. (1967) *The English Public Schools: The Sociology of Elite Education*. Atherton Press; New York.
- Wilkinson, R. and Bishop, T.J.H. (1967) *Winchester and the Public School Elite: A Statistical Analysis*. Faber and Faber; London.
- Znaniecki, F. (1939) Social groups as products of participating individuals. *American Journal of Sociology*, 1 (XIV), 804.
- Znaniecki, F. (1952) *Cultural Sciences. Their Origins and Development*. University of Chicago Press; Urbana.
- Znaniecki, F. (1968) *The Method of Sociology*. Octagon Books; New York.
- Znaniecki, F. (1998) *Education and Social Change*. Peter Lang Verlag; Frankfurt.

The Need to Investigate Greek Students' Experiences in British Universities: The Use of Ethnography in the Identification of Such a Need

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The growth in international students coming to the United Kingdom has well been documented, but little research has been undertaken into the implications for specific national cohorts, particularly with regard to students from Greece. There is lack of research into the nature and persistence of issues faced by such students. This article presents the results of the initial interviews, which were held in order to decide the parameters of the research and to understand the sort of issues, which it would be helpful to investigate further. The article also underlines the importance of ethnographic perspectives in the identification of research questions in research.

Greek students, Ethnographic research, semi-structured interviews,
support mechanisms, British Universities

INTRODUCTION

The literature on international students' education in institutions outside their own countries has demonstrated that they encounter problems when they come to study in other countries and that these problems are complex in that they involve a range of different issues, which are not fully understood by those interacting with students from other countries.

There are pre-arrival problems, on arrival problems and problems that appear in the longer term. Institutions have, to some extent, recognized the need for better support services to respond to international students' needs. A number of studies have been carried out in order to identify the nature of the problems international students experience (for example, Okorocho, 1997; Cunliffe, 1993; Kinell-Evans, 1990). The profile of the students covers various nationalities both non-European and European. There are studies that examine the Chinese and Hong Kong cultures, in particular (Barker, et al 1991) but there are no studies that specifically focus upon Greek students' experience in British higher education institutions.

It is evident that recruitment policies need to be kept under review and that institutions should make use of the feedback current students offer. Studies have presented information about recruitment methods used in British institutions and have indicated the difference between recruitment and pre-arrival information (Warner, 1990; Stevenson, 1991) without, however, including evidence as to whether or not recruitment methods have proved to be useful to students in any institution. In particular, there is no qualitative evidence, which indicates how far the issues of concern to international students are satisfactorily handled. There is no discussion moreover of schemes which are directed to specific national groups of students, nor of strategies based on Information and Communications Technology (ICT). It would appear that many problems would be alleviated if improved pre-arrival strategies were introduced. Studies carried out by Stevenson (1992) and Rogers and Smith (1992) underlined the complexity of understanding recruitment

policies and the perceptions among substantial numbers of international students that improvements are necessary. Research lends support to the recognition that international students have invested much to come and study in the United Kingdom and that they have special needs so that Universities and Student Unions should take the problems seriously and provide services to make their adjustment quicker and less painful (McDonough, 1996; Hodgen, 1993).

As shown, there is an increasing body of evidence which attests to the problems experienced by international students but, for the most part, such studies are general and do not relate to students from a specific cultural background. The overall aim of the investigation presented in this paper is to understand better the issues related to the acculturation of international students, particularly Greeks and to examine possible solutions. The specific objectives of the initial research presented in this paper are to better understand the background of Greek students taking courses in the United Kingdom, to examine the nature and importance of the problems facing such students and consider ways in which the issues identified may be effectively addressed.

THE CHOICE OF THE INITIAL INTERVIEWS

The need for the study of the problems facing Greek students was established in the literature. This current paper describes how initial interviews were used in order to identify issues to be explored in later stages of the survey concerning Greek students' experiences in the United Kingdom. In particular, it describes the value of the ethnographic perspective in the identification of the research questions to be investigated.

Following close consultation of the literature, an initial research phase used 19 initial interviews in order to set the parameters for the most important issues faced by students from Greece. It was decided to base the interviews on an interview guide enabling focused interactions with individual perspectives.

Hoepfle (1997) argued that interview guides make the interviewing of multiple subjects more systematic; and they help to keep interactions focused. The interview guide can be modified over time and can provide a framework within which the interviewer develops questions, sequences them and decides which information to investigate in depth, or which questions the researcher has found to be unproductive and should be excluded from the aims of the research. According to McDonough and McDonough (1997) the interview questions should be written in exactly the way they are going to be asked in the actual interview. The basic purpose is to minimize interview effects by asking the same question to each participant. The interview is then systematic and the analysis of the data is easier since it allows the interviewer to organize the responses and pull together similar answers.

The weakness of this standardized approach is that the interviewer does not have the chance to cover any topics that were not anticipated when the interview questions were written. Moreover, the interviewer cannot change the wording of the questions or the sequence of them. Mindful of this problem, a semi-structured approach was adopted. Thus, the interviews had the structured overall framework described above but allowed the flexibility, for example, to change the order of the questions. The researcher remained in control of the direction of the interview whilst giving scope for more personalized responses.

The interviews were used to gather data in order to develop the framework of the study of Greek students' experiences in British universities. The researcher used the notion of ethnography to justify the choice of the interviews as a method to gather data.

Schwandt (1997) argued that ethnography is a particular kind of qualitative inquiry, which describes and interprets cultural behaviour and that ethnography unites process and product,

fieldwork and written text. Patton (1990) had adopted the same stance as Schwandt arguing that ethnography focuses upon the question: “What is the culture of this group of people?” For him the idea of culture is central to ethnography and the assumption is that every human group that is together for a period of time will evolve a culture. Atkinson and Hammersley (1992) observed that ethnography can be integral to social research and certain features were apparent through the use of the initial interviews.

Specifically, as Atkinson and Hammersley (1992) argue, ethnography places emphasis on exploring the nature of particular social phenomena. The initial interviews served as a means to gather information on Greek students’ experiences in British universities. Ethnography moreover tends to work primarily with unstructured data that has not been coded at the point of data collection. The initial interviews were carried out in order to proceed to the construction of the questionnaire. Investigation on a small number of cases is an ethnographic feature. The initial interviews were conducted with 19 students.

Sampling for these initial interviews was based on the notion of intensify sampling as Patton (1990) calls it. The researcher tried to select rich cases, which could manifest sufficient intensity to illuminate the nature of the problems. Patton (1990) argued that intensify sampling involves the possession of some prior information and considerable judgment. Some exploratory work was done by reading and reviewing the literature in order to determine the nature of variations in the situation. Much of the literature throws light on the experiences on international students from the Middle East and Asia, China and Japan. However, there is little research on students from Mediterranean countries.

The model of illuminative evaluation also helped in the sampling decision process. Illuminative evaluation treats each case as unique and enables each student interviewed to offer valuable support and unique data. Illuminative evaluation places primary emphasis on description and interpretation (Patton, 1990).

The analysis of these initial interviews was based on deductive and inductive analysis. The first part of the analysis involved deductive analysis by moving from the general to the specific (Holloway, 1997) and categorizing the Greek students’ specific experiences. This led to inductive analysis, working from specific cases, to a more general conclusion (Schwandt, 1997; Patton, 1990), helping the researcher draw conclusions to frame the structure of the next stage of the research. These two techniques were used as justification for the notion of grounded theory. According to Corbin and Strauss (1990) grounded theory methods involve a specific set of procedures for producing a theory of social phenomena. Data generates hypotheses and generative questions, which are explored through further data collection. Grounded theory starts with an area of interest followed by the collection of data allowing relevant ideas to develop.

ANALYSIS OF THE INITIAL INTERVIEWS

The questions used in the initial interviews were divided into four categories: pre-arrival information, on arrival, post arrival and suggestions for further support.

According to Patton (1990) a simple way to analyse interviews is by combining case analysis with cross case analysis. Case analysis involves the process of writing a case study for each person interviewed. Cross case analysis means grouping together answers from different persons to common questions and analyzing different angles and perspectives of the issues raised.

In this study, the researcher recorded the actual words the Greek students used in each part of the semi-structured interview (case study). Next, the data were organized in terms of similar patterns

and other emerging patterns (cross-case). This process was an essential part of the work since it allowed scope to look at the data from different perspectives.

The next stage of the analysis involved the process of identifying, coding and categorizing the primary patterns in the data, a process that Patton (1990, p.382) refers to as content analysis. This labelling of the kinds of data leads to a classification system. Patton argues that this classification system is very important because without classification there is chaos.

Direct quotations from Greek students were also used to provide further context for the analysis. The Greek students' quotations show different perspectives of their experience and throw light on the effect of cultural factors on the adjustment to a different academic and social environment.

PRESENTATION OF FINDINGS FROM THE INITIAL INTERVIEWS

The interviews were held in the universities of Essex, Brighton, Sussex and Bradford. They were held in private houses and quiet public places and were tape-recorded to prevent any loss of crucial data.

For each question, the main findings have been summarized and a number of direct quotations are included in order to emphasize the importance of the individual findings.

Qualifications in English and entry procedures

Most of the Greek students did not have very high qualifications in English. The majority of them (15 students) held the First Certificate in English, though some students held a higher qualification such as the Cambridge Proficiency in English (6 students) and satisfactory scores in TOEFL (around 560) and IELTS (6.5). The majority of them gained admission to their university on the basis of one of the above certificates in English or by getting satisfactory university entrance examination marks in Greece. There was evidence that students were unaware of the university's entrance requirements.

I wasn't aware of the procedures to get accepted in a British university. Some of my friends who already studied in the United Kingdom did A levels and entered a British university so I thought I had to do them.

Foundation courses and pre-arrival information

The Greek students were asked whether they attended foundation courses in Greece or in Britain and whether these courses were useful. They were also asked whether they knew enough about the United Kingdom and the British university they were going to attend including information about the general educational system, the program of specific studies and life in Britain.

Most of them had attended foundation courses in Greece (14 students) or in the United Kingdom (5 students). The Greek students' responses revealed that the majority of them were not satisfied with the preparation they received on these foundation courses. The teachers on the foundation courses in Greece largely provided information based on their own personal experiences of academic life in the United Kingdom, experiences that were frequently out of date.

Most students made inquiries about the reputation of different British universities with regard to their main course subject. A large number of them had sought specific information on living expenses in the United Kingdom and the different aspects of personal life in Britain. The most frequent complaint the Greek students reported was that the subjects they were taught in the foundation courses were irrelevant to the courses they were doing in the United Kingdom. Some Greek students were worried about how to relate to their tutors in the United Kingdom. Most of

them reported that they were not informed fully about the British education system and that they had to rely primarily on information from friends and family.

There appeared to be a lack of specific information and an inaccurate portrayal of tutors' roles and university regulations, which underlined the fact that many students perceived their preparation as being inadequate.

They told us that British tutors are strict.

The teachers in the foundation courses terrified us by saying things like 'if you don't submit an essay on time, you will get a zero'. However, I realized that I could get an extension as I usually do.

Some of the positive comments revealed what Greek students considered important to know before the commencement of their studies in the United Kingdom.

I was informed about the British education system in the foundation course in Athens. The structure of the courses there was similar to the British one. They were giving us papers stating our coursework and the assessment procedures.

Other sources of pre-arrival information

Students' comments indicated the variety of extra institutional information encountered by students coming to the United Kingdom.

I had a good impression of British education through the big flashy pictures and impressive advertisements in newspapers in Greece presenting studies in Britain as organized.

My English aunt has informed me. She explained to me the procedures to enter a British university and also said that if a student doesn't have money to study, the government is giving money to the student.

Additional information required

Students were asked to list any information they would like to have had before arriving in the United Kingdom. Responses suggested that more information on the specific course programs and on the learning context was needed.

It would be very helpful if I knew beforehand the technique of good essay writing.

I would like to know more details about subject courses and particularly terminology.

It was also clear that more information on British culture and life in the United Kingdom in general would have been appreciated.

I would like to know more about British culture. I believe that when British people come to Greece, their behaviour blends with the Greek mentality.

Expectations

Greek students were asked to comment on their expectations before arriving in Britain. Their comments referred to academic concerns and indicated that there was indeed a perceived lack of information particularly on British study methods.

I expected the teachers to help more than giving me the opportunity to search alone and study individually. I expected more teaching hours and more supervision.

Some students reported that they had not experienced adjustment problems although the adjustment process varies among individuals. This does not preclude the value of more descriptive information.

I did not feel as if I am in a different planet. I just had the strange feeling that I am in a different country.

I did not expect to feel homesick. At the beginning I could not wait to go back to Greece.

It is interesting to note that Greek students seemed to welcome any opportunity to meet other Greek students and some even suggested they would have welcomed Greek-speaking university support staff.

I wish there was a Greek agency at the university so that Greek students could arrange trips to Britain.

It would be nice if there was an experienced Greek person who could help us and guide us during our studies in the United Kingdom.

Impressions

Greek students were invited to discuss their first impressions of the first few weeks in the United Kingdom. Their experiences seemed to have often involved negative relationships with British students. Most of the Greek students reported that differences between Greek and British cultures made it difficult to develop effective relationships with native speakers.

I have real problems interacting with my British flat mates. Sometimes they are ironic towards Greece and what Greek students say in class.

I was shocked by the British students' amount of drinking every night.

Even though Greek students seem to enjoy each other's company, they admit that these close relationships have lessened their chances to practice English

Greek students should practise English a lot more. I wish there were fewer Greeks at the University.

It was evident that students were often worried about finding appropriate and inexpensive accommodation.

I had problems acclimatizing to hall life. I thought that the place and my other flat mates were dirty and I didn't like sharing the bathroom with others.

I am worried about seeking accommodation for next year and about my money budget since I find the cost of living in the United Kingdom expensive.

Some Greek students had difficulty in relating to the British education system where the relationship between tutors and students is less formal and more relaxed than in Greece. Some comments illustrated their misunderstanding of their university roles and their expected behaviour.

My tutors sometimes did not explain clearly what they expected from us.

Tutors seem to pay attention to British students and not to Greek ones. I felt uncomfortable and attributed this discrimination due to Greek students' deficient linguistic capabilities.

Many students experienced homesickness, which affected their ability to adjust to life in the United Kingdom.

The most important thing for me was to adjust socially rather than academically. I did not care about the courses at first. I was so sad.

A further important issue is that students experienced language problems, which they did not expect.

I struggled at the beginning speaking English. I thought that the English language is strange and different from what I was taught in Greece. I felt as if I had to learn another language.

Language skills

Listening

Not surprisingly many students experienced uncertainty about the adequacy of their English abilities. Students admitted having difficulties in understanding spoken English. Some particular problems are noted including issues about the pace of delivery, accents, study skills and communication with native speakers.

Due to a very long absence of English practice, at first I could just grasp the gist of the whole lecture

Not all my tutors are British; some of them were Irish, some Scottish implying strong accents.

Speaking

A large number of students reported that they lacked confidence and flexibility in speaking. They hadn't spoken English for some time and thus they were embarrassed to speak. They could understand what other people were saying but they could not speak. Some particular problems in speaking are listed below.

I had the tendency to pronounce the last syllable of the words and I used to translate Greek into English, which was wrong since Greek and British syntax differ.

It was an absolute shock when I had to present a paper in front of the whole class.

Writing

All students reported that they had problems in academic writing. They felt that these difficulties could be minimized if their tutors explained to them exactly what to do and if they had been taught how to write essays and reports before the start of the academic year. Some of the following comments reflect the ignorance of academic writing techniques.

I had the impression that academic essays are just compositions including only the students' ideas and opinions without any bibliography. Thus, the first time I wrote an essay I got a very low mark.

