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The *MJES* is a biannual refereed international journal with a regional focus. It features educational research carried out in Mediterranean countries, as well as educational studies related to the diaspora of Mediterranean people world-wide. The journal offers a forum for theoretical debate, historical and comparative studies, research and project reports, thus facilitating dialogue in a region which has vigorous and varied educational traditions. There is a strong international dimension to this dialogue, given the profile of the Mediterranean in the configuration of the new world order, and the presence of Mediterranean peoples in Europe, North America and elsewhere. The *MJES* is of interest to scholars, researchers and practitioners in the following fields: comparative education, foundation disciplines in education, education policy analysis, Mediterranean studies, cultural and post-colonial studies, Southern European and area studies, intercultural education, peace education, and migrant studies.

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RESEARCH AND ADVISORY CENTRE FOR INTERNATIONAL EDUCATION: AN APPROACH FOR SENDING COUNTRIES

ABDURAZAK GRADY
MICHAEL LOCKE

Abstract – *For developing countries, industrialisation may be held be back by the shortage of managerial and technological knowledge which can only be acquired through a long process of education and training. In order to meet the demand, many developing countries - including many of the twenty countries bordering on the Mediterranean - have invested in international education by sending their students abroad to improve their technological capability by acquiring technological knowledge and technological expertise from already established institutions in industrialised countries. Major essays are written on the subject of international education in which recommendations are put forward to improve the practices of education in host institutions. However, few recommendations have been directed at the sending countries for appropriate actions to be taken. This paper seeks to address ways in which developing countries can participate in international education activity. It proposes a research and advisory centre for international education to be established in sending countries in order to benefit from their investment.*

Introduction

$\mathcal{T}$he acquisition of knowledge from one place to another is not a recent phenomenon. For centuries centres of knowledge and other institutions have been welcoming international students and scholars (Feizi 1990; Barakat 1988; Williams 1990; Saqeb 1992; OST 1982). The objectives of higher education institutions involved in international education are many. Among them is the aim to equip such students to become contributors to the world community; to expose both local and international students to the diversity and interdependent nature of our world; to gain financial benefits in terms of income generated by the presence of international students; to promote international goodwill and understanding, and to assist international students especially from the Third World seeking the technological knowledge and technological expertise needed for industrialisation and development (OST 1982).

From the sending country's perspective, there are two dimensions behind

international education. One is a personal interest (student) and the other is a national benefit (country). Among the personal interests may be the desire to gain a prestigious internationally recognised qualification; a window on another culture; a worthwhile degree to use in the home country; the benefit of gaining another language; and other personal gains such as knowledge for its own sake. The national interest is in receiving advanced training that is not available at home. Many developing countries have sent their nationals abroad for highly specialised education that they are unable to provide but require (UN 1972; Graham 1982; Macioti 1979; Jenkins 1983; Gucluol 1986; Richardson 1978; Al-Ali 1988; Makepeace 1989; Barakat 1988; Fonge 1987; and Zelmer and Johnson 1988). The fact that students from developing countries (sending nations) continue to come for education in developing countries (host nations) in increasing numbers is an indication of the real developmental needs for technological knowledge and technological expertise (Richardson 1978).

> '...the transfer of technology from...developed nations to developing nations is a very important process, and....the hundreds of thousands of foreign students...form a significant component in this transfer process' (Jenkins 1983:2).

In addition to the international students', sending countries', and host countries' perspectives, international education can serve as channel of understanding between nations rather than a diplomatic means, as Fullbright (1983:x) pointed out:

> 'The interchange of students and scholars across national borders...is the most effective way to enable humankind to apply reason rather than arms to the arbitration of international problems...Educational exchange between nations of different cultures is relevant to the reasonable solution of their differences and allows people to demonstrate their capacity for humane conduct'.

Appropriateness of education

In the field of international education, the problem of appropriate education is more complex. Questions are raised about what is taught, how it is presented, and how it will be used. Tran (1990) defined the *appropriate technology* as follows: '*Appropriate technology is basically technology which is most able to achieve the goals of economics, social and cultural development which have been set by the country receiving the technology' (p.122).* As the question is frequently put,

are developed countries' technology curricula relevant to the development in developing countries? According to the Institute of International Education (1988), in spite of much discussion and recommendations for modifying science and engineering programmes to provide more appropriate services to developing countries, *'...such modifications have generally not been made'*. Yet, as the number of international postgraduate students has grown, *'...perspectives on the relevance issue have shifted drastically'*. Some engineering academics, especially from the United States, *'...now voice concern about the possible intrusion of developing-country problems into the training and research in the US engineering schools'* (Institute of International Education, 1988:5). Thus the question for students in the developing countries is not simply one of whether or not they can attend a foreign university, but one of whether or not they can be provided with the appropriate type of technological knowledge and technological expertise in the host industrialised countries. This poses the further question whether graduates will be able to transfer their knowledge to the local environment after the conclusion of their studies (Gucluol 1986). Makepeace (1989) pointed out that there are more fundamental issues, such as whether it is ethical to provide education for international students without sufficient consideration about the appropriateness of that education to the developing nations, and whether the effect is to prevent the development of education in the sending countries. Specifically, Gucluol (1986: 33) maintained that: *'...if the higher education institutions of the advanced countries really wish to help educate foreign students, they should learn more about the applicability of their own educational aims and ideals to the developing countries'*. Similarly, Richardson (1978: 2) stressed that if an institution is to serve international students, monitoring of the needs of international students would be useful:

> *'When an institute...works in the area of application of technology, and either explicitly in terms of its statutes, or implicitly by accepting large number of students from the third world, is involved in the transfer of technological skills as an attempt to help in the solving of development problems in societies that are changing even more rapidly than those of the industrialised West, then monitoring is a necessity.'*

Power and Gertzel (1990) criticise international students for not helping themselves to obtain appropriate education by putting qualifications first, before relating their education to the needs of any particular job, described by Dore (1980) as the *Diploma Disease*. Brandt (1980) stressed that only developing countries themselves know what suits their own local needs, and suggested that special international support should be given to research into more efficient

production, development and the improvement of the market competitiveness of those raw materials mainly produced in developing countries. Richardson (1978) stressed that a course aiming for technology transfer should consider employer's needs and priorities, country needs, and alternative training facilities and costs in the student home country, or in other countries, either developing or developed.

The Inter-University Council for Higher Education Overseas (IUC) produced a report concerning the appropriateness of training received by international postgraduate students in Britain. The report reveals that some supervisors, anxious to have research students to assist them with their own academic advancement, give little regard to the relevance of the training received by international students. Also the research topic might be so remote to a student's need in his country (British Council Committee for International Co-operation in Higher Education, 1986). Lulat, Altbach and Kelley (1986) explained this by the fact that members of PhD committees often do not have the expertise to supervise a project specific to a student's home country, and also it requires too much time and effort to supervise field work in a foreign country. The report also highlighted the second concern that in Britain there had been considerable discussion about broadening the PhD by including advanced courses or to follow masters with taught courses before embarking on research. Similarly for the UK students, the Office of Science and Technology (1994: 3) in the May 1993 white paper *Realising Our Potential* in relation to research training for postgraduate UK students stated:

> *'The government welcomes the growth in postgraduate courses. It is concerned, however, that the traditional PhD is not well matched to the needs of a career outside research in academia or an industrial research laboratory.'*

Similarly in the United States, arguments are mounting on the need to reshape postgraduate education by changing the practice and curriculum for more appropriate education. According to a report from the National Academies of Science and Engineering and the Institute of Medicine, only about a third of new US PhD holders in science and technology will end up working for the academic world. Unfortunately for the other two thirds of the PhD graduates, their doctoral degrees have equipped them for an academic career but not one outside academia (Cage 1995). If this is the case in host countries, *'...It is not surprising that the developing world is becoming increasing sceptical of each 'assistance' when one hears of growing concern in Britain itself of the irrelevance of much of higher education to meet its own economic and social needs'* (Salmon 1977, in Richardson 1978:2).

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In the UK, universities are under an increasing pressure resulting from '...*a mixture of student anecdotal feedback, institutional guilt, Government pressure, Research Council agenda and external audit*' (Halliday 1995: 69). The considerable pressure to modify the PhD programmes has produced a call for a better, more structured system of PhD training (Kipling 1995). The Office of Science and Technology has proposed two models. The first is a new Master of Research which will act as a filter to a PhD. The second model is to enhance the existing PhD to provide research skills training (Walsh and Mills 1994). As a result of debate by professional bodies, several universities have chosen to move toward the second model by introducing research skills training courses as part of the existing PhD programme (Clark 1995), while others are still discussing the required changes (Walsh and Mills 1994). Also industry is in favour of broadening research training, which recruits PhD students for '...*their research awareness and training, for some specific skills and for technology transfer*' (Advisory Board for the Research Councils, 1993: 11). Examples of the recent developments of research training can be found in Clegg (1994), Daniels and Akehurst (1995), Lowe and Murray (1995), Powell (1995) and Halliday (1995).

Although many criticisms were noted with regard to the appropriateness of technology programmes available to international students in the host countries, the author believes that the lack of co-operation between developing and developed countries contributed to the problem of appropriateness. The United Nations Conference on Trade and Development (UNCTAD) gave clear pointers as to the importance of co-operation in its resolution:

> '...*recommends that* developed *countries...encourage taking into account the priority of developing countries, universities and research and training institutes and technical school to create special programmes and curricula for developing countries and to work closely with corresponding institutions in developing countries*' (in Richardson 1978: 3).