I expected my tutor to explain to me exactly what he wanted me to include in the report and even help me individually.

Reading

Students in all four universities said that they used dictionaries when they came across unknown words in their reading texts. In general, they did not seem to have serious problems in comprehending the written word.

How students deal with language problems

Students were asked to state ways in which they had dealt with any language problems. Interestingly, there was a significant uniformity of opinion.

Several noted that the best way to overcome any English problems is to talk to British flat mates or watch television in order to listen to spoken English. Some students went to lectures even though they considered them irrelevant to the course content.

Others noted that they tried to enrich their vocabulary by reading books and newspapers. As far as course work is concerned, one suggestion was first to read books with additional background information in their subject and then, if they still did not understand, to go to a tutor. Several added that if they had serious problems, they would go to their tutors who were regularly available and supportive.

Weekly timetable

Almost all students talked about gaps in between their classes, which in practice led them missing some of them.

It is not necessary to go to all the lectures since the lecturer is not explaining anything at depth during the lecture and thus the handout is enough.

My timetable is normal apart from the hours in between my daily schedule. It is tiring to wait for hours for the next lecture.

Subjects presenting most difficulty

Most of the students (16 students) said that they considered theoretical subjects difficult because they had to read a lot to understand the theory. Additionally, students stated that difficulties in understanding some courses were, in their view, sometimes related to the tutors' approach to teaching the subject.

Assessment is not always subjective in my literature subject.

There are no difficult subjects... there are interesting and not interesting ones. The difficult ones are those which the teachers do not do their job properly.

Assessment differences

All Greek students understood that the British assessment system is different from the Greek and interestingly all of them preferred the British one. They reported that the British is fairer in that it combines assignments and examinations. In Greece it is not compulsory to attend lectures, as in the United Kingdom and each academic year is divided into two semesters and examinations are held at the end of each of them. It is more difficult to get accepted into Greek universities but once students are accepted, there isn't the same pressure since any number of re-sits are permitted. Several noted that they do not like the fact that in the British institutions, if a student fails twice, he or she does not have the chance to re-sit the subject.

I like the fact that I can improve my mark by doing oral presentations and essays.

I like it when I can pop into my teacher's office whenever I want to and ask for help.

Relationships with teachers and personal tutors

Students from all four universities unanimously stated that their tutors were helpful whenever they asked for advice and further explanation. They did not go to their personal tutor very often because they did not need him or her. Some of them did not even know who their personal tutor was.

My tutor is always helpful and polite to me.

A minority, however, stated that some of their tutors were prejudiced against them because they were Greek.

One of my teachers even told in front of the whole class that it is not possible for a Greek student to master the language that well and she was always giving me bad marks.

Language support

All Greek students thought that language support was not very helpful. They mentioned that they went once or twice and they noticed that they were taught elementary English which they had already learned in schools in Greece. The following comments capture their complaints and their suggestions for improving the usefulness of such classes.

I suggest that these classes could be held as a combination of teaching advanced English and meeting other students practising English.

It would be better if teachers gave a general mark for the whole essay and a separate one for the English used in it. In this way, students would be more motivated to improve their English.

Other problems students encounter

Students had the chance to report other problems they had encountered at university.

Unfortunately in Falmer there are not any Greek videos or books in the resource centre.

SOME KEY IMPLICATIONS OF THE FINDINGS FROM THE INITIAL INTERVIEWS

The findings from the interviews revealed that there are indeed serious concerns expressed by Greek students about the support they receive when preparing to come and study in the United Kingdom. Specifically, Greek students are concerned about their academic success in Britain and worry about a lack of understanding of issues relating mostly to study methods and assessment. Insufficient pre-arrival information is a serious problem affecting the students' preparation. Students' false expectations concerning the new academic and social environment created problems for their adjustment on arrival. Students experienced culture shock and there was concern about their relationships with British people. Students encountered language difficulties on arrival and during their studies, especially in understanding spoken English and in academic writing. Finally, students thought that contacts with other Greek students could make them feel confident during the first weeks in the host country.

It is evident that the issues identified in the initial interviews appear to corroborate the implications drawn in the literature. It is recognized that students from Greece require a specially targeted approach. These issues were useful in the construction of the questionnaires, which were

subsequently piloted and distributed in September 1998 in the universities of Essex, Sussex and Brighton.

TOWARDS THE DEFINITION OF THE RESEARCH QUESTION

According to Black (1993, p.26) research questions should not be vague but specific. He discussed general categories of research problems, one of which is particularly relevant to this study. The current research problem results from previous accumulated propositions, which become the starting point for the establishment of a comprehensive model. There is evidence in the literature that international students experience difficulties when adjusting to the United Kingdom, but there is not much evidence on the effectiveness of support mechanisms directed to specific national groups.

This problem requires the collection of data to clarify issues and thus the researcher needed to define the topics, which should be further elucidated in the questionnaire survey.

It is incumbent on those involved in British institutions to ensure that efforts are made to understand better the nature of the problems experienced and the effects that problems have on the success of the period of study within the context of the various cultural backgrounds presented.

It was therefore very important that the framework for the questionnaire survey should be carefully designed to ensure that specific topics are researched in order to bring to surface answers that will smooth the transition of Greek students to the British cultural and educational environment.

CONCLUSION

This article seeks to discuss the methods adopted to achieve the aims and objectives of the initial study. It describes the focus of the initial research and develops its significance by framing it within a broader theoretical perspective. Results of the initial survey are presented in order to establish the parameters of the investigation and to set out the most fruitful lines of inquiry. The major study that followed from this initial investigation has been reported by Katsara (2002).

REFERENCES

- Atkinson, P. and Hammersley, M. (1992) *Ethnography: Principles in Practice*. London, Routledge.
- Barker, M., Child, C., Gallis, C., Jones, E. and Callan, V.J. (1991) Difficulties of Overseas Students in Social and Academic Situations. *Australian Journal of Psychology*, 43(2), 79-84.
- Black, T. (1993) *Evaluating Social Science Research: An Introduction*. London: Sage Publications.
- Corbin, J. and Strauss, A.L. (1990) Grounded Theory Research: Procedures, Canons and Evaluative Criteria. *Qualitative Sociology*, 13 (1), 3-21.
- Cunliffe, A. (1993) International Students at the University of Plymouth: An Examination of Admissions and Needs. *Journal of International Education*, 4(3), 66-76.
- Hodgen, L. (1993) The Role of Student Unions. *Journal of International Education*, 4(1), 52-60.
- Hoepfle, M. (1997) Choosing Qualitative Research: A Primer For Technology Education Researchers. *Journal of Technology Education*, 9 (1), 53-64.
- Holloway, I. (1997) *Basic Concepts for Qualitative Research*. London: Blackwell Science Ltd.

- Katsara, O. (2002) *Greek Students in UK Universities: A Support Strategy*. Unpublished PhD Thesis, University of Brighton.
- Kinell-Evans, M. (1990) *The Learning Experiences of Overseas Students*. Milton Keynes: The Society for Research into Higher Education and the Open University Press.
- McDonough, J. (1996) Starting out and Student Choice: Great Weather and a Dream come true? *Journal of International Education*, 7(1), 62-69.
- McDonough, J. and McDonough, S. (1997) *Research methods for English Language Teachers*. London: A member of the Hodder headline Group.
- Okorocho, E. (1997) *A Study of Overseas Students' Experience in UK Higher Education and Issues that Affect Counseling and Working with them*. Unpublished PhD Thesis, University of Surrey.
- Patton, M.Q. (1990) *Qualitative Evaluation and Research Methods*. London: Sage publications.
- Rogers, C. and Smith, P. (1992) Identifying the Needs of Overseas Students: A Monitoring Exercise at the University of Southampton. *Journal of International Education*, 3(3), 7-24.
- Schwandt, T.A. (1997) *Qualitative Inquiry: A dictionary of terms*, London: Sage Publications.
- Stevenson, J. (1991) Information Concepts: Recruitment and Pre-arrival Information for Overseas Students. *Journal of International Education*, 2(2), 57-62.
- Stevenson, J. (1992) Market Forces and Pre-arrival Information for Overseas Students. *Journal of International Education*, 7(2), 57-62
- Warner, D. (1990) Guidelines for Successful Recruitment. *Journal of International Education*, 1(1), 11-35.

Strategies and Policies for Basic Education in Cambodia: Historical Perspectives

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This article examines the process of development and change in the state of education in Cambodia over four decades preceding the 1990 Jomtien World Conference on Education for All. The author argues that during the 1950s and 1960s, efforts to enhance basic education opportunities for all Cambodians were largely unsuccessful due to the lack of adequate infrastructural mechanisms and a guiding framework for action. Of the periods considered in this study, only the Prince Sihanouk regime (1950s-1960s) was relatively socioeconomically advanced, and saw a growth in the number of modern school buildings, teacher training centres, and universities. The succeeding regimes in the 1970s not only failed to maintain the development, but by the second half of the 1970s the formal education system had been completely dismantled. The collapse in 1979 of the Pol Pot regime made way for the rebirth of traditional socio-cultural structures and the wide expansion of schooling opportunities throughout the 1980s. National rehabilitation and reconstruction during the 1980s, despite lingering social insecurity, marked considerable and fundamental progress towards the present educational situation of this struggling nation.

Cambodia, basic education, policy, strategy, educational development

INTRODUCTION

The developing world has made tremendous strides in expanding primary education in the past three decades, and many countries have achieved universal primary enrolment. Most developing countries are, however, still a long way from achieving universal primary completion. With their populations growing faster than primary school enrolments, many countries will have to make a vigorous effort to reduce illiteracy over the next ten or fifteen years. Lockheed and Verspoor (1991, p.37)

Post-conflict Cambodia is no different from the above-described developing nations. Notwithstanding its tragic past, namely, civil conflicts and a massive destruction of socio-cultural settings and human resources, led to a serious social and educational crisis during the 1970s and 1980s. Since gaining independence from France in 1953, the ideal policy of building a nation-state through educational development was successfully implemented. New schools were built reaching to rural and remote areas; and universities, which the French had refused to offer during its colonial period (1863-1953), were established in the capital and several main provincial cities. The improved schooling opportunities of the 1950s and 1960s were expressly declined during the 1970s. It is estimated that between 75 and 80 per cent of the teachers and higher education students fled or died between 1975 and 1979 (Klintworth, 1989 as cited in Asian Development Bank, 1996, p.5).

The restructuring progression in education systems and the overall social services in the early 1980s marks the country's recommitment to socio-economic development and expanding educational opportunity. The schooling rehabilitation process was ruted and obstructed by the

continued social insecurity, especially in the rural and remote areas. The Asian Development Bank (1996) described the educational situation during the 1980s as poor school conditions, large numbers of unqualified teachers, an absence of a national curriculum framework, inadequate book supply systems, and a high pupil dropout rate in primary school. Nevertheless, Duggan (1996) noted since the early 1980s that basic education opportunity had been massively expanded through the initiation of comprehensive primary schooling strategies.

Since the 1990 Jomtien World Conference on Education for All (WCEFA), Cambodian leaders, especially in the late 1990s have made numerous efforts to provide accessibility for nine years of its currently defined basic education, to all their citizens. The contemporary regime's policy on universal nine-year basic education of high quality, which aimed to achieve before the beginning of the twenty-first century, is excessively ambitious (Dy and Ninomiya, 2003). A bunch of strategic approaches employed to accomplish its profound goal of basic education for all were barely, fully implemented for the lack of funding and disturbed social insecurity in several parts of rural and remote areas during the 1990s (ADB, 1996; Ayres, 2000; Dy, 2003; Prasertsri, 1996). Many of the targets for the year 2000 were not reached for several reasons such as are found in insufficient number of schools, financial burdens on the households, insufficient learning and teaching facilities – which caused low enrolment and high dropout rates within the basic education level.

This study covers Cambodia's recent four regimes of different political trends and ideology dating from the 1950s to the 1980s – attempting to build, reform, adjust, and transform the face of Cambodia from their respective political strategies. The central question begs to be asked here is what can an examination of educational strategies and policies of the previous regimes of Cambodia explain how basic education evolved and why it was not fully enhanced?

This paper traces and analyses educational strategy and policy development from 1950 to the period before the 1990 WCEFA with a special concern on basic education strategies and policies. This period is critically significant for the history of formal and mass 'modern' schooling system in Cambodia. It covers the very last few years during the French colonial era, Prince Sihanouk regime (1953-1970), Lon Nol regime (1970-75), Pol Pot or infamous regime of the Khmer Rouge (1975-79), and Heng Samrin regime (1979-1989). It probes the regimes' educational strategies and policies for their citizens in line with the socio-economic factors and their political trends. Their inputs, methods, and outputs are discussed so as to explain their commitments to building or changing Cambodia.

A modernization of the Cambodian traditional education system, done by the French, has lent support to socio-economic development and building a nation-state in the postcolonial era. This essay draws extensively on chronological government reports, ideas of other scholars, dialogues with senior government education officials, Khmer narratives and literature, and personal memory and understandings.

BACKGROUND: KHMER TRADITIONAL EDUCATION SYSTEM VERSUS THE FRENCH MODERN EDUCATION SYSTEM

Cambodian [Khmer] people were among the first in Asia to adopt religious concepts and socio-political institutions, presumably from India, and to create a centralized kingdom occupying large territories in the present-day mainland South-East Asia, with comparatively sophisticated culture (Chandler, 1988; Encyclopedia Britannica, 2001). This Indianized royal headship regarded their religious leaders as their intellectuals and *guru* (teachers), hence this allowed the religious institutions to play the role of educating their children and people. The temple education practice was first seen widespread in around the twelfth century allocating the Buddhist institutional

system of shaping the youth with Buddhist principles about individual life, family, civil society, and at least some basic literacy and numeracy skills. This public schooling system could allowably continue to provide only primary education (Bit, 1991, p.50).

The teachers were volunteer Buddhist men (monks: *sangha* or *acharj*). This traditional schooling system had been implemented as early as the seventh century for mainly the elite members in society (Chandler, 1988). The system escalated to the highest degree of education in Buddhist Philosophy known as *pundit* or the highest learning as noted by Chou, a Chinese envoy to Angkor (former Cambodian capital) during 1296-1297 (Chou, 1953). Bray (1999) noted this long tradition of schooling financed primarily from the contributions by villagers or local community.

This formal learning at the temple schools were restricted to males for one of the main reasons that the teachers were Buddhist monks and the students were required to stay and work at the temple. In traditional education curricula, students were taught sacred Khmer texts such as the Sutra which contains the precepts of Buddhism, literary traditions, and social life skills. The principal aim of the temple schooling system was to equip young men with the principles of life and society such as social conduct, moral ethics, as well as to achieve a certain degree of basic literacy.

The French colonized Cambodia in 1863, but the colonial government did not introduce a so-called 'modern' French schooling system until the early 1900s. This introduction was mainly to target the very few Cambodian elite communities to serve the colonial powers since the temple schools were only aiming to sustain Khmer traditional culture. However, it helped give for the first time, opportunity for girls to have access to formal schooling. For the first 20 years of their colony, Chandler (1991) found the French had done so little to interfere with traditional politics and even neglected educational development in Cambodia.

In the early twentieth century, the colonial administration began to modernize the traditional schooling system by integrating into the French schooling system, arguing that Cambodia's progress in more cooperation and improved agricultural production would serve better the colonial power. Chandler (1998, p.156) commented, "Before the 1930s the French spent almost nothing on education in Cambodia". The French were reluctant to enhance education for the idea that education would empower Cambodians and tentatively bar France's grip (Clayton, 1995). Some scholars even argued that the French purposefully withheld quality education from Cambodians in order to consolidate and then to maintain power. French schools did indeed fail to enrol significant numbers of Cambodians until late in the colonial period.