The literature reveals that co-operation between institutions exists between different developed countries rather than between third world countries and developed countries. One example of this co-operation is the Japanese investment in several American colleges for both Japanese and American students (Wagner and Schnitzer 1991). Since 1992, the United States Information Agency has supported North American higher education co-operation among Canada and United States (Craven 1995). In the UK, Barnes (1991) reported that several British higher education institutions have initiated and developed links with American institutions. Literature on this topic also revealed a similar pattern among European students who study in another country as part of an organised

joint study programme:· the European Community's 'Joint Study Programme' scheme, the 'Integrated Study Abroad' scheme run by German Academic Exchange Service (DAAD), and the Swedish 'Internationalisation of Higher Education' programme (Teichler and Steube: 1991).

Also there are other co-operation programmes within the European community for the purpose of technology transfer. Among those, the · University-Industry Co-operation in Education and Training (COMETT) '...*aims to strengthen and stimulate community-wide co-operation between universities and industrial or other enterprises in respect of technological training*' (Carpentier 1989: 21). One example to illustrate such co-operation is the University Alliance of Grenoble which has used the COMETT programme '...*to enable over 100 students to attend courses in European companies to prepare to implement technology transfer operations through which students learn about the human constraints of transfer within enterprise settings*' (Skilbeck and Connell 1996: 18).

Power and Gertzel (1990) suggested that while there has been increased emphasis over the past decade upon the internationalisation of higher education, a higher level of co-ordination between donors and receivers is needed and this can be achieved when education is treated as an overseas assistance. Similarly, Williams, Woodhall and O'Brien (1986), in a survey of British institutions, found that at the university level in particular, respondents thought that links with overseas' institutions such as staff exchange, research collaboration and joint. courses, are becoming an increasingly popular way of targeting student recruitment efforts, as well as enabling a better understanding of international students.

The current situation

To address the needs and expectation of overseas students, it is apparent that most research recommendations are directed at the host countries, involving the issue of adjustment of international students, and few recommendations are directed at sending countries. In the conclusion of the study of Fonge (1987), seven recommendations were made. Although three recommendations are in the area of academic concerns, none of these are directed at the sending country. Similarly, Ukaegbu (1989) presented 19 recommendations in his thesis, only three of which were directed at the sending country. Also, among the 24 recommendations presented by Barakat (1988) at the conclusion of his study, only one was designed for the sending country. Other researchers who presented recommendations only to host institutions include: Kinnell (1988), Feizi (1990),

and Chinapah (1986). Similarly, the British Council Committee for International Co-operation in Higher Education (1986) presented nine recommendations to host universities and none to sending countries.

Host countries' higher education institutions expend considerable resources in attracting international students to their institutions and in serving them whilst they study. This, together with the increasing competitive nature of the international student market, has prompted several agencies to conduct a national study into the decision-making process and experience of international students studying in British higher education institutions. Those agencies, without exception, are established in host countries, which reflect only one part of the international student question, i.e. the concerns of the host countries and their institutions, and they do not involve themselves in the selection process of technological knowledge programmes.

> *'The literature on foreign students remains dominated by a few countries...the concerns of the major host countries...dominate the literature. The research and publication on foreign students and international study done in Third World – source of most of the world's foreign students – is minuscule'* (Altbach and Wang 1989: 4).

Those agencies contribute to the issue of adjustment by presenting guidelines and recommendations to the host institutions, including: *Do It Yourself Guide to Welcoming International Students*, UKCOSA (1992); *CVCP/CDP Code of Recommended Practice*, CVCP/CDP (1992); *Overseas Student Handbook*, National Union of Students (no date). Also there are many publications in the United Kingdom designed for international students, including: *Young Visitors to Britain*, Central Bureau for Educational Visits and Exchanges (1987); *Graduate Study at Universities in Britain*, Association of Commonwealth Universities (1990); *Planning to Study in Britain*, UKCOSA (1992); *Studying and Living in Britain*, British Council (1990); *Guidance Notes for Students*, UKCOSA (1987). The authors of these publications direct their concerns to international students while in the host country.

Although such publications are available in book stores and libraries, the question may be asked how many students have access to them before coming to the host country. It appears as if the authors assume that those students live in the UK. One wonders how the student is helped to choose a course and a university when he/she has had to made a decision before his/her arrival in the host country and his/her visa was issued based on that decision. Such publications do little to help students make a selection on criteria of appropriate technology and technology transfer.

Approaching international students only from the perspective of the host countries is an error in terms of the transfer of technological knowledge and technological expertise. The authors, as Brandt (1980), believe sending countries should give more consideration as to how they can help their prospective students make sound decisions.

> *'It is surprising that these countries, which have such a major stake in foreign study, have taken so little interest in generating data and analysis relating to the issues from their perspective'* (Altbach and Wang 1989: 4).

Unlike others, the authors will consider the problems from the perspective of the sending countries. They do not put forward a single solution, but attempt to focus concern on sending countries, so as to encourage international students and their sponsors to look at their own future and decide for themselves if they want to proceed to universities in developed countries.

> *'There is a significant literature, perhaps the majority of studies, that are about Third World students in industrialised nations...but such research generally does not explore these questions from a Third World perspective. Any future research agenda concerning foreign studies must take into account the needs and perspectives of the...sending countries'* (Altbach 1991: 307).

Research and Advisory Centre

The lack of information about educational opportunities available abroad is a contributory factor for inappropriateness of education. Many sending countries have no co-ordinated policy with host institutions. The sponsoring authorities specify the criteria for studentships for international postgraduate education but do not engage in the process of selection and admission. Also, many sponsoring authorities do not provide information about courses or institutions. Given the number of specialised courses which come under one subject of universities, it is no surprise that students face problems in choosing appropriate education. This is especially true if the prospective student does not have a command of the language and needs a letter of acceptance for his/her visa application before even setting foot on a host country's soil. The importance of advisory services and information to international students before leaving home was also identified by Kinnell (1988) in her study on overseas students at both Nottingham and Loughborough Universities regarding students needs and expectations:

'Pre-arrival communications to students in their home countries were seen as a vital prerequisite to a proper understanding of, first, British culture and higher education in general, and second, the specific institution, its expectation, academic programmes and facilities' (p.131).

The need to advise prospective students is accentuated by changes in the international educational scene, such as the increased number of courses and options offered to postgraduate students. With more educational choices to be made, there is a need for people who are professionally skilled in helping students, as well as their sponsors, to make their choices. What the authors would seek is that each student and his/her sponsor should be helped to achieve a sense of purpose and to see the goals before he/she leaves his/her country for international postgraduate.

'Overseas students will...take back good reports of their experience...only if the courses offered are relevant to their needs, and if adequate and timely information necessary for an appropriate choice of course and institution is readily available' (UKCOSA 1986: 13).

Hence, the authors suggest that developing countries should establish their own research and advisory centres for international education. Such a centre should serve as a consultancy and information clearinghouse on international education. The research and advisory centre should enable students and their sponsor to identify the most suitable educational opportunities in host institutions by providing advisory services and preparing special brochures that give information about the curricula offered in English and in the national languages. The advisory service should include ready advice about the educational opportunities, provision of information about what is in store for students during their international experience, academic support and monitoring while in the host country, and advice to sponsors regarding the selection of potential students. To guide decisions, the suggested centre should sponsor relevant research. Some of the activities may be carried out through links with host countries.

Having a research and advisory centre, dealing with all matters relating to international education, would not only benefit the sending country, but also the host institutions. Students also could benefit from such a centre in that they would only have to visit the centre locally. If established, its advisory and support personnel would provide a continuing service and support to the students and their sponsors from the moment they begin considering education abroad, until they have completed their programmes.

Selection of educational programmes

In the area of selection of appropriate technology educational programmes, the recommended Research and Advisory Centre for International Education should play an active role in the selection of appropriate courses by advising and encouraging enrolment in postgraduate taught courses with technological knowledge curricula that are most appropriate for the students' and their nations' needs. For postgraduate research programmes, research students should be encouraged to enter research programmes which offer research training courses as part of the research programme. In this way, research programmes will contribute not only to producing a competent researcher, but also to the ability to transfer the gained technological expertise. One consequence of the traditional PhD practice was *'...the production of researchers unable to transfer their abilities to other research situations'* (Daniels and Akehurst 1995: 8).

In many industrialised countries, linking university to practical experience is a favoured model for teaching and learning (Szabo 1995). With sending countries, such links and co-operative arrangements are still rare and there is no general agreement on the appropriate form of such links. Since the United Kingdom is one of the major host countries for international students, the authors believe that any proposed co-operation is viable especially when *'...the introduction of PhD into the British higher educational institutions dates back to the early 1920s as an attempt to attract international students at the time'* (Archibong 1995: 86). In addition to the philosophy and motivation behind both industry and higher educational institutions, there are benefits resulting from such arrangements. Powles (1994) wrote that some of the benefits of university-industry interface *'...translate into advantages for postgraduate students in that they become acquainted with work in industry, their employment options are multiplied, and they gain access to additional funding, resources and facilities for their research'* (p.216).

In order to smooth the process of co-operation between the sending country's industry and the host country's universities, joint supervision from both countries (sending and host) is desirable (British Council Committee for International Co-operation in Higher Education 1986). Also, joint supervision will help research students to engage in research relevant to his/her country as Lulat, Altbach and Kelly (1986) stated that PhD supervisors *'...often do not feel that they are knowledgeable enough to supervise research on problems specific to the student's home country...requires too much time and effort to supervise a student doing field work thousands of miles away'* (p.45). The suggested research and advisory centre could persuade both industry and universities that there are major

opportunities for co-operation, and that the difficulties are manageable and the traditional divide is bridgeable.