Several scholars (Ayres, 2000; Bray, 1999; Chandler, 1991; Clayton, 1995) see the modernization of the traditional education system and the integration of the French-oriented curriculum into the traditional Khmer curriculum as a French socioeconomic exploitation. Kierman (1985, p.xiii), as quoted by Clayton (1995 p.6), argued:

There were 160 modern [that is controlled by the French] primary schools with 10,000 pupils by 1925...but even by 1944, when 80,000 [Cambodians] were attending [some sort of] modern primary schools, only about 500 pupils per year completed their primary education...by 1944 there were only 1,000 secondary students...even by 1953 there were still only 2,700 secondary students enrolled in eight high schools in Cambodia.

Such a low investment in modernizing Cambodian education is likely because traditional Cambodian intellectuals, especially the Buddhist monks, resisted the French's attempt to Romanize their traditional language scripts in the 1940s as the French had successfully done to the Vietnamese (Chandler, 1998; Osborne, 1969). Seeing that their traditional culture of education on

the verge of collapse caused by the French reform, the Cambodians resisted and even actively opposed the French reform in rural areas (for discussion see Clayton, 1995).

EVOLVING CONCEPTS OF 'EDUCATION' AND 'BASIC EDUCATION'

From a traditional, social and cultural perspective, 'education' is literally defined by Cambodians on one hand as an honest route to better the human condition, intentionally aimed at shaping individuals for a better lifestyle, knowledge, and good manners for living in their respective societies. On the other hand, the contemporary Cambodian perception of 'education' refers to a process of training and instruction, especially of children and young people in schools, which is designed to give knowledge and develop skills.

Both induct the maturing individual into the life and culture of the group. This consciously and purposefully controlled learning process is conducted by more experienced members of society. In traditional education the pupils received instruction in the arts of writing, ethical precepts, practical philosophy, and good manners. There were also traditional codes of conduct and rules (*chbab*) for men and women requiring them to learn and obey to become good members of the Khmer family and society.

Thus 'basic education', as a 'minimally adequate level of education to live in society' is varied in accordance to socio-cultural and socio-political factors of the state. The majority of Cambodians are peasants relying on subsistence agriculture. Traditional and cultural principles encourage men to be more sociable, gentle, courageous, responsible, and hardworking, while women are supposed to be caring, reserved, and having good housework management skills. Accordingly, parents, senior members of the society, and Buddhist teachers, were responsible for educating boys.

What should be an adequate level of basic education that Cambodian citizens should be equally equipped? The 1990 WCEFA identified basic education as aimed at 'meeting basic learning needs'. Hence, the length of formal education and education content should depend on the policy of the individual society or country. With reference to this definition, Cambodian basic education was identified in the 1950s and 1960s as at the 'primary education level' in urban areas and at basic literacy level (being able to read and write everyday-life texts) in rural areas (Ministry of National Education, 1956-57). The extent of this basic education ideal was first halted in the early 1970s and later dissolved between 1975 and 1979 during the infamous Khmer Rouge regime.

In 1979-1981, putting children back to school and combating the illiteracy among adults were the main tasks of the regime. The level of education, which should be appropriate to meet basic learning needs during this period was unclear. In the mid-1980s the government started its commitment to strengthening the quality of educational provision. Education officials noted that during the 1980s, basic literacy or at least completion of the fourth grade of the primary cycle (then five years in length) was sufficient for achieving basic education.

ENHANCING BASIC EDUCATION OPPORTUNITY: 1950-60

In the last few years before the French left Cambodia, the colonial government, with recommendations from UNESCO, grudgingly introduced compulsory education for children aged 6 to 13 years. Events during these years have shown that the effort to provide compulsory, free primary education was too hasty. In the report presented at the UNESCO 14th International Conference on Public Education, Princess Ping Peang Yukanthor in 1951 stated:

The principle of compulsory education can thus not be fully applied – until the government is in a position to fulfill its essential duties through the possession of

sufficient number of teachers able, not only to instruct, but also to educate, and of adequate funds to meet all necessary expenditures (p.1).

Furthermore, Cambodian education was still without a national curriculum. Urban schools were able to offer more subjects in science and technology than the rural ones, which combined to focus on local traditional culture and more social subjects.

Prince Norodom Sihanouk was crowned King of Cambodia by the French colonial power in 1941 when he was still a senior high school student at a French Lycée in southern Vietnam. His policies for education after gaining independence were to attain the goal of compulsory primary education for all and to increase, at all levels of educational opportunities from primary to university institutions. His efforts were to build a prosperous nation-state through educational development. New principles of educational development in the 1950s, with the recommendations from UNESCO, were introduced and some were fully implemented such as increasing more learning opportunities for boys and girls and fighting illiteracy among adults in rural areas. However, the achievement was far from satisfactory. Statistically, only 10 per cent of female adults were basically literate in 1958 (Peng Cheng Pung, 1959).

The term 'basic education', which aimed at the level of primary education, was first used in the annual government report to UNESCO in 1957 which signified the UNESCO's recommendation to integrate audio-visual materials into the existing teaching methods at basic education level was not possible at that time (Ministry of National Education, 1956-57). Regardless of inadequate quality in basic education system, several scholars (Bit, 1991; Deighton, 1971; Dunnett, 1993) noted that the Prince Sihanouk regime, compared to the French era, had made significant progress in increasing accessibility at all levels of education. Deighton (1971, p.579) statistically described:

By the late 1960s, more than one million children enrolled in primary education as compared with about 0.6 million in 1960 and 0.13 million in 1950. From 1950 to 1965 the number of females enrolled at the primary level grew from 9 per cent to 39 percent. The number of teachers and schools has expanded commensurately from 1950 to 1964. Although primary enrolment rate increased, the illiteracy rate was estimated 50 per cent in 1953 for a population of 3.7 million and at 55 per cent for a population of 6.2 in 1966.

Reflecting its attention and commitment to formal education in building a modern and peaceful state, the regime even increased national budget for education to over 20 per cent of the national expenditure by the late 1960s.

However, other scholars such as Ayres (1999, 2000), Chandler (1991, 1998), Duggan (1996), and the two current senior education officials interviewed for this study commented that the regime had failed to universalize basic education and enhance employment for high school and university graduates. Thus, Duggan (1996, p. 364) criticized the regime:

The education system provided by Sihanouk was biased towards the nation's large cities. Rural Cambodia did not benefit from the selective expansion strategies employed by the Prince (Sihanouk) and handsomely built universities did not assist rural children and their family's poverty.

Despite criticisms of the regime for not having enhanced nationwide literacy-oriented education or increasing quality schooling opportunities for all, the regime marked a great recovery of Cambodia in the past few hundred years of its history. Dunnett (1993) claimed that during the 1960s, Cambodia had one of the highest literacy rates and most progressive education systems in Southeast Asia.

Further details of the Prince Sihanouk regime were given in some well-known Khmer accounts, written during the 1950s and 1960s, such as those by Nou Hach's *Phka Sroaporn* (The Flower Past its Bloom), Nhok Thaem's *Kolap Pailin* (Rose of Pailin), and Rim Kin's *Sophaat*, reflecting the struggles of young men and their families for education and employment. The belief that enhanced education would bring the benefit of higher employment in the government sector was raised in these works, which was also subsequently reflected in school curriculum. The social value of furthering the education of the individual, leading to a better future, was closely associated with the increased development of higher education institutions in the larger cities. However, the failure to give top priority to basic education during the 1960s led to the crisis in education system (for further discussion see Ayres, 2000).

EDUCATIONAL CRISIS AND DECLINE: 1970-75

Following over fifteen years of peace and prosperity which Cambodia enjoyed under the Sihanouk regime, General Lon Nol backed by the United States, seized control in a diplomatic coup d'état in March 1970 and declared the creation of the Khmer Republic. This incident may have been caused by the Prince's foreign policy, which was interpreted as 'practically' supporting Communist Vietnam and angering the United States during the Vietnam War. It was the first time that Cambodia abolished its chronological monarchy. Not only was there little constructive reform during this period, but rather the country was driven to civil conflict as communism strengthened to its hold in the East and fighting in rural areas spread in early 1970s, causing barriers to schooling opportunities. In turmoil, the regime completely collapsed in April 1975 and socio-economic achievements of the previous regime soon vanished.

During the early 1970s Cambodia was inevitably drawn into the Vietnam War. The national instability and political turmoil led the Lon Nol regime to reduce educational funding and many school closed in rural areas. Simultaneously, many teachers fled to join the Khmer Rouge movement while student and teacher demonstrations frequently occurred in Phnom Penh. By early 1972, the United States bombardment aimed at slowing the spread of communism from the East, resulted in serious damage to the education system and infrastructure.

SCHOOLING ABOLITION: 1975-79

Cambodia was eventually plunged into a complete darkness during the regime of Democratic Kampuchea, or the infamous Khmer Rouge, locally known as the Pol Pot regime which came into power in April 1975. The regime led Cambodia into revolutionary Maoist communism. Pol Pot's so-called 'great leap' revolutionary regime further ravaged Cambodia through the mass destruction of individual property, schooling system, and social culture by forcing the entire population either into the army camps or onto collective farms (Chandler, 1998; Dunnett, 1993). Damage was inflicted not only to the educational infrastructure, but Cambodia also lost almost three-quarters of its educated population under the regime when teachers, students, professionals and intellectuals were killed or managed to escape into exile (ADB, 1996; Prasertsri, 1996). It has been estimated that about two million of the pre-war Cambodian population of around seven million were killed or died through suffering in that genocidal regime.

Duggan (1996) noted that under the Pol Pot regime, literacy education beyond the lowest grade was abolished and formal schooling of the Western kind was eradicated. People were grouped into cooperatives by gender and age. Some basic reading and writing were introduced, albeit in an unstructured way and with no national curriculum, to children in some working collectives of about two to three hours every ten days (personal experience). During the early years of this regime, basic education was deemed unnecessary since almost all citizens were working in factories and farms (for further discussion see Chandler, 1991,1998; Duggan 1996).

EDUCATIONAL REHABILITATION AND RECONSTRUCTION: 1979-1989

People's Republic of Kampuchea (PRK) or Heng Samrin regime (1979 to 1989) started to rebuild the country. This regime, which was supported by communist Vietnam and other socialist bloc nations, ruled Cambodia after the fall of the Khmer Rouge. The regime's top priority between 1979 and 1981 was to reinstall educational institutions. Generous support from UNICEF and International Red Cross, together with a strong determination to restructure Cambodia by the PRK, saw about 6,000 educational institutions rebuilt and thousands of teachers trained within a very short period (Dunnett, 1993). According to an interview with a senior education official who had been involved in basic education system and teacher training since 1979, the regime's policy on enhancing education was:

1979-1981 was a period of restructuring and rehabilitating of both infrastructure and human resources. By restructuring and rehabilitation I refer to collecting school-aged children and putting them into schools despite in the poor condition. Classes were even conducted in makeshift, open-air classrooms or under trees. We appealed to all those surviving teachers and literate people to teach the illiterates. We used various slogans such as 'going to teach and going to school is nation-loving' and so on. There were no official licences or any requirements for taking on the teaching job. We just tried to open schools and literacy classes, regardless of their quality.

The rebirth of education in Cambodia in 1979 represents a historically unique experience from that of any other nations. In the early 1980s, all levels of schooling (from kindergarten to higher education) were reopened and the total enrolment was almost one million. Many teachers were better trained and quality gradually enhanced. Enrolment in primary education in 1989, increased to 1.3 million, and in lower secondary to 0.24 million, compared with only 0.9 million and 4,800 in 1980 (Ministry of Education, Youth and Sport, 1999). However, it is worth noting that in any primary school, about 30 per cent of the children had no father, 10 per cent had no mother, and between 5 and 10 per cent were orphans (Postlethwaite, 1988). The political and economic disturbance haunted Cambodia pending the second term of the current Royal Government and the complete eradication of the Khmer Rouge's machinery and organization in 1998. Nevertheless, the people of Cambodia still have pride and look forward to a golden age when their nation will again be prosperous.

CONCLUSION

Social and political factors of the last four decades from the 1950s to the 1980s determined the flux of crisis and progress of the schooling systems. The former extensive Khmer Empire, Cambodia suffered massive socio-cultural destruction, political turmoil, genocide, international isolation, and socio-economic crisis during the civil conflicts of the 1970s and 1980s. Political and economic problems during the above two decades were not isolated from the education structure, which was also seriously damaged during the civil conflicts. Shifting from limited or no access for girls to formal education within the traditional school system to the French schooling system in the early twentieth century was a positive step towards universal basic education. However, although primary education was made compulsory in the 1950s and 1960s, there was no presence of mechanism in handling the implementation of the policy.

The changing concepts of basic education from basic literacy to primary education, and to primary plus lower secondary education in the mid 1990s saw the expansion of learning opportunities for better lifestyle and socio-economic amelioration in contemporary Cambodia. The experiments of the 1950s and 1960s were largely unsuccessful because modern educational contents and outcomes could not meet the actual needs of the society at that time. In other words, many Cambodians feared that the modernity would lead to the demise of their traditional culture

inherited from their proud Angkorian ancestors. However, present-day Cambodians consider reforms in education during the 1990s as positive measures towards socio-economic development and improving freedom of lives. This acknowledges tremendous support from international community for guidance and recommendations.

REFERENCES

- Asian Development Bank (1996) *Cambodia: Education sector strategy study*. Manila: ADB.
- Ayres, A. M. (1999) Policymaking and policies of education in Cambodia. In D. Sloper (Ed.), *Higher education in Cambodia: The social and educational context for reconstruction*, Bangkok: UNESCO.
- Ayres, A. M. (2000) Tradition, modernity, and the development of education in Cambodia. *Comparative Education Review*, 44 (4), 440-463.
- Bit, S. (1991) *The Warrior Heritage: A Psychological Perspective of Cambodia Trauma*. El Cerrito.
- Bray, M. (1999) *The Private Costs of Public Schooling: Household and Community Financing of Primary Education in Cambodia*. Paris: UNESCO.
- Chandler, D. P. (1988) Cambodia. In *The Encyclopedia of Asian History* (vol.1, p.219-221). New York: The Asia Society.
- Chandler, D. P. (1991) *The Land and People of Cambodia*. Washington, DC.: Harper Collins.
- Chandler, D. P. (1998) *A History of Cambodia* (Rev. ed.). Chiang Mai: Silkworms.
- Chou, Ta-kuan. (1953) *The Custom of Cambodia*. (3rd ed.). Bangkok: The Siamese Society System.
- Clayton, T. (1995) Restriction or resistance? Educational development in French colonial Cambodia. *Education Policy Analysis Archives*, 3(19), 1-13.
- Deighton, L. C. (1971) Cambodia. In *The Encyclopedia of Education* (vol.1, p.578-584). Creswell-Collier Educational Corporation.
- Duggan, S. J. (1996) Education, teacher training and prospects for economic recovery in Cambodia. *Comparative Education*, 23 (3), 361-375.
- Dunnet, S. C. (1993) Cambodia, overcoming hardship, rebuilding its education system. *WENR: World Education News and Reviews*. Spring, 6 (2), 20-23.
- Dy, S. S. (2001, July) *Opportunities for Access to Basic Education in Cambodia*. Paper presented at the Eleventh World Congress of Comparative Education: Chungbuk, South Korea.
- Dy, S. S. (2003, March) *External Assistance to Basic Education in Cambodia: The Impact on Policies and Implementations*. Paper presented at the 47th Annual Conference of the Comparative and International Education Society, New Orleans: LA.
- Dy, S. S. and Ninomiya, A. (2003) Basic Education in Cambodia: The impacts of UNESCO on policies in the 1990s. *Education Policy Analysis Archives*, 11(48), [Online]. <http://epaa.asu.edu/epaa/v11n48/>.
- Encyclopedia Britannica. (2001) Cambodia, [Online]. www.britannica.com/bcom/eb
- Lockheed, M. E. and Verspoor, A. M. (1991) *Improving Primary Education in Developing Countries*. Washington, D.C.: The World Bank.
- Ministry of Education, Youth, and Sport (1999) *Education in Cambodia*. Phnom Penh: Author.
- Ministry of National Education of Cambodia (1956-57) *Educational Progress in Cambodia*. Report submitted to the 20th UNESCO International Conference on Public Education. Paris: UNESCO.
- Osborne, M. E. (1969) *The French Presence in Cochinchina and Cambodia: Rule and Response (1859-1905)*. Ithaca, N.Y.: Cornell University Press.
- Peng Cheng Pung (1959) *Educational Progress in Cambodia 1958-59*. Report submitted to the 22nd UNESCO International Conference on Public Education. Paris: UNESCO.
- Postlethwaite, T. N. (1988) Kampuchea. In T.N. Postlethwaite (ed.) *The Encyclopedia of Comparative Education and National Systems of Education*, (pp.412-13), Oxford: Pergamon Press.
- Prasertsri, S. (1996). *Rebirth of the Learning Tradition: A Case Study on the Achievements of Education for All in Cambodia*. Phnom Penh: UNESCO.

E-Learning: A study on Secondary Students' Attitudes towards Online Web Assisted Learning

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Information and Communications Technology (ICT) at secondary schools has made positive inroads into learning. The use of online e-learning by members of educational communities is increasing. It is suggested that educators identify and address individuals' attitudes so that anxieties can be kept to a minimum while at the same time allowing learning to progress and be cultivated in a positive manner.

This research study examined the affective, behavioural and cognitive attitudes of 52 Year 10 students from an Adelaide Public Secondary School towards a specific type of online e-learning, that of Online Web-Assisted Learning (OWAL).

Data were collected to examine differences in attitudes between paper assisted learning and OWAL, of differences in attitudes towards OWAL between males and females, the correlation between Internet use and positive OWAL attitudes, and the 'publishing elements' that students find most appealing in OWAL.

Media in Education, Multimedia/Hypermedia Systems, Evaluation of CAL Systems, Human-Computer Interface, e-Learning

INTRODUCTION

With the advent of the microcomputer in the late 1970s, the quest for e-learning, or electronic-learning (that is, using a computer to aid in the learning process) at the school level had begun. Online learning (especially Online Web Learning or OWL) has emerged as one of the fastest moving trends in education today (Palmer et al., 2001). Dede (2000, p. 281) reinforces this concept with the statement:

In developed countries, sophisticated computers and telecommunications are on the verge of reshaping the mission, objectives, content, and processes of schooling.

Since the start of the 1980s, Australian secondary schools have confronted with the issue of using computers in the classroom. Today ICT Education incorporates the use of the computer, its peripherals and Internet services within the student learning process and the teacher delivery process.

Computer usage in secondary schools has made many positive impacts and developments into learning. However the acceptance of ICT by schools, as with the current emergence of OWL, has been slow. However, in reference to Computer Based Learning (CBL), Woodrow (1991) points out that monitoring teacher and student attitudes is significant for communal usage, acceptance and success. Hence, this paper addresses the following research question:

What attitudes do secondary students have about Online Web Assisted Learning (OWAL), as compared to paper assisted learning (PAL), and what are the strengths of these attitudes?

KEY CONCEPTS

E-learning covers a broad area within ICT Education and comes in many media formats as seen in Figure 1.

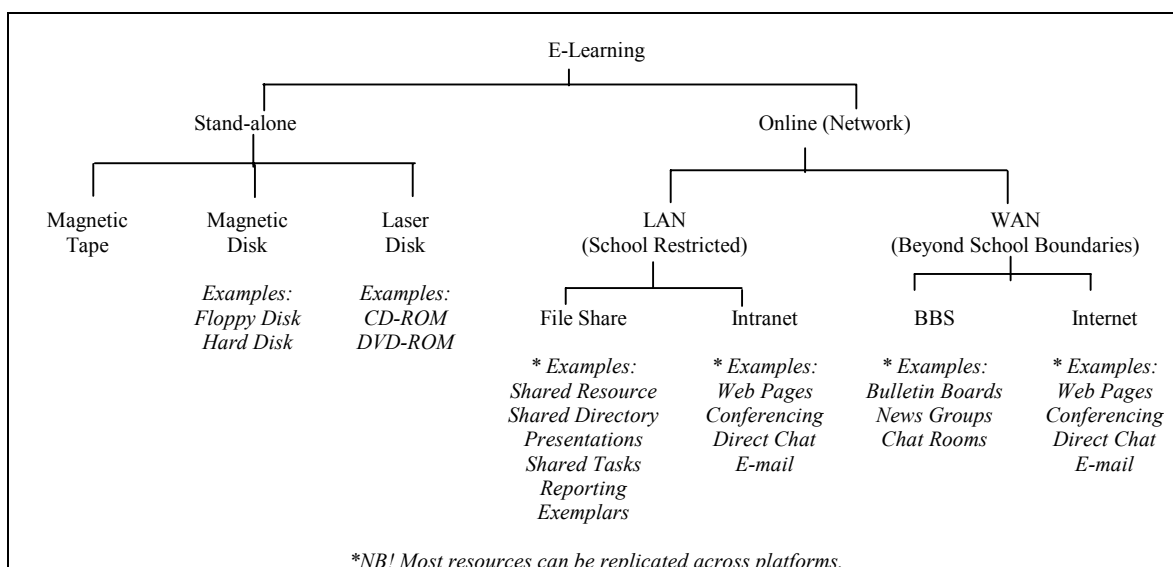


Figure 1. Media Formats of E-Learning

Today the most common format for e-learning is the Internet, which itself is a broad field of study as outlined by Palmer (2001, p. 314):

The Internet offers a new range of educational technologies to educators that includes: electronic mail, file transfers, the multimedia capability of the World Wide Web, low cost desktop videoconferencing, online, interactive tutorials, real time group conferencing, remote access to laboratory experiments and 3D interactive modelling.

E-learning involves the use of computers to aid in the learning process. If a computer is standalone, then we have Computer Learning (CL) that can be used as either Computer Based Learning (CBL) or Computer Assisted Learning (CAL). CBL involves the computer taking the place, for the most part, of the teacher, and is popular in distance education. CAL involves a teacher using e-learning “to supplement face to face teaching” (Hong et al., 2001, p. 224). This also applies to computers networked to the Internet with web page access. As with CL, Online Web Learning (OWL) can either be Online Web Based Learning (OWBL) or Online Web Assisted Learning (OWAL). Figure 2 demonstrates the parallel relationship between CL and OWL.

THEORETICAL FRAMEWORK

E-Learning

In a longitudinal study spanning 4 years at Deakin University Palmer and Bray (2001) found that “Student computer usage was rising... Student access to the Internet was rising ... Student usage of the Internet was rising ... The proportion of students with access to the Internet at home was rising ... Student usage of email was rising”.

Woodrow (1994, p. 309) makes the statement, “it is of critical social and educational importance to research the circumstances under which student (and teacher) feel comfortable learning about and utilizing the computer as an essential tool for learning”. Another study,

Hong et al. (2001) reveals that e-learning is becoming progressively an integral part of the secondary school's curriculum learning processes:

Schools from elementary levels to universities are using the Web and Internet to supplement classroom instruction, to give learners the ability to connect to information (instructional and other resources) and to deliver learning experiences (Hong et al. 2001, p. 223).

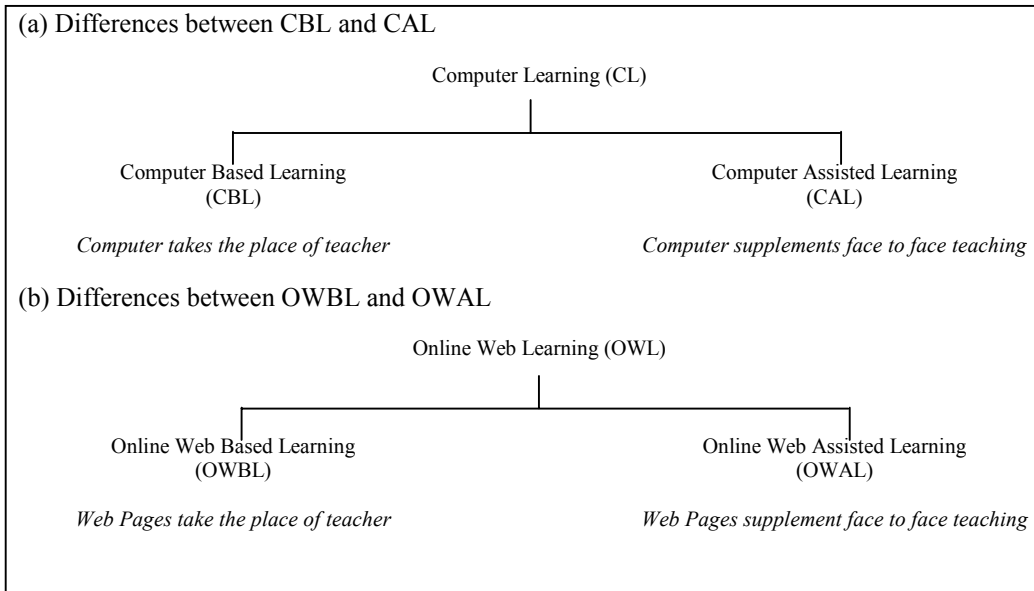


Figure 2. Comparisons between Computer Learning and Online Web Learning

Alessi and Trollip (1991) make a number of statements and recommendations about developing good e-learning material for students that appear pertinent for today's publishers of OWL. They consider the following good publishing elements:

- Text Presentation – “A critical factor affecting the quality of a (e-learning) tutorial is the length of information presentation”,
- Graphics and Animation – “Pictures, especially animated ones, capture attention more than text”,
- Colour – “Color is effective for attracting attention”,
- Text Transitions – “It is difficult for a student to distinguish a change in display that represents a continuation, from one that represents changing to an entirely different topic, the equivalent of changing chapters in a book”,
- Help Menus – “(Students) ... frequently need help of two types, procedural and informational”,
- Questions and Responses – “A lesson which presents information without demanding interaction with the student will not be successful”, and
- The Response Economy – “The amount of typing or other physical activity required to produce a response should be as little as necessary” (Alessi & Trollip, pp. 34-63, 1991).

Alessi and Trollip's work was used in the development of the OWAL activities used in this study.

Attitudes

Breckler (1984) and Jones and Clarke (1994), proposed that affect, behaviour, and cognition are distinguishable, yet interrelated components of attitude. Breckler (1984, pp. 1191–1205) provides a continuum by which to measure these attitudinal components;

Affect can vary from pleasurable (feeling good, happy) to unpleasurable (feeling bad, unhappy). Behavior can range from favorable and supportive (e.g., keeping, protecting) to unfavorable and hostile (e.g., discarding, destroying). Likewise, cognition or thoughts may vary from favorable to unfavorable (e.g., supporting versus derogating arguments), (Breckler, 1984, p. 1191).

Educators have known that learner attitudes and responses are interconnected and that a positive correlation exists between the two. Burns's study supports this with the statement that "attitudes are evaluated beliefs which predispose the individual to respond in a preferential way" (Burns, 1997, p. 456). Educators therefore have had the dynamic task of improving the curriculum, its delivery and resources in an attempt to fuel positive learner attitudes knowing that, in turn, it would improve learning outcomes.

Massoud (1991) points out that the interconnectedness of attitudes and responses also exists in ICT education. However, as a result of ICT emerging across all facets of education, anxieties are rising, especially among staff. Massuod (1991, p. 269) states that, "the existence of computer anxiety is often based on computer attitudes". Consequently, it is suggested that schools identify and address individuals' attitudes so that anxieties can be kept to a minimum while at the same time allowing learning to progress and be cultivated in a positive manner.

Additionally, prior ICT experiences influence attitudes towards ICT. Shashaani (1994, p. 348) states that, "recent empirical studies have shown that computer experience is positively related to computer attitudes". Woodrow (1991, p. 165) also points out that "awareness of student attitudes towards computers is a critical criterion in the evaluation of computer courses and in the development of computer-based curricula".

Gender

Shashaani (1997, p. 37) found that "females were less interested in computers and less confident than males", and, further, that "Females' lack of interest and low self-confidence regarding computers are related, to some extent, to their parents' behavior and expectations" (p. 40). By contrast, Katz et al. (1995, p. 241) in their research reported there was "no significant difference between the (attitude) scores of men and women". Data were collected to examine these issues in this study.

METHOD

Fifty-two Year 10 students from a low socio-economic district of Adelaide, South Australia were chosen for the study. The students were grouped into two cohorts of 26. Each cohort was allocated an 80-minute session involving three phases.

In Phase 1, a PAL activity was administered that utilised a senior secondary ICT text book (Chapter 7 of "Information Processing and Management: Units 3 and 4, School Edition", Scott et al., 1995) as its resource. In Phase 2, an OWAL activity was administered that involved multiple linked web pages as its resource. Both the PAL and OWAL activities included colourful photos and graphics. However the web pages also included animation, sound and hyperlinks. One cohort of Year 10 students did the PAL activity first; the second cohort of Year 10 students did the OWAL activity first.

Phase 3 of the study required the student participants to complete an online questionnaire. The items for the questionnaire were grouped into four sections: Section 1 gathered student personal details and ICT experiences; Section 2 gathered data on students' behavioural attitudes towards OWAL; Section 3 gathered data on the affective attitudes of students; and Section 4 examined the students' cognitive attitudes.

The items for the questionnaire used in Phase 3 were derived from two sources. One source came from responses provided by a group of 19 randomly selected Year 10 students prior to the study. The students were chosen during a study-line period and were asked to provide a written response to two open-ended questions as follows:

1. When learning for school work, which do you enjoy the most; a book or a Web Site?
2. If you have answered a WEB SITE, then please continue by answering the following question: What makes learning from a Web Site more enjoyable?

The other source came from the Jones and Clarke's (1994) Computer Attitude Scale for Secondary Students (CASS). The items for the CASS study were modified to include web page references instead of Computer references.

The questionnaire used in this study consisted of five-point Likert-type attitude scales.

DATA

The scoring for the questionnaire was established as follows: Strongly Agree: 5 points; Agree: 4 points; Undecided: 3 points; Disagree: 2 points, and; Strongly Disagree: 1 point.

Negative items had their scoring reversed. As in the CASS study, the gender specific item had its scoring reversed for the opposite gender only.

Table 1 illustrates the mapping of questionnaire items to the research questions.

Table 1. Mapping Questionnaire Items to Research Questions

Research Questions	Questionnaire Items
Differences in attitudes between PAL and OWAL	B4, B5 F1, F2, F3, F5, F6, F8, F13 O1, O2, O3, O4, O8, O10
Differences in attitudes towards OWAL between males and females	P1, P2, P3, P4, P5, P6, P7 F3, F5, F6, F7, F8, F9*, F10, F11*, F12*, F13, F14* O1, O5*, O6, O11*, O13*, O15
Correlation between Internet use and positive OWAL attitudes	P3, P4, P5, P6, P7, B1, B2, B3, B6, B7, B8*, B9*, B10*, B11*, B12*, B13, B14 F7, F8, F9*, F10, F11*, F12*, F14* O5*, O6, O7, O9, O12*, O13*, O14*
Publishing Elements that students find most appealing in OWAL	B5, B13, B14 F2, F3, F4, F13 O15

*Items from CASS

Table 2 presents each of the item codes used in the data collection and information processing stages.