Selection of students

The proposed centre for international education could play an active role in the selection of students if the sponsoring agencies allow the centre to make such an assessment of potential students in co-ordination with the host institutions. The literature suggested that students selected by their governments are not necessarily the kind of students who should be given the opportunity, as Parish (1977: 9) stated: '...*unfortunately, student candidates from third world countries are often selected by their government or other authoritative bodies, and they are not necessarily the kind of student we would like to see in our courses*'. The sponsored students should be selected for international training, not because they wish to see the world, or because they volunteer, but because they are suitably qualified and suitably motivated to be effective learners and suitably placed to pass on the technological knowledge. A year or more in industry before leaving home for international education would make students familiar with the conditions and needs of local business which will help them to identify the kind of education in demand.

> '*Postgraduate students should be encouraged to gain experience of working in industry for one or two years before returning to study. These students may be aware of the conditions and problems of industry, and they will help the development of the economy*' (Boliang 1989: 115).

During the overseas experience

First-hand experience of differences in educational approach and content is considered by students and institutions to be an additional benefit of international education. These differences in approach, expectations, language and way of life are also sources of problems for international students. UKCOSA (1985) reminded those working with overseas students that those students face problems of adjustment to life in Britain in addition to the general pressure experienced by students as a whole. These might include being in a strange country, understanding and complying with bureaucratic necessities such as immigration controls, and being educated in a foreign language in a different educational system. Various studies indicated some similar and/or different problems experienced by different groups of students: Blue (1980), Kendall (1986), Niven

(1987), Ryan (1977), Velle (1988), Goldsmith and Shawcross (1985), Abdou (1989), Al-Sherhy (1989), Shahmirzada (1988), Feizi (1990), Naido (1990), Barakat (1988), Ukaegbu (1989), Fonge (1987), Porter (1962), Williams, Woodhall and O'Brien (1986).

The research and advisory centre could expand to play a part in the student's experience in the host country. There is a dilemma for the international student. He/she comes on a conveyer belt out of the sending country's different educational system and finds the host institution's experience different from what he/she anticipated. He/she may then want to leave as he/she feels trapped. The advisory centre could explore this with the student and offer support. When the student sees the alternatives open to him/her and sees other possible avenues, he/she may then decide to stay. The authors believes that without a branch of the suggested research and advisory centre in the host country, the international student may well have to endure a miserable period abroad. Many such international students lose all motivation not only to acquire technological knowledge but also to return home. Their potential is lost, and the money spent on international education wasted, because extra money is not forthcoming to provide the necessary services.

Guidance and monitoring

The suggested research and advisory centre should sponsor research to guide its functions more efficiently. Since many existing organisations found in the host countries such as UKCOSA and NAFSA are pressing for policies in the host institutions, and expanding the welfare services for international students, the suggested research and advisory centre for international education should press for policies in the sending countries. This can be done by sponsoring independent investigation and relevant research; promoting and organising meetings, seminars and conferences to guide decisions as recommended by Altbach and Wang (1989: 4): *'Sending countries must weigh the implications of foreign study – economic, political, curricular, etc. – and there is very little research to help guide decisions'*. Although research on international education has been conducted, these efforts are made by the host countries alone. The authors believes that encouraging sending countries to contribute to the literature will help correct the imbalance in the body of knowledge.

> *'There needs to be a better balance in the research and analysis. Of course, the major responsibility for identifying topics and developing research agendas and strategies rests with third world researchers and agencies'* (Altbach and Wang 1989: 9).

As a further step, to ensure the quality and standards of international education, the centre may establish an advisory board of respected leaders in international education. They would contribute their time and expertise to review the centre's programmes and policies, visit international universities to evaluate programmes for technological knowledge and suggest modifications when necessary. The advisory board could be selected from local universities, host universities, local industries, and a technology transfer advisory group. Finally, the authors believe that the proposed centre, if established, would contribute to the selection process of technological knowledge to be transferred, so that students could look for future jobs more positively rather than worrying about future careers as some studies indicated.

Conclusion and recommendations

In addition to their national institutions, developing countries have invested in international education by sending their nationals to foreign institutions in an attempt to catch up with developed countries so those students can contribute to the technological and industrial progress, through transferring technological knowledge and technological expertise. Hence, there has been an influx of international students to industrialised countries like the United Kingdom, to the point that they constitute a sizeable number of enrolments in British higher education institutions. Within this group of international students there is a sub-group, international postgraduate students, whose numbers have been increasing substantially in recent years. They are a group of highly-trained individuals who potentially can shape the future progress of their countries.

The evidence indicates that host countries do desire to be helpful and to be understood by international students. Indeed, major essays are written on the subject of international education. The evidence further indicates that there are other factors affecting the contribution of international education to the process of technology transfer. Among the major factors which affect its contribution: (a) problems and concerns that face those students while studying in the United Kingdom, and (b) the appropriateness of technology programmes available to such students. Major reports are written on the subject of international education, in which recommendations are put forward to overcome problems and concerns. However, few recommendations have been directed at the sending countries for appropriate action to be taken.