Table 2. Definition of Questionnaire Item Codes

CODE	Questionnaire Items
P1	Indicate your gender
P2	Indicate your age group
P3	How many computers do you have at home?
P4	Do you have access to a computer at school to do your school work?
P5	Do you have access to a computer in the classroom for school work?
P6a	Do you have access to the Internet at home?
P6b	If YES to P6 - How often do you use the Internet for chatting (such as ICQ)?
P6c	If YES to P6 - How often do you use the Internet for school work?
P6d	If YES to P6 - How often do you use the Internet for playing games?
P7a	Do you have your own email account?
P7b	If YES to P7 - How often do you use the Internet for e-mailing?
B1	I have problems using the mouse when using Web Pages
B2	I have problems using the keyboard when using Web Pages
B3	I have problems using the scroll bars on the Web Pages
B4	If given a choice I would first search for a book to find information for a school project before I search for a Web Site
B5	If given a choice I would get most of my diagrams for school projects from a text book than a Web Site
B6	I avoid using Web Sites when ever I can
B7	I have problems finding my way around a Web Site
*B8	I learn to use new Web Sites by trial and error
*B9	Other students look to me for help with Web Sites
*B10	Using Web Sites has increased my interaction with other students
*B11	I develop shortcuts, and more efficient ways to use Web Sites
*B12	When I have a problem with a Web Site, I usually solve it on my own
B13	I can adjust Web Pages (such as Font sizes) to suit my needs
B14	I download objects (such as pictures and sound) from a Web Site for school use
F1	The Web Assisted activity terrified me
F2	The colours on the Web Assisted activity made it more interesting than the colours on the Paper Assisted activity
F3	I preferred the Web Assisted activity instead of the Paper Assisted activity because it had animation
F4	I preferred the Web Assisted activity instead of the Paper Assisted activity because it had sound
F5	I felt more uncomfortable using the Web Assisted activity than the Paper Assisted activity
F6	I found the Web Assisted activity more boring than the Paper Assisted activity
F7	School work that uses Web Sites for learning makes me feel happy
F8	If I had a choice I would prefer to learn from a book than from a Web Site
*F9	I feel helpless when asked to use Web Sites for school work
F10	I feel confident with using Web Sites
*F11	I feel threatened when others talk about Web Sites
*F12	Web Sites frustrate me
F13	I preferred the graphics on the Web Site better than the graphics on the Paper Assisted activity
*F14	I get a sinking feeling when I think of trying to use a Web Site
O1	The Web Assisted activity was easier to use than the Paper Assisted activity
O2	The Web Assisted activity was more difficult to read than the Paper Assisted activity
O3	The Web Assisted activity was more difficult to understand than the Paper Assisted activity
O4	Web Sites will take over Books in the future
*O5	Working with Web Sites will not be important to me in my career
O6	There should be more school work that uses Web Sites
O7	All subjects in the future will use Web Sites for learning
O8	Students learn more using Web Assisted activities than Paper Assisted activities
O9	Web sites are difficult to learn from
O10	Finding your way around a Web Site is harder than finding your way around a Book
*O11	Boys like using Web Sites more than girls do
*O12	People who use Web Sites for work are seen as being more important than those who don't
*O13	Working on Web Sites means working on your own, without contact with others
*O14	To use Web Sites you have to be highly qualified
O15	Learning from a Web Site is enjoyable because some include games and movies

*Items Derived from CASS

P – Personal, B – Behaviour (Behavioural), F – Feelings (Affective), O – Opinions (Cognitive)

ANALYSIS AND RESULTS

Thirty-four males and 18 females, a total of 52 Year 10 students (N=52), formed the subjects for this research study. Table 3 shows the age distribution of male and female students.

Table 3. Age and Gender distribution of Year 10 students

Age	Male	Female	Total
< 14 years old	0	0	0
14-15 years old	8	4	12
> 15 years old	26	14	40
Total	34	18	52

It can be seen from Table 4, that 97 per cent of the males and all of the females had access to at least one computer at home. Of the females, 22 per cent had two home computers, whereas 42 per cent of the males had two or more computers at home.

Table 4. Percentage of Number of Home Computers accessed by Students (N_m=34, N_f=18)

	Male	Female
One	56	78
Two	18	22
More than Two	24	0
Total	97	100

Table 5 highlights the fact that 97 per cent of the males (one male was banned from unsupervised computer usage) and all of the females had access to school computers. Seventy-four percent of the males and 44 per cent of the females used the classroom computer at some stage for schoolwork.

Table 5. Percentage of School Computer access by Students (N_m=34, N_f=18)

	Male	Female
School Access (Item P4)	97	100
Class Access (Item P5)	74	44

As illustrated in Table 6, 65 per cent males and 67 per cent females had 'Home Internet Access', while 76 per cent males and 89 per cent females had 'Home E-mail Accounts'. The 'Home E-mail Account' is in addition to their 'School E-mail Account'.

Table 6. Percentage of Home Internet Access and Personal E-mail Accounts (N_m=34, N_f=18)

	Male	Female
Home Internet Access	65	67
Email Account	76	89

Table 7 shows that 67 per cent of the females use the Internet for chatting and doing schoolwork, whereas 53 per cent and 50 per cent of the males used the Internet for chatting and doing schoolwork respectively. Table 7 also highlights that 89 per cent of the females use their e-mail account at least once per week in comparison to 74 per cent of the males.

Table 7. Percentage of Internet and Email Usage ($N_m=34$, $N_f=18$)

	1 pw		2 pw		3 pw		7 pw		Total	
	M	F	M	F	M	F	M	F	M	F
Home Internet Chatting	12	22	6	11	18	22	18	11	53	67
Home Internet for school work	26	22	12	22	9	11	3	11	50	67
Home Internet for games	24	22	6	22	6	11	12	0	47	56
Email Usage	38	22	3	22	15	33	18	11	74	89

M – Male F – Female pw – per week

Reliability Analysis of Research Questionnaire

An Alpha reliability coefficient was computed on the items used in the research questionnaire. The purpose was to determine the extent to which items within each of the attitudinal groups related to each other. Table 8 shows the results of the internal consistency of these grouped items.

Table 8. Reliability Analysis of Items used in the Research Questionnaire

Attitudinal Components	No. Items	Cronbach Alpha
Behavioural Items	14	0.62
Affective (Feelings) Items	14	0.85
Cognitive (Opinions) Items	15	0.82

It can be seen from Table 8 that the items used to determine the Affective and Cognitive Attitudes of students have a good internal consistency of 0.85 and 0.83 respectively. That is, the items used to determine these attitudinal components were very reliable. However, upon examination of the items used to determine the Behavioural Attitudes of students, the Cronbach Alpha Coefficient was 0.62. This is below the recommended reliability value of 0.7. Pallant (2001, p. 85) suggests that the Cronbach Alpha value is quite sensitive to the number of options used in scales and states that “it is common to find quite low Cronbach values” especially with scales providing less than 10 options. The 5-point Likert Scale used in the research questionnaire may have contributed to the low Cronbach value. It should be noted that by removing Behavioural Items B10, “Using Web Sites has increased interaction with other students”, and B13, “I can adjust Web Pages (such as Font sizes) to suit my needs”, the Cronbach Alpha Coefficient reaches a value of 0.71.

Student Attitudes towards OWAL

Table 9 provides an overall summary of the results from the questionnaire. As an example, it can be seen from questionnaire item coded B14 that the males Mean rating was 3.7 while the females Mean rating was 4.3. The Mean ratings have a maximum score of 5 (based on the Likert rating scales) where 5 is a positive rating in favour of OWAL based activities as opposed to PAL based activities. Generally, both males and females rated OWAL favourably.

It should be noted that negative questionnaire items (shown with an asterisk in Table 9) were negatively scored. Furthermore, Questionnaire item ‘011’ was gender positive in favour of males and as such female responses were negatively scored.

Table 10 provides a summary of the findings for males and females in relation to the CASS based items.

Table 9. Mean ratings of Attitudes to Questionnaire Items (N_m=34, N_f=18)

Behaviour			Affective			Cognition		
Item Code	Male	Female	Item Code	Male	Female	Item Code	Male	Female
B1*	4.4	4.3	F1*	3.8	3.8	O1	3.5	3.6
B2*	4.3	4.2	F2	3.4	3.4	O2*	3.5	3.3
B3*	4.3	4.2	F3	3.7	3.4	O3*	3.6	3.3
B4*	4.3	4.2	F4	3.6	2.8	O4	4.0	4.0
B5*	4.3	4.4	F5*	3.9	3.6	O5*	3.7	4.0
B6*	4.3	3.8	F6*	3.9	3.8	O6	4.2	4.2
B7*	4.1	3.9	F7	3.5	3.7	O7	3.8	3.9
B8	3.3	3.0	F8*	4.1	4.3	O8	3.8	4.0
B9	3.1	3.3	F9*	4.2	3.9	O9*	3.8	3.8
B10*	3.1	3.4	F10	4.3	4.2	O10*	3.5	3.3
B11	3.3	3.2	F11*	4.4	4.3	O11**	3.1	3.6
B12	3.8	4.0	F12*	3.9	3.9	O12*	3.1	3.1
B13	3.3	2.8	F13	3.9	4.4	O13*	3.5	3.7
B14	3.7	4.3	F14*	4.3	4.2	O14*	4.1	4.3
						O15	4.3	4.2

* Scoring Reversed; ** Scoring Reversed for Females only; Rating Maximum is 5 (based on Likert Scale) where 5 is positive in favour of OWAL

Table 10. Mean Ratings of CASS Based Questionnaire Items (N_m=34, N_f=18)

	B8	B9	B10	B11	B12	F9	F11	F12	F14	O5	O11	O12	O13	O14	Mean
Males	3.3	3.1	3.1	3.3	3.8	4.2	4.4	3.9	4.3	3.7	3.1	3.1	3.5	4.1	3.6
Females	3.0	3.3	3.4	3.2	4.0	3.9	4.3	3.9	4.2	4.0	3.6	3.1	3.7	4.3	3.7
Overall	3.2	3.2	3.3	3.3	3.9	4.1	4.4	3.9	4.3	3.9	3.3	3.1	3.6	4.2	

Rating Maximum is 5 (based on Likert Scale) where 5 is positive in favour of OWAL

As seen from Table 10, both male and female students generally demonstrated favourable attitudinal tendencies towards OWAL. While male students felt very confident in using Web Sites for learning (F9, F14) and generally felt that people do not need to be highly qualified to use Web Sites (O14), female students felt very confident towards solving Web based procedural problems (B12), and so did not feel threatened in discussing Web Site issues (F11), nor did they feel uncomfortable using Web Sites (F14). Females had a stronger tendency towards the importance of using Web sites for career advantages (O5).

Table 11 provides the mean ratings and the frequency distributions in percentages for questionnaire items that compare OWAL to PAL, where SA (Strongly Agreed) is in favour of OWAL.

As can be seen in the 'Overall Mean' of Table 11, 65 per cent of students ranked their scores 'Agree' to 'Strongly Agree' in comparison to 11 per cent who ranked their scores 'Disagree' to 'Strongly Disagree'. Hence 65 per cent of the students felt that OWAL activities were better than PAL activities, while 11 per cent of the students felt that PAL activities were better than OWAL activities; 24 per cent of the students were undecided. It should be noted that the scoring had been reversed for negative items. For instance, the questionnaire item 'F1 - The Web Assisted activity terrified me' had its scoring reversed so that the 'Strongly Disagree' response became the 'Strongly Agree' response, which is what is being reflected in the results of Table 11. Hence, the response frequency for questionnaire item 'F1' is in reference to the question 'The Web Assisted activity did NOT terrify me'.

Table 11. Differences in Attitudes towards PAL and OWAL (N=52)

Code	Questionnaire Item	Mean Rating	SD	Frequency (%)			
				D	U	A	SA
B4*	If given a choice I would first search for a book to find information for a school project before I search for a Web Site	4.3*	0*	8*	8*	37	48
B5*	If given a choice I would get most of my diagrams for school projects from a text book than a Web Site	4.4*	0*	6*	8*	31	56
F1*	The Web Assisted activity terrified me	3.8*	0*	4*	37*	35*	25
F2	The colours on the Web assisted activity made it more interesting than the colours on the Paper Assisted activity	3.4	2	17	35	29	17
F3	I preferred the Web Assisted activity instead of the Paper Assisted activity because it had animation	3.6	2	8	37	27	25
F5*	I felt more uncomfortable using the Web Assisted activity than the Paper Assisted activity	3.8*	2*	13*	23*	29*	33*
F6*	I found the Web Assisted activity more boring than the Paper Assisted activity	3.8*	0	4	33	38	25
F8*	If I had a choice I would prefer to learn from a book than from a Web Site	4.2*	2*	4*	17*	21*	54*
F13	I preferred the graphics on the Web Site better than the graphics on the Paper Assisted activity	4.1	2	2	27	21	48
01	The Web Assisted activity was easier to use than the Paper Assisted activity	3.5	6	12	29	33	21
02*	The Web Assisted activity was more difficult to read than the Paper Assisted activity	3.4*	6*	13*	19*	35*	23*
03*	The Web assisted activity was more difficult to understand than the Paper Assisted activity	3.5*	6*	8*	29*	35*	21*
04	Web Sites will take over Books in the future	4.0	2	8	12	38	38
08	Student learn more using Web Assisted activities than Paper Assisted activities	3.9	0	8	29	31	33
010*	Finding your way around a Web Site is harder than finding your way around a book	3.4*	2*	23*	17*	35*	21*
OVERALL MEAN			2	9	24	32	33

SD- Strongly Disagree; D-Disagree; U-Uncecided; A-Agree; SA-Strongly Agree;

*Scoring has been reversed and is reflected in these results

Rating Maximum is 5 (based on Likert Scale) where 5 is positive in favour of OWAL

Table 12 provides a summary of the relationship of gender to OWAL attitudes using Chi-square analysis.

Table 12. Chi-Square Analysis of Gender Dependence and OWAL Attitudes (N=52)

	Behaviour	Affective	Cognition	CASS
Chi-Square (Corrected values)	0.506	0.185	0.001	0.198
Asymptotic Significance	0.447	0.667	0.981	0.656

Table 12 indicates that there is no significant difference ($p < 0.05$) in gender, and the behaviour, affective, cognitive and CASS based attitudes.

Table 13 examines the effect size of gender in relation to OWAL attitudes.

Table 13. Effect Size of Gender Dependence and OWAL Attitudes (N=52)

Attitude Components	Significance	t	Significance (2-tailed)	Eta Square
Behaviour	0.035	-0.846	0.402	0.014
Affective	0.396	0.531	0.598	0.006
Cognitive	0.450	-0.350	0.728	0.002
CASS	0.122	-0.500	0.619	0.005

An independent samples t-test was conducted to compare the attitudinal components and CASS based attitudes for males and females. Upon examination of the Effect Size, only 0.014 of the variance in Behavioural attitudes, 0.006 of the variance in Affective attitudes, 0.002 of variance in Cognitive attitudes, and 0.005 of variance in CASS based attitudes were explained by gender. That is, the magnitudes of the differences in the means for each of the attitudinal component, and the CASS based attitudes, were very small.

Hence both the Chi-square analysis and the Effect Size analysis indicate that the attitudes exhibited by males towards OWAL were not significantly different, nor significantly varied, to the attitudes exhibited by females. This supports Katz's study (see section above on Gender).

Table 14 outlines the relationship between Internet access and each of the attitudinal components using Pearson's product-moment correlation coefficient.