The variety of postgraduate educational programmes available in developed countries can be utilised by developing countries if the process of selection is done through professional advisory services so the effort can be integrated. To be

successful and capable of transferring technological knowledge and technological expertise, international postgraduate education should come after a carefully researched advisory service has been provided. A research and advisory centre for international education should be established in developing countries. The centre should be charged with the responsibility of improving the contribution of international education to the process of technology transfer through various functions.

The recommended Research and Advisory Centre for International Education should play an active role in students' selection of appropriate courses for the purpose of technological knowledge transfer by advising and encouraging enrolment in educational programmes with technological knowledge curricula that are most appropriate for the students' and their nations' needs. For technological expertise, postgraduate research students should be encouraged to enter research programmes which offer research training courses as part of the research programme. In this way, research programmes will contribute not only to producing a competent researcher, but also to the ability to transfer the gained technological expertise.

Ultimate productivity of international students would be greatly enhanced by encouraging research students to involve themselves in a real industrial problem either at home or in the host country. Also, joint supervision should be encouraged. In this way local industry can easily work with host universities through international education activities. This should not only smooth co-operation between host universities and sending countries, but also enhance and facilitate the development of local supervisor capabilities through interaction with host supervision. The recommended Research and Advisory Centre should play a significant role in stimulating the process of such co-operation.

Certain personal and professional qualities must be sought in selecting students for study overseas. A student must be suitably qualified, motivated to learn and able to pass on technological knowledge and technological expertise, and must possess a desire to help in the process of industrialisation. The time and money spent in the selection process would prevent the waste of investment in international training. The Research and Advisory Centre should be given the authority to assess potential students.

Some research efforts have attempted to examine the effectiveness and relevance of UK technology educational programmes to developing countries. However, as concluded in this paper, those efforts are made by the host countries rather than the sending countries. There is an urgent need to examine the effectiveness and contribution of international education to the sending country. Research in this area would help both sending and host countries to formulate their

future strategies with more confidence. Also, encouraging sending countries to contribute to the existing literature will balance knowledge in a field which is currently dominated by the host countries. The proposed Research and Advisory Centre, if established, should carry out this research and similar investigations to guide decision-makers.

Abdurazak Grady *has recently completed his PhD and currently holds a Postdoctoral Research Fellowship at the Centre for Institutional Studies, University of East London (UEL). His Research interests focus on technology transfer to developing countries, and the role which international postgraduate education can play in this process. Contact Address: Centre for Institutional Studies, Maryland House, Manbey Park Road, London, E15 1EY, UK. Phone: (44) 181-849 3670,   Fax: (44) 181-849 3678, E-Mail: Grady@uel.ac.uk*

Michael Locke *is Reader and Acting Director of the Centre for Institutional Studies at the University of East London (UEL). He has undertaken research and consultancy projects for central and local government and a range of voluntary organisations and associations, mostly concerned with policy review or with professional development. Contact Address: Centre for Institutional Studies, Maryland House, Manbey Park Road, London, E15 1EY, UK. Phone: (44) 181-849 3670, Fax: (44) 181-849 3678, E-Mail: Locke@uel.ac.uk*

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RELIGIOUS DIVERSITY AND THE FUTURE
OF EDUCATION IN LEBANON

HELEN TANNOUS

Abstract – *A key element of Lebanon's constitution and national identity is religious diversity. This article sets out to examine the state of such diversity, and the relationship between that and education. Education has always had a high priority in Lebanon, yet the education system itself has lent itself to sectarian biases and rivalry. In order to understand the dynamics of educational development in Lebanon, therefore, it is important to consider the forces that constitute the Lebanese mosaic, and to be aware of its confessional political system. The implications of seventeen years of intermittent violence on sectarianism and education will be analysed with an investigation of what may lie ahead for education in Lebanon.*

> *'You are my brother and I love you;*
> *I love you at prayers in your mosque,*
> *at worship in your temple, at your devotions in your church;*
> *for you and I are the son of the one religion – the spirit.'*

(Khalil Gibran, 1934)

Introduction

$\mathcal{T}$he ancient country called Lebanon, situated on the eastern shores of the Mediterranean, had its borders carved at the 1920 Peace Conference. It is a country with 3 million people where 17 different ethnic and religious communities reside. Lebanon's very diversity endows it with a unique, intangible destiny, dedicated to liberty, progress and creativity. Yet in its diversity has emerged the very essence of its destruction.

In this paper the focus will be on religious diversity in Lebanon: it is this diversity which is the foundation of the country's constitution and national identity. Questions will be posed to try and analyse the role of education in the creation of a strong Lebanese national identity. What does education in Lebanon promote? Has the education system tried to weaken the sectarian biases? Are the well educated more tolerant and accepting of the diverse religious groups? Has the war added to or reduced sectarian rivalry? Have the youth in Lebanon evolved into a united homogenous people because of the national system of education?