Table 14. Pearson Correlation between Internet access and Attitudes (N=52)

		Behaviour	Affective	Cognition	CASS
Home Access	Pearson Correlation (r)	0.199	0.111	0.228	0.088
	Sig. (2-tailed)	0.157	0.432	0.105	0.536
	Coefficient of Determination	3.9%	1.2%	5.2%	0.8%
School Internet Access	Pearson Correlation (r)	0.208	0.252	0.236	0.198
	Sig. (2-tailed)	0.140	0.072	0.093	0.160
	Coefficient of Determination	6.5%	6.4%	5.6%	2.6%
Classroom Internet Access	Pearson Correlation (r)	0.026	0.239	0.161	0.175
	Sig. (2-tailed)	0.858	0.087	0.255	0.214
	Coefficient of Determination	0.1%	5.7%	6.5%	3.1%

As seen in Table 14 there were small positive correlations between Home Internet Access and the components of attitude (e.g. Behaviour, $r=0.199$, $N=52$), School Internet Access and the components of attitude (e.g. Affective, $r=0.252$, $N=52$), and Classroom Internet Access and the components of attitude (e.g. Cognition, $r=0.161$, $N=52$).

When examining the coefficient of determination, it can be seen that at most, increasing access and use of Internet at home, school or classroom only contributed to 6.5 per cent (that is, the coefficient of determination for School Internet Access and the Behavioural Attitudes and Classroom Internet Access and Cognitive Attitudes) of the students overall positive attitudes towards OWAL. Therefore 6.5 per cent of the students exhibit positive attitudes towards OWAL activities regardless of opportunities and excess background access to the Internet.

Table 15 provides a summary of the mean ratings (where 5 is positive in favour of OWAL) obtained from the questionnaire.

Table 15. Publishing Elements Students find Appealing about OWAL in Comparison to PAL (N_m=34, N_f=18)

Publishing Elements	Mean Ratings		% Rated ≤2		% Rated ≥4	
	Male	Female	Male	Female	Male	Female
OWAL Diagrams (B5)	4.32	4.44	9	0	79	100
Adjusting OWAL pages (B13)	3.32	2.78	24	44	47	22
Download pictures and sound (B14)	3.74	4.33	21	0	71	100
OWAL Colours are more interesting (F2)	3.41	3.44	18	22	41	56
OWAL Animation preferred (F3)	3.68	3.44	9	11	56	44
OWAL Sound preferred (F4)	3.59	2.78	12	22	50	22
OWAL Graphics preferred (F13)	3.94	4.44	6	0	65	78
OWAL Games and Movies preferred (O15)	4.26	4.22	9	0	82	89

Rating Maximum is 5 (based on Likert Scale) where 5 is positive in favour of OWAL

It can be seen from Table 15 that the mean response from students was 4.32 for males and 4.44 for females in favour of the use of OWAL diagrams in comparison to PAL diagrams. Also 9 per cent of the males and no female provided a rating of 2 or less favouring PAL based diagrams. Similarly, it can be seen that 79 per cent of the males and all the females rated 4 or more on the Likert scale in favour of OWAL based diagrams.

Differences in attitudes between paper assisted learning and OWAL

Table 11 (Differences in Attitudes towards PAL and OWAL) shows a strong positive tendency by students towards OWAL. It appears that students prefer OWAL because they can get most of the diagrams required for school projects more readily from an Internet site than from a text book (B5, Table 11), they find the graphics on a Web site more appealing (F13, Table 11), and students believe they can find additional information more easily from the Internet (B4, Table 11). Seventy-six percent of the students believed that OWAL will replace books in schools in the future (O4, Table 11) and 52 per cent of the students enjoyed the fact that OWAL has animations (F3, Table 11).

Differences in attitudes towards OWAL between males and females

Though Table 12 (Chi-Square Analysis of Gender Dependence and OWAL Attitudes) and Table 13 (Effect Size of Gender Dependence and OWAL Attitudes) showed no significant difference in attitudes towards OWAL for males or females (all students perceived OWAL in a positive light). However, there were some differences that were evident from the data. For instance, it can be seen from Table 7 (Internet and Email Usage) that more females than males (nearly two-thirds of the females compared to about half the males) indicated that they used the Internet and e-mail for chatting and school work. This may be reflecting that females, more than males, pursue relationships and networking with people. Table 7 (Internet and Email Usage) also highlights that more females use Internet at home for games than males. This could be the result of males buying more commercial video games for as one male commented, "Internet games are boring". The result could also be a reflection that females' interests are not being addressed by commercial video game programmers and companies and as a result females are seeking game entertainment elsewhere.

The results in this study highlight that more females felt they could solve Web based procedural problems than males (B9, Table 9, Mean ratings of Attitudes to Questionnaire Items). A lot of Web based procedural problems come in the form text via 'Help Menus' and 'Search Queries'. Predominantly, these forms of assistance involve reading that could

be disconcerting to some of the males. Other modes of assistance may need to be investigated to include the males preferred 'Trial and Error' techniques (B8, Table 9).

When asked directly it is evident that more males would use OWAL (B6, Table 9) than females if given a choice. This is further supported by Table 5, which indicates that more males than females are using the classroom computer. More males than females felt that they could find their way around the Internet (B7, Table 9). Males found the OWAL activity simpler to read than the PAL activity (O2, Table 9).

Overall, the attitudes expressed and demonstrated by both females and males were positive towards OWAL.

Correlation between Internet use and positive OWAL attitudes

This research study highlights that home computers are being used extensively by students from a low socio-economic area. Nearly all students had at least one computer at home, while many had two or more (Table 4, Number of Home Computers accessed by Students). Additionally, at least two-thirds (Table 6, Home Internet Access and Personal E-mail Accounts) of the students had Internet and e-mail access from home. An anomaly appears in Table 5 (School Computer access by Students) where more students indicated personal e-mail accounts in comparison to home Internet access. This could be the result of students using the school's computer network to create private Web based e-mail accounts even though they all have a school based e-mail account.

As demonstrated in Table 12 (Chi-Square Analysis of Gender Dependence and OWAL Attitudes) there are tendencies towards positive OWAL attitudes and the use of the Internet. As Internet and computer use are increasing (Palmer et al, 2001, p. 313), it would seem obvious that educators follow suit and take advantage of the positive attitudes of their students.

Having Internet access at school generated stronger positive attitudes among students (Table 12) than having access to the Internet at home or in the classroom. This could be the result of the school Internet being online 24 hours a day, everyday, and that all computers within the school have access to the Internet. It is the general school policy to allow unlimited Internet access for students and staff due to the lack of resources within the school.

Home Internet access generated slightly lower levels of positive attitudinal responses from students. This could be attributed to students using the home Internet for entertainment and socialising, while at school the Internet is used for learning, henceforth students may be finding OWAL intrusive.

Classroom Internet access generated the lowest levels of positive attitudes towards OWAL. It could be reflecting that not all subject teachers are using the classroom computer effectively. It may mean that students are not given appropriate access time nor being modelled positive learning practices by classroom teachers in using the classroom computer, or the teacher may not be utilizing OWAL type activities in the classroom to enhance curriculum delivery. This reinforces the notion that teachers may be a contributing factor in the slow acceptance of OWAL and ICT in general within schools because they are either resisting the change; lacking skills and/or knowledge of the utilization of OWAL type activities; or (although not the case in this study) are lacking ICT resources.

Publishing elements that students find most appealing in OWAL

Most students showed strong preferences towards OWAL publishing elements as opposed to PAL publishing elements (Table 15, Publishing Elements Students find Appealing about

OWAL in Comparison to PAL). Most students favoured OWAL offerings of diagrams, games, animations and movies. It becomes apparent that the use of multimedia facilities in the learning process such as that provided by Web sites are attracting and keeping students motivated.

However, there were slight variations in preferences between males and females in terms of OWAL publishing element preferences. For instance, females showed stronger positive preferences for features such as downloading sounds and graphics as provided by the OWAL activity whereas males showed stronger preferences towards the provision of customising Web pages, animation, synchronous sound, games and movies. In contrast, being able to adjust Web pages and using synchronous sounds from Web pages attracted a slightly negative rating from females (mean rating at 2.78, Table 15). This could be an indication that males require immediate stimuli to help keep them motivated whereas females are more motivated by the option of downloading resources that will help them complete future tasks, such as importing pictures into assignments or text for quotes. Females also exhibited a slightly stronger tendency towards the use of colours on Web pages.

CONCLUSION

The research study has generated a number of outcomes to the research question,

What attitudes do secondary students have about Online Web Assisted Learning (OWAL), as compared to paper assisted learning (PAL), and what are the strengths of these attitudes?

Based on the findings of a group of Year 10 students from a low socio-economic high school, the following are some outcomes:

- Rank OWAL activities positively in preference to PAL activities.
- Prefer the multimedia aspects of OWAL such as animation, movies, graphics and synchronous sound. Generally it would appear that where one media format may not enhance the learning process of one student, it may enhance the learning process of another.
- Do not find all publishing elements appealing. For instance, the option of adjusting Web pages and synchronous sound appealed to the males but not females.
- Have parental expectations and encouragement in the use of computers and the Internet at home to help supplement their child's education with or without the support of the school.
- Support the finding by Katz et al. (1995) study that concludes that there are no significant differences between the attitudinal scores of males or females.

This research study also indicates that some students engage in and accept the use of OWAL to supplement their learning, if not at school, then at home. The data indicate that OWAL activities would aid in the learning process of students because students have positive attitudes towards the use of OWAL.

REFERENCES

- Alessi, S. M., and Trollip, S. R. (1991). *Computer-Based Instruction: Methods and Development* (2nd ed.). Prentice Hall, NJ.
- Breckler, S. J. (1984). Empirical validation of affect, behavior and cognition as distinct components of attitude. *Journal of Personality and Social Psychology*, 47 (6). 1191-1205. American Psychological Association, Washington D. C.

- Burns, R. B. 1997. *Introduction to Research Methods* (3rd ed.). Longman, Melbourne.
- Dede, C. (2000). Emerging influences of information technology on school curriculum. *Journal of Curriculum Studies*. <http://www.tandf.com.uk/journals/tf/00220272.html> [online 2000].
- Dewar, T., and Whittington, D. (2000). Online learners and their learning strategies. *Journal of Educational Computing Research*, 23 (4). 385-403.
- Hong, K., Lai, K., Holton, D. (2001). Web based learning environments: Observations from a web based course in a Malaysian context. *Australian Journal of Educational Technology*, 17(3), 223-243. <http://cleo.murdoch.edu.au/ajet/ajet17/hong.html> [online 3/3/2002].
- Jones, T., and Clarke, V. A. (1994). A computer attitude scale for secondary students. *Computers and Education*, 22(4). 315-318.
- Katz, Y. J., Evans, T., Francis, L. J. (1995). The reliability and validity of the Hebrew version of the Bath County computer attitude scale. *Journal of Educational Computing Research*, 13(3). 237-244.
- Massoud, S. L. (1991). Computer attitudes and computer knowledge of adult students. *Journal of Educational Computing Research*, 7(3). 269-291.
- Palmer, S. R., and Bray, S. L. (2001). Longitudinal study of computer usage in flexible engineering education. *Australian Journal of Educational Technology*, 17(3), 313-329.
- Scott, M., Holland, J., O'Leary, T. J., Williams, B. K., O'Leary, L. I. (1995). *Information Processing and Management: Units 3 and 4 (School Ed.)*. McGraw-Hill Book Company, Sydney.
- Shashaani, L. (1994). Gender-differences in computer experience and its influence on computer attitudes. *Journal of Educational Computing Research*. 11(4). 347-367.
- Shashaani, L. (1997). Gender differences in computer attitudes and use among college students. *Journal of Educational Computing Research*. 16(1). 37-51.
- Woodrow, J. E. (1991). A comparison of four computer attitude scales. *Journal of Educational Computing Research*, 7(2). 165-187.
- Woodrow, J. E. (1994). The development of computer-related attitudes of secondary students. *Journal of Educational Computing Research*, 11(4). 307-338.

Staying Longer at School and Absenteeism: Evidence from Australian Research and the Longitudinal Surveys of Australian Youth

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Participation in senior secondary education in Australia has experienced tremendous growth since the late 1960s. Much of this growth has come from young people who were the first in their families to participate in schooling at this level. Many of the changes in participation and in curriculum offerings have been documented as part of a number of longitudinal surveys of young people. This paper summarises some of the knowledge gained from this research, and from research conducted by one state education department over the period.

Absenteeism, Australian Youth, Longitudinal Surveys, retention, subject choice

INTRODUCTION

In 1967, the apparent retention rate in Australian schools was 22.7 per cent. Over the next eight years, this rate grew to 34.1 per cent, then remained close to that point until 1982, when it began to increase again. Over the following ten years, the rate more than doubled, growing from 36.3 per cent in 1982 to 77.1 per cent in 1992. The rate peaked in 1992, and has remained above 72 per cent into the 2000s. In 2002, the Year 7-12 apparent retention rate was 75.1 per cent.¹ While the apparent retention rate is often mistakenly considered a Year 12 completion rate, it does rise and fall as the completion rate rises and falls, and is a reasonable proxy for monitoring trends in the proportion of students who participate in senior secondary school education.

During this period, apparent retention was not the only rate to change dramatically. Between the middle of the 1980s and the late 1990s, the proportion of 15- to 19-year-olds in full-time employment dropped from 32 per cent to 17 per cent, where it remained in 2002. The number of young people in part-time employment increased over the same period, as did the structure of the Australian economy, with fewer positions in unskilled and semi-skilled occupations (Lamb et al., 2000). Together, these trends suggest a strong relationship between the labour market and young people staying longer at school. Specifically, reduced opportunities for full-time employment and a reduced demand for lower skill levels are associated with an increase in apparent retention rates.

Youth in Transition (YIT), a program of longitudinal surveys conducted by the Australian Council for Educational Research (ACER), began in 1978. The program was designed to trace national samples of 6 000 young people who were born in 1961 and had participated as 14-year-olds in the Australian Studies in School Performance in 1975 (Keeves & Bourke, 1976). New samples were added in 1981, 1985 and 1989, based on cohorts of young people born in 1965, 1970 and 1975, respectively. Data were collected on each of the first three cohorts until the mid-1990s; data collection from the 1975 birth cohort ended in December 2002. A new cohort was added in 1995,

¹ All information on apparent retention rates are from annual publications of Australian Bureau of Statistics, *Schools, Australia* (cat 4221.0), for the respective years.

and the program was renamed the *Longitudinal Surveys of Australian Youth* (LSAY); a second LSAY cohort was added in 1998. Each of these LSAY cohorts comprised more than 13 000 young people who were in Year 9 in those years. LSAY also incorporates data from cohorts of the *Australian Longitudinal Survey* (ALS) and the *Australian Youth Survey* (AYS), two Commonwealth survey programs that concentrated on the labour market and training experiences of young people in the late 1980s and early 1990s. A third LSAY cohort commences in 2003.

Much of the interest in these longitudinal studies has been in understanding the transitions young people make from school: to work, to further study and into society as adults. The young people were first contacted in school (although not for AYS), and have been interviewed annually until about age 27. Members of the last of the YIT cohorts—young people born in 1975—were contacted for the last time at the end of 2002, aged 27. Some of the earlier cohorts had been contacted somewhat sporadically until age 30 or 33. The current cohorts were modally 22 and 19 years old in 2002. LSAY provides valuable information on changes in senior secondary education from the early 1980s to the early 2000s.

WHO IS STAYING AT SCHOOL?