These questions will require years of study in Lebanon and the creation of conceptual frameworks as bases for research. In this exploratory paper I will attempt to analyse the facts that are available in the literature on Lebanon, by focusing on the country's sectarian composition and on the impact this has on the national system of education. I will also focus on Lebanon's political system and its confessional characteristics, analysing how these have affected education and further divided the country. In conclusion I will look at scenarios for the future, and more specifically at the role of education in the future of Lebanon.

Sectarian composition and education

A mosaic society which has been a haven for the persecuted, Lebanon's religious composition is perhaps unique in its diversity, especially when considering that with a surface area of 10,452 square kilometres, we are talking about a small country. None of the communities in Lebanon can claim to constitute a majority. The diverse nature of the society is clearly reflected in its educational structures. There are as many systems and philosophies of education as there are religious communities (Barakat 1977). Each sect has its own schools, and over and above that, there are also foreign, public and private schools. The curriculum generally draws its inspiration from French or American traditions and systems of education.

Who constitutes this mosaic? It would be correct to say that Lebanese society is made up of Muslims and Christians, but within this twofold division lie several distinct social and traditional subcommunities. Among the Christians, for instance, one finds Maronites, Antiochian Orthodox, Greek Catholic(Melkite), Armenian (Orthodox and Catholic), and other minority Christian denominations. The Muslims include the Sunnis, Shia and Druze. Then there are the Palestinians who are mainly Sunni and Melkites. There are other subcommunities, but these are the ones that are most often referred to in the literature about Lebanon.

The largest of the Christian communities are the Maronites. Owing to their strong ties with France since the Crusades, their education has been mainly influenced by the French tradition. Indeed, many members from this community travel to France to receive further education or to find work, or attend the University of St Joseph, established in Lebanon by French Jesuits. The ties with France are further reinforced by the presence of a large active political and socio-cultural Lebanese community in the metropole (Ferkh 1991). Maronites are often considered by other sects to be élitist. They have an intense attachment to their country, yet are also open to western culture and means of education through their connection with France.

The Antiochian Orthodox communities identify themselves strongly with Arab nationalism and are less open to the influence of the west. They generally attend Maronite schools, but have their own schools as well. Another Christian group is made up of Melkites; these are Catholic, and their allegiance is to the Pope of Rome. The Melkites attend Christian schools, and per capita, they are the most prosperous community in the country. Many of the Palestinian Melkites who were highly educated received Lebanese citizenship and have integrated into the community (Cobban 1985).

The Armenians were welcomed into Lebanon after the Ottoman persecution of their community. The Christians in the host country considered the arrival of such a large number of refugees as an effective way of boosting their own numbers in the delicate balance of power in Lebanon. The Armenians are made up of Catholics and Orthodox groups, and they have formed a closely knit community, establishing their own schools thereby sustaining their language and identity. There will be further discussion of this community in the sections below.

Among the different Muslim communities are the Shias and the Sunnis. The former community has a fair number of adherents who declare an allegiance to the Khomeini of Iran. Shias generally live in the countryside and tend to be less economically 'advanced' and less formally educated, despite the fact that Moussa Al Sadr, their great leader, united and lifted some out of their deprived state in the 1970s. Sunnis are members of what could be referred to as mainstream Islam, and are generally more highly educated than the Shias. Indeed, Sunnis living in urban areas are part of the country's élite. Finally, it is important to mention the Druze, who were originally Muslim but who developed their own identity in the eleventh century. The details of their faith are kept secret by those who are the initiated learned. They have a strong communal pride and cohesion.

The plethora of sectarian identities, while constituting Lebanon's cultural wealth, also acts as a barrier to unity. The country is often perceived to be fragmented and volatile, and as having failed to attain genuine pluralism or a national identity. The reason for this situation is that most Lebanese identify themselves with the confession first, and only then with their nation. Their loyalties have often been to Pan-Arab nationalism, to the creation of a Greater Syria, or to Europe, which has lead to antagonism by the opposing groups.

Historically, the Lebanese have tended to unite when there is a common vested interest, such as shared hostility towards Ottoman rule, or participation in the booming economy of the 50s and 60s. Such times tend to be characterised by tolerance and cooperation. However, during periods of internal hostility, sectarian divisions and communal identification become more pronounced and explicit.

Schools in Lebanon have been as diverse as its religious communities and their diversity has contributed to further social fragmentation, national disunity and

cultural disintegration. The education system reflects as well as maintains the establishment of a confessional system. However, it should be noted that neither Christianity nor Islam as religious convictions and faiths are in any way responsible for the hostilities that marked the country for seventeen years (Kadir 1984).