Lamb, Dwyer and Wyn (2000) examined school non-completion using data from the ALS and AYS cohorts. McMillan and Marks (2003) also examined non-completion, concentrating on the LSAY 1995 Year 9 cohort. While both pieces of research focused on the outcomes of non-completion and the pathways followed by non-completers, they also provided information on who completed Year 12 during the 1980s and 1990s. This information is summarised for males and females separately in Table 1.

Table 1. Year 12 completion rates (percentage) by selected student background characteristics, 1980s and 1990s, by gender

Background characteristic	Males				Females			
	Early 1980	Late 1980	Mid 1990	Late 1990	Early 1980	Late 1980	Mid 1990	Late 1990
Total cohort	38	54	70	74	49	63	82	84
Parent occupation group								
Professional/managerial	67	73	84	83	77	81	93	89
Clerical/sales/service	57	71	78	77	65	75	86	86
Skilled manual	32	52	70	66	49	62	83	79
Semi-/unskilled manual	29	40	62	60	32	55	79	78
Parent education								
University	75	81	85	87	77	85	95	92
Post-secondary	57	69	78	71	68	77	88	87
Secondary or less	33	48	64	73	44	60	80	82
Location								
Metropolitan	40	57	72	79	51	68	86	88
Non-metropolitan	31	46	57	66	42	52	75	79
Parents' country of birth								
Australia	35	51	67	71	49	60	81	81
Other English-speaking	34	50	73	72	33	59	87	81
Non-English speaking	53	69	81	87	57	76	91	91
School sector								
Government	33	48	65	68	42	57	79	79
Catholic	47	70	82	86	63	78	90	90
Independent	79	83	89	87	82	87	95	90

Source: McMillan & Marks (2003), appendix 4, based on Lamb et al. (2000), Table 3.1, and McMillan & Marks (2003), Chapter 3. The original table in McMillan & Marks (2003) used rates of non-completion.

Some of the more noteworthy changes in completion rates are the substantial increases by young people whose parents were from semi-skilled and unskilled manual occupations, especially for

young females; the increases by young people whose parents had not done any post-secondary education themselves; the doubling of the completion rate for students from government schools and Catholic schools; and the differences of approximately ten percentage points between males and females at each point. The characteristics of young people in senior secondary school in 2003 are much different from the characteristics of those who completed Year 12 twenty years ago.

It should be noted that the completion rates shown in Table 1 are affected by the interrelationships of student background characteristics. For example, while there tends to be a difference of around ten percentage points between metropolitan and non-metropolitan students, these differences are not statistically significant when analysed using multivariate techniques, accounting for other characteristics (see, for example, Lamb, 1996).

WHAT ARE THESE YOUNG PEOPLE STUDYING AT SCHOOL?

With the increased participation of young people at school, there have been changes in what is being studied in the senior secondary years. One notable change is the widening of options within learning areas, such as the expansion of mathematics to include courses such as Mathematics in Society and Mathematics in Practice, designed for students who have experienced limited success in school mathematics. Another notable change is the incorporation of vocational education and training (VET) into the school curriculum. The inclusion of VET subjects in senior secondary has been both a cause and an effect of increased retention. While the increase of VET offerings was a response to the increase in the retention of young people, State education departments also provided these options to encourage more young people to remain at school.

A number of reports have examined subject enrolments in Year 12. Ainley, Jones and Navaratnam (1990), Ainley, Robinson, Harvey-Beavis, Elsworth and Fleming (1994), Fullarton and Ainley (2000) and Fullarton, Walker, Ainley and Hillman (2003) have looked at subject participation among Year 12 students in Australia during 1990, 1993, 1998 and 2001, respectively. From these reports it is possible to examine the changing patterns of senior secondary school enrolments. Table summarises enrolments by key learning areas for students in Year 12 in 1993, 1998 and 2001, the years for which subjects were organised according to key learning areas.²

Between 1993 and 2001, there has been a drop in the proportion of young people studying English, even though it is mandatory for a senior secondary school certificate in almost all States. Some of the explanation is the acceptance of English as a Second Language courses as alternatives, reflecting the changing population of young people in Year 12, but some is a reflection of the changes in senior secondary enrolment patterns. In a number of States, part-time study is an option in the senior secondary years, allowing young people to combine school and work, or school and other forms of study; in these cases, the young people surveyed may not have been studying English in the year of the survey.

Some subjects have grown in relative popularity among Year 12 students, while some have decreased. Business Studies, in the Society and Environment learning area, has increased in the proportion of students enrolled, from 9 per cent in 1993 to 23 per cent in 2001, while Geography, Politics and Social Studies, Economics, Legal Studies and Accounting have all declined in enrolments. The proportion of students enrolled in almost all Science subjects has decreased, with only Psychology, a relatively newer school subject gaining enrolments. While there was an increase in the proportion of students undertaking Computer Studies between 1993 and 1998,

² Another LSAY report, by Lamb and Ball (1999), used data from the AYS cohorts to examine subject participation in Year 12, but the subjects were not organised according to KLAs.

there was a slight decrease between 1998 and 2001. Also under the Technology learning area, Food/Catering subjects have replaced Home Science in popularity, while enrolments in another service-based subject, Child Studies, have also increased (Fullarton et al., 2003).

Table 2. Year 12 participation rates in subject areas, 1993-2001

Key Learning Area	Subjects	Percentage of Year 12 students		
		1993	1998	2001
English	English	92.1	92.8	88.0
	ESL	1.2	0.8	6.0
	Literature	5.5	5.3	4.5
Mathematics	Mathematics	86.3	87.5	84.3
	Basic Mathematics	-	-	22.5
	Intermediate Mathematics	-	-	25.9
	Advanced Mathematics	-	-	35.8
Society and Environment	History	21.1	17.4	18.2
	Geography	18.3	13.8	12.0
	Politics & Social Studies	15.2	15.7	7.0
	Economics	17.8	10.8	7.0
	Legal Studies	15.2	11.1	11.8
	Accounting	12.0	7.3	6.4
	Business Studies	9.2	17.1	22.7
	Secretarial Studies	4.3	1.8	1.4
	Tourism & Hospitality	1.9	1.5	2.2
	Religious Studies	17.6	12.2	15.5
Science	Chemistry	22.6	20.3	17.8
	Physics	20.4	20.0	16.6
	Biology	31.7	25.2	25.4
	General/Multi Strand Science	7.2	10.2	7.0
	Psychology	5.1	5.5	6.9
	Other Sciences	4.2	1.9	3.2
Arts	Creative and Visual Arts	17.4	18.2	20.9
	Performing Arts	7.3	6.6	10.0
	Music	3.6	4.9	6.2
LOTE	French	1.9	1.5	2.0
	German	1.2	1.3	1.0
	Indonesian	na	0.8	0.8
	Italian	1.1	1.0	1.2
	Japanese	2.2	2.1	2.7
	Other languages	1.3	3.4	2.3
Technology	Computer Studies	20.7	27.7	27.0
	Technical Studies	16.9	23.2	16.4
	Home Science	11.0	4.7	6.1
	Food/Catering	3.8	6.5	9.8
	Agriculture	2.4	2.8	2.6
	Child Studies	na	1.1	4.2
Health & Phys. Ed.	Physical Education	17.6	17.7	15.0
	Health	1.9	8.5	9.9
Not Classified/Other		1.7	7.2	0.1

Source: Fullarton et al. (2003), table 9.

Fullarton et al. (2003) looked at relationships between specific background factors and participation in subjects for Year 12 students in 2001. They found that higher achievers in Year 9 were more likely to enrol in advanced mathematics and physical sciences subjects in Year 12, and less likely to enrol in technical studies, including computing studies. Young people whose parents were born in a country where English is not the main language were more likely to enrol in the physical sciences and less likely to enrol in the biological sciences; more likely to enrol in economics and business and less likely to enrol in the humanities and social sciences; and less likely to enrol in technical studies—except computing studies—and the arts. Fullarton et al.

(2003) also noted that differences in subject participation varied according to parent occupation groups, particularly in science subjects and technology subjects (see Figure 1).

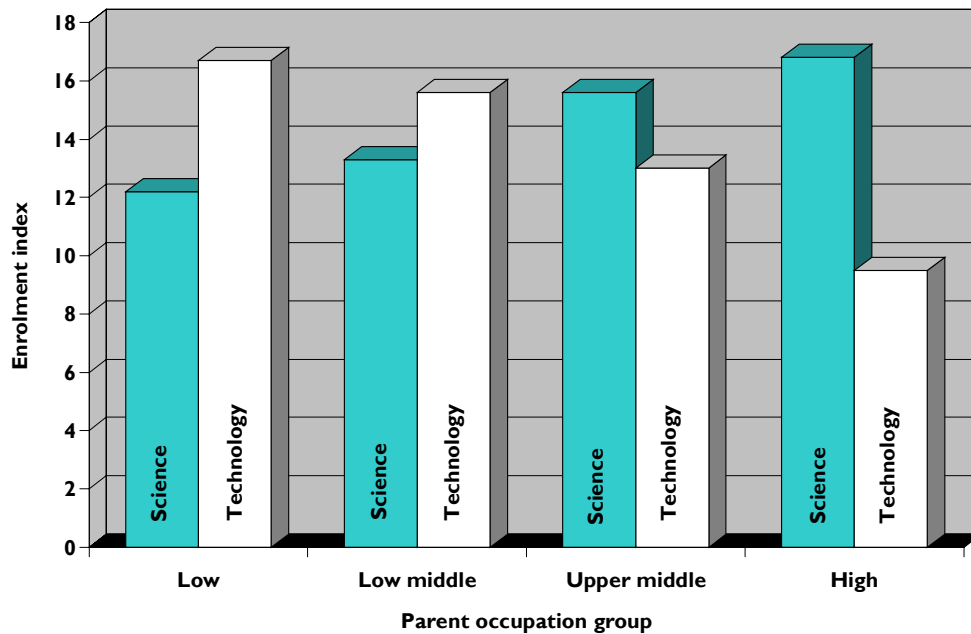


Figure 1. Year 12 enrolment index scores for subjects in the science and technology key learning areas, by parent occupation group, 2001

Within individual States, there were changes in the distribution of subject enrolments over the period. A comparison of subject enrolments in New South Wales government schools in 1991 and again in 1997 reflects the changes noted above (New South Wales, 1992, 1997):

- The proportion of Year 12 students enrolled in 2-unit Contemporary English more than doubled, from 16 per cent to 36 per cent, while the proportion in 2-unit and 3-unit English decreased from 24 per cent to 12 per cent;
- Enrolments in 2-unit Mathematics in Society and 2-unit Mathematics in Practice grew from 37 per cent of all Mathematics enrolments to 57 per cent, while 3-unit and 4-unit Mathematics decreased in their share of enrolments from 28 per cent to 17 per cent;
- The proportion not studying a Science subject grew from 8 000 to 14 000, while the total Year 12 enrolment remained fairly constant; and
- The number of students in Business Studies increased from 1312 in 1991 to 7791 in 1997.

VET in Schools, Work Experience and Structured Workplace Learning

One of the options to increase school retention and completion has been the introduction of programs of vocational education and training (VET) in schools, including work experience and structured workplace learning programs. Under VET in Schools, school students enrol in vocational programs that comply with the National Training Framework and receive credit toward a senior school certificate. VET in Schools may include programs at TAFE colleges, and they may involve structured workplace learning or New Apprenticeships. Approximately 84 per cent of students in the LSAY 1995 Year 9 cohort participated in work experience in either Year 10 or Year 11, and less than 10 per cent in structured workplace learning. Nearly one-quarter of the cohort had participated in VET in Schools at some time in Year 11 or 12 (Fullarton, 1999, 2001).

Participation in all programs was highest among lower-achieving students; students attending government schools; students of English-speaking background; students with parents in manual, clerical and service occupations; and students attending schools in non-metropolitan areas. In addition, students who participated in VET programs while at school had expressed less positive attitudes toward school when surveyed in Year 9 (Fullarton, 1999, 2001).

What Are the Consequences of Curriculum Choices?

Lamb and Ball (1999) used AYS data to relate curriculum patterns in Year 12 to post-school participation in education, training and employment. They found that students who had undertaken a program of study dominated by mathematics and science subjects were most likely to participate in higher education at age 19. Those who had followed a course of study that included many vocational education and technology subjects were least likely to be in further education or training at the same age; they were, however, most commonly in full-time work.

The relationship changes between curriculum choices and employment when young people who were not engaged in further education and training are removed from the analysis. Young people who had undertaken vocational education and training subjects had experienced four or more spells of unemployment by age 19 more frequently than young people who had undertaken any other group of subject in school. Those who had concentrated on sciences and mathematics had experienced the fewest spells of unemployment (Lamb & Ball, 1999).

SCHOOL STUDENTS AND PART-TIME WORK

Another result of the increased participation in post-compulsory schooling is the increase in the proportion of students who are working part-time. Robinson (1996, 1999) examined part-time employment among the YIT cohort of young people born in 1975. She reported that approximately 30 per cent of Australian 17-year-old secondary school students held regular part-time jobs during the school year, and they worked between eight and nine hours per week. Young women were most commonly found in sales and personal service occupations, while young men worked as labourers, as kitchen hands and in 'other sales' positions (Robinson, 1999). When asked why they worked, more than three-quarters of these young people stated that they 'liked the sense of independence the job provided' and they 'needed the money' for financial support. Approximately 14 per cent said that the money allowed them to remain in school.

Robinson (1999) also looked at the effects of part-time work on school outcomes. After a number of student background factors—gender, ethnic background, parent occupation and education, family wealth, and achievement in Year 9—were considered, engagement in part-time work did not have a significant effect on Year 11 students' completion of Year 12. When the intensity of part-time work was considered, the effect changed, but only for those who worked more than ten hours per week. Robinson (1999) also examined the effects of part-time work on Year 12 students' tertiary entrance rank. She found no significant differences among students who worked up to ten hours per week in either Year 11 or Year 12, but a significant effect for students who worked more than ten hours per week during Year 11, although not during Year 12. She acknowledged the problem of determining cause and effect in these findings: Are students who work more than ten hours per week negatively affected by their employment, or are they less attached to school and committed to completing Year 12?

Students' part-time work was also investigated by Vickers, Lamb and Hinkley (2003), using the LSAY Year 9 1995 cohort. They found that 24 per cent of the cohort were working part-time in Year 9. Student workers were more commonly male, attending government schools, from an English-speaking background, and living in non-metropolitan areas. There was no difference in

participation by achievement level, and those from the lowest parent occupation group were less likely to be working part-time. They also found that working more than five hours per week had an additional effect, beyond socioeconomic status and other background factors, on leaving school before completing Year 12. They did not, however, include any of the LSAY information on students' attitudes toward school or their aspirations.

During Term 3, 2000, the Department of Education, Training and Employment, with the assistance of the Australian Bureau of Statistics, surveyed 1 417 students from Years 10, 11 and 12 in 119 South Australian government secondary schools. The Department reported that 47 per cent of these students were working, with a further 19 per cent unemployed or looking for work, and 33 per cent not in the labour force (see Figure 2). Of those working, close to 40 per cent worked for ten or more hours, with those in Year 12 more likely to be working more hours (South Australia, 2000).

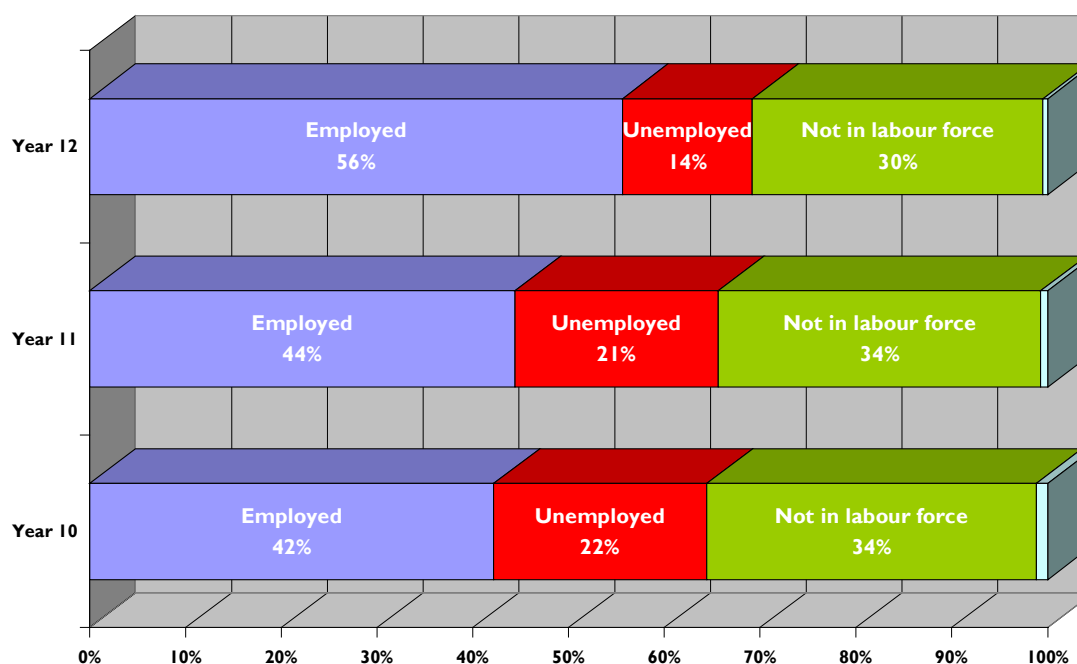


Figure 2. Distribution of employment status of students in South Australian government schools, 2000

ARE THERE BENEFITS FOR YOUNG PEOPLE STAYING LONGER AT SCHOOL?

The push for increased retention of young people at school has been seen as important for young people, because they would benefit from more secondary school education. The major argument is that with more schooling, young people enter the labour force or further study better prepared for the modern world. For example, Ryan (2003), using data from the YIT 1975 cohort and the LSAY 1995 cohort, found initial employment benefits for South Australian young people who had spent an additional six-to-twelve months at school after the introduction of the *Early Years of School* policy.

The effects of the non-completion of Year 12 has been one topic of interest that can be better addressed using longitudinal research. McMillan and Marks (2003) compared the post-school experiences of school non-completers with those of school completers who did not enter higher education. Non-completers were also classified as early leavers if they left school before the commencement of Year 11, and as later leavers if they left after the commencement of Year 11 and before the completion of Year 12. All data were obtained from the LSAY 1995 Year 9 cohort.

They found that one-half of the early leavers had completed a qualification by the end of 2000, as had one-third of the later leavers. They also found that in 2000, there was no significant difference between completers and non-completers in the likelihood of being unemployed, and that later leavers were more likely than early leavers to be unemployed after other background factors were considered. ‘This suggests that for non-completers, length of time in the labour market is positively related to employment status; that is, the longer a non-completer has been out of school, the more time they have had to find employment.’ (p. 62). They also noted that ‘the length of time spent in the labour market ... had the same net effect as Year 12 completion on securing employment’ (p. 62), and that male non-completers who had undertaken an apprenticeship had made a more successful transition to the labour market.

Even though there were some positive outcomes for non-completers among the 1995 Year 9 cohort, there were indications that completion of Year 12 was beneficial. Male non-completers were more likely to be unemployed than male completers, and female non-completers were more likely to be out of the labour force altogether (see Figure 3). McMillan and Marks (2003) recommended continued monitoring of this cohort to determine if the ‘not unequivocal’ findings—that early school leavers were faring about as well as completers who did not attend higher education—change as both groups have more exposure to the labour market (p. 88).

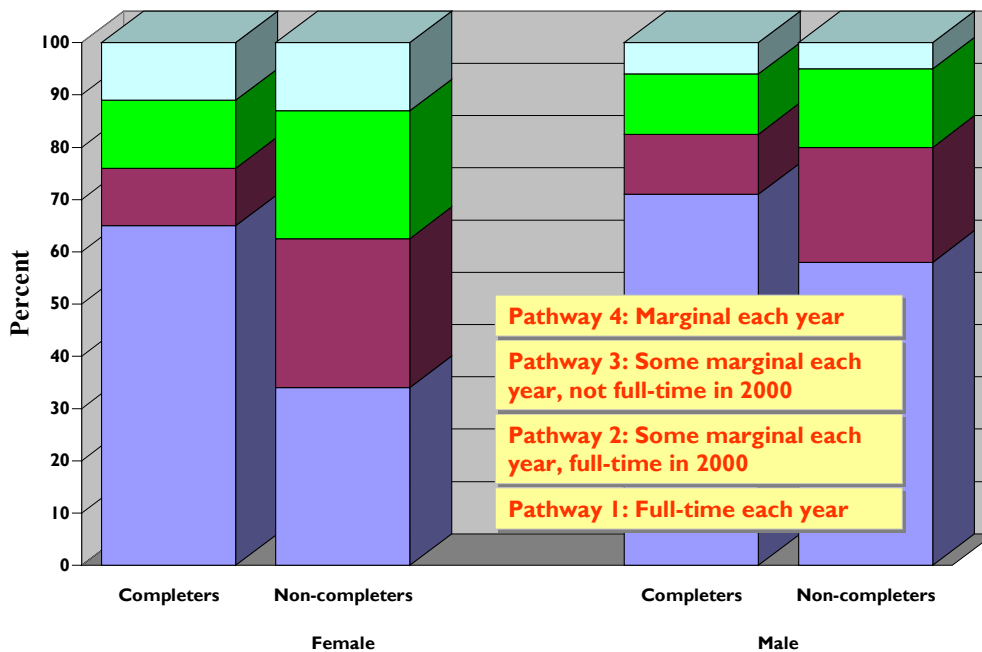


Figure 3. Post-school pathways, by gender, for school non-completers and completers who did not enter higher education

WHO ATTENDS SCHOOL EACH DAY?

LSAY does not include information on student attendance as part of its annual data collection. Information is available, however, from State education agencies—at least for students attending government schools—although statistics regarding student attendance are rarely made public. In 1997, the South Australian Department for Education and Children’s Services added an attendance module to its schools’ data management system, EDSAS. This module allowed the collection of data on student absences for any specified period of time; to reduce the workload on schools, data for only the second term of the school year were gathered in the first years of the collection. After overcoming some of the glitches associated with new computer software, the Department was able to report some statistics.

Using these data for 1997 and 1999, Rothman (2002) reported that absence rates were lowest among students in the middle primary grades, particularly in Years 3 through 5, at slightly greater than 5 per cent. Among secondary students, Year 10 students had the highest absence rates, between 10 and 11 per cent. Senior secondary students had absence rates between 9 and 11 per cent. The proportion of absences that were unexplained increased as students reached secondary school, from around 30 per cent in the primary years to more than one-half in Years 11 and 12. Unfortunately, the data do not allow further understanding of 'unexplained' absences;³ it is not possible to determine how many were absent because of job commitments, school timetabling, illness or 'misadventure'.

It has been argued that attendance can serve as an indicator of a student's attitude toward school and self-concept (Altenbaugh et al., 1995; House of Representatives, 1996; Reid, 1982). While attendance is not examined as part of the LSAY program, items relating to attitudes toward school are included in the LSAY questionnaires. Marks (1998) examined students' attitudes and found that only attitudes toward achievement, as measured using portions of the *Quality of School Life* scales (Williams & Batten, 1981), had a significant effect on leaving school before Year 10. Other LSAY research has noted the influence of students' attitudes, aspirations and self-concept of ability on achievement in Year 9 (Rothman & McMillan, 2003), on their participation in extra-curricular activities (Fullarton, 2002), and on tertiary entrance performance (Marks, McMillan & Hillman, 2001).

DISCUSSION

Over the past twenty years, changes to the social, economic and educational lives of young people have created new issues for Australian senior secondary schools. Participation in the senior secondary years of school has more than doubled, with much of this change coming from social groups that historically have had less experience of senior secondary education than many of their counterparts. Most significantly, participation increased among young people whose parents work in lower-status occupations and among those with lower achievement in the earlier years of schooling. The labour market for young persons has also changed since the 1980s. In July 2002, 779 500 young persons aged 15-19 were in the labour force, representing 57 per cent of the age group. More than one-third of secondary school students aged 15-19 were employed, with 3 per cent of student workers employed full-time (Australian Bureau of Statistics, 2002). These increases have meant changes in the pathways taken by young people entering the work force, as well as changes in schools to accommodate the needs of students in the post-compulsory years. Many of these changes have also been recorded by the Longitudinal Surveys of Australian Youth.

Even though participation in senior secondary education has increased over this period, close to one quarter of young people still leave school before completing Year 12. Although more than one-half of these school leavers say they are unhappy with school, their main reasons for leaving school are employment-related: they leave school to get a job, undertake an apprenticeship or traineeship, earn their own money, or experience freedom. Very few students state that a dislike for school is the main reason for leaving (McMillan & Marks, 2003). Despite the many changes that have occurred in senior secondary schools, young people are maturing and often finding that schools are not necessarily the most appropriate places for them. Some young people do leave school before completing Year 12 and experience a successful transition to the labour force. More frequently than not, these successful transitions include some form of post-secondary education or training.

³ An 'unexplained' absence is an absence for which no explanation was recorded up to the time of the collection.

As young people enter the labour force while at school, schools need to adapt to students' working hours. In the current economic and social climate, it is difficult for young people to devote all of their time to school study. Some school systems have already developed interesting arrangements for young people so that they can remain at school while entering the labour force, including part-time senior secondary study, separate and/or alternative campuses and extended hours (including evening classes), in addition to awarding credit for skills gained while working. Government schools have been the most accommodating in meeting these needs, although there are some notable exceptions in the non-government sector, especially in the provision of 'Year 13' in some States.

It has been the stated policy of State and Commonwealth governments to promote the completion of Year 12 or its VET equivalent for all young people. The question remains, however, whether this is the best option for all young people, and how it is best achieved. The VET equivalent of Year 12 requires enrolment through a registered training provider; a good deal of learning occurs 'on-the-job' and is never formally recognised with certificates of participation or achievement. For some young people, the availability of VET may not provide enough incentive to remain in a secondary school.

It is necessary that we reassess our policies and practices to best meet the needs of young people in the post-compulsory years. Is the completion of Year 12 best for all young people? Who decides what pathway is best for each young person? Should all post-compulsory education and training be done in formal, semi-formal and informal settings? Must such learning be accredited by State and Commonwealth agencies, or can we accept informal on-the-job training as a benefit? Is there any benefit for the young person who leaves school at age 16 and travels, or are such notions outdated and inappropriate for the current economic and social climate? Should we revisit the debates regarding opportunity and outcomes?

We need to decide as a nation whether education and training are best completed when a young person is between the ages of 15 and 25. Lifelong learning, as its name suggests, is the recognition that learning should not stop when a person leaves school. It crosses all boundaries, so that nuclear physicists undertake classes in jazz ballet, and men and women caring for children learn to converse in Spanish. They do not take these courses to gain employment, but to learn. As it is now being promoted by some, however, lifelong learning must have a vocational goal, so that courses in sailing and black-and-white photography do not necessarily qualify. If we choose to see *all* learning as beneficial, then we may alter our perceptions of what should occur in the senior secondary years of schooling, and we may better adjust the curriculum to suit the needs of the young people who inhabit our schools.

REFERENCES

- Ainley, J., Jones, W., and Navaratnam, K.K. (1990). *Subject choice in senior secondary school*. Canberra: AGPS.
- Ainley, J., Robinson, L., Harvey-Beavis, A., Elsworth, G., and Fleming, M. (1994). *Subject choice in years 11 and 12*. Canberra: AGPS.
- Altenbaugh, R. J., et al. (1995). *Caring for kids: a critical study of urban school leavers*. Bristol, PA: Falmer Press.
- Australian Bureau of Statistics (2002). *Labour force, Australia, July 2002* (Catalogue no. 6203.0). Canberra: ABS.
- Fullarton, S. (1999). *Work experience and work placements in secondary school education*. LSAY research report no. 10. Melbourne: ACER.
- Fullarton, S. (2001). *VET in schools: participation and pathways*. LSAY research report no. 21. Melbourne: ACER.
- Fullarton, S. (2002). *Student engagement with school: individual and school-level influences*. LSAY research report no. 27. Melbourne: ACER.

- Fullarton, S., and Ainley, J. (2000). *Subject choice by students in year 12 in Australian secondary schools*. LSAY research report no. 15. Melbourne: ACER.
- Fullarton, S., Walker, M., Ainley, J., and Hillman, K. (2003). *Patterns of participation in year 12*. LSAY research report no. 33. Melbourne: ACER.
- House of Representatives Standing Committee on Employment, Education and Training (1996). *Truancy and exclusion from school*. Canberra: AGPS.
- Keeves, J.P., and Bourke, S.F. (1976). *Australian studies in school performance. Volume I: Literacy and numeracy in Australian schools: a first report*. ERDC report no. 8. Canberra: AGPS.
- Lamb, S. (1996). *Completing school in Australia: trends in the 1990s*. LSAY research report no. 1. Melbourne: ACER.
- Lamb, S., and Ball, K. (1999). *Curriculum and careers: the education and labour market consequences of year 12 subject choice*. LSAY research report no. 12. Melbourne: ACER.
- Lamb, S., Dwyer, P., and Wyn, J. (2000). *Non-completion of school in Australia: the changing patterns of participation and outcomes*. LSAY research report no. 16. Melbourne: ACER.
- Marks, G.N. (1998). *Attitudes to school life: their influences and their effects on achievement and leaving school*. LSAY research report no. 5. Melbourne: ACER.
- Marks, G.N., McMillan, J., and Hillman, K. (2001). *Tertiary entrance performance: the role of student background and school factors*. LSAY research report no. 22. Melbourne: ACER.
- McMillan, J., and Marks, G. (2003). *School leavers in Australia: profiles and pathways*. LSAY research report no. 31. Melbourne: ACER.
- New South Wales (1992). *Statistical bulletin: schools and students in New South Wales, August 1991*. Sydney: Department of School Education.
- New South Wales (1997). *Statistical bulletin: schools and students in New South Wales, 1997*. Sydney: Department of Education and Training.
- Reid, K. (1982). The self-concept and persistent school absenteeism. *British Journal of Educational Psychology* 52, 179-187.
- Robinson, L. (1996). *School students and part-time work*. LSAY research report no. 2. Melbourne: ACER.
- Robinson, L. (1999). *The effects of part-time work on school students*. LSAY research report no. 9. Melbourne: ACER.
- Rothman, S. (2002). Student absence in South Australian schools. *Australian Educational Researcher* 29, 69-91.
- Rothman, S., and McMillan, J. (2003). *Influences on achievement in literacy and numeracy*. LSAY research report no. 36. Melbourne: ACER.
- Ryan, C. (2003). *A 'causal' estimate of the effect of schooling on full-time employment among young Australians*. LSAY research report no. 35. Melbourne: ACER.
- South Australia (2000). *Survey of student participation in the labour force, South Australia, 2000*. Adelaide: Department of Education, Training and Employment.
- Vickers, M., Lamb, S., and Hinkley, J. (2003). *Student workers in high school and beyond: the effects of part-time employment on participation in education, training and work*. LSAY research report no. 30. Melbourne: ACER.
- Williams, T., and Batten, M. (1981). *The quality of school life*. ACER research monograph no. 12. Melbourne: ACER.