The attainment of high levels of education follow closely developments in industrialisation and urbanisation. According to Christiano (1987), the consciousness of the members of a society is simultaneously detached from tradition and broadened in scope. Consequently, the mind is opened and freed to discover, and people gain access to vast amounts of information. Christiano's historical research on North American cities at the turn of the century illustrates that through education there is a broadening of popular commitment and religious affiliation. Generally people tend to detach themselves from tradition and are introduced to new worlds of thought and experience, and thus open themselves up to intellectual change. Literacy therefore promotes – and illiteracy hampers – religious diversity. While Christiano's model provides us with an attractive framework for analysis, it fails to connect too readily with the situation in Lebanon, where religion seems to be far too deeply rooted. Indeed, one could claim that the more ignorant the masses were, the more control sectarian clan leaders had over them.

The confessional political system

The political system in Lebanon was designed to regulate the various subcommunities within the framework of one political community. After over half a century, Lebanon's political system remains a composition of sectarian groups with diverse and conflicting interests. Instead of creating a united nation state, the system has aggravated political controversy (Koury 1976).

The National Pact, 1943

The National Pact of 1943 played a significant role in freeing Lebanon to become a sovereign and independent state. It marked the start of a new phase of inter-sect political relationships which had evolved over the centuries. The Pact stipulated that the Lebanese president always be a Maronite and the parliament would have a 6:5 ratio of Christians to Muslims – to ensure Christian dominance and also to reflect the national demographic profile. The Prime Minister would be a Sunni and the Speaker of the House always a Shia. The rapid demographic growth among Muslim Lebanese - Christians tended to migrate more and have less

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children – turned the population ratio around. From the 1950s, the Muslim Shia believed that they outnumbered the Christians and therefore wanted more power in government. The Muslim demand for political reform and for a greater role in government was however resisted by the Maronites. This in itself did not lead to the war, but one can consider it to be a prelude to the conflict, and one of the reasons that made it last for so long. The Pact, therefore, symbolised a resistance to sociological change in the content of the intersect coalition in Lebanon from 1943 to the 1970s.

Although the political system is still based on confessions, there was an assumption that the younger generation would be less heterogeneous and more tolerant due to a unified system of education, and due to higher educational attainment and exposure to different ways of life. Education, it was thought, would have a significant and positive impact on the course of nationalism and political socialisation. This perhaps might have been true twenty years ago before Lebanon's war became so horrific and violent. However, there is still evidence of sectarian biases and elitist attitudes and intolerance amongst youth and the well educated. Although one could claim that education has alleviated some aspects of conflict, and many private sectarian schools in certain areas accept any religious denomination, the underlying sectarian attitudes still prevail (Van der Gaag 1994).

It is common for Muslims to send their children to Christian schools of any denomination, despite the fact that there are well financed Islamic or Koranic schools in Lebanon. It is however extremely uncommon for Christians, especially Maronites, to attend Islamic private schools. For example, St. Anthony's College, which is a large Maronite school in South Mount Lebanon, has a very large Druze enrollment because of the area it is in. Scripture classes are not compulsory for the Druze students, and there existed a 'forced harmony' in the school environment. However, it is reported that during the war, the principal was threatened by the Druze militia because he refused to accept a civic text book which would have led to antagonism among the Maronite and Druze school community (Kassi 1994).

Writing in 1976, Koury pointed out that although education of the masses takes place in sectarian schools and that some of the media is also subject to sectarian biases, the fact that Lebanon is a small country leads one to expect its people to interact readily with each other, since they are 'neighbours'. Distances too are short, facilitating contact between different groups and communities. Koury therefore argued that the old social, economic, religious, political commitments might very well be eroded and new patterns of socialisation and behaviour emerge. It should be noted that Koury wrote this analysis twenty years ago: since then Lebanon – and particularly Beirut – have moved in the direction of conflict and division rather more than unity. Koury's conviction that the creation of

a national secular government would 'desocialise' and 'resocialise' the communities in order to foster a homogenous political culture has failed to be confirmed by history.

Civics education and the promotion of unity

Civics education is widely considered to be a vehicle for the promotion of national unity. It is a compulsory part of the national curriculum and its aim is to induce the citizen into the concept of a nation state, emphasising the individual's responsibilities to the state and society. There is an emphasis on the reciprocal responsibility in the giving and taking of one's rights. Karame (cited in Chidiac et al. 1992) points out that in civic education in Lebanon, patriotism and nationalism tend to be confused. Patriotism tends to refer to a defence of one's homeland at any price. Nationalism, on the other hand, means that the privileged need to let go of their privileges, as all constituents have the same rights and interests and mutual respect needs to prevail.

Karame continues to argue that there is a relationship between civic education and cultural heritage. In order to overcome the constraints of the past, one needs to search for knowledge. In each community there is a certain intrinsic culture which must be studied in order to recognise who is a Lebanese. Such a search for identity and the process of reaching out to understand different communities can help resocialise the young generation as members of a united nation. The Lebanese, like many other members of ethnic minorities, feel secure in their own communities or groups. But the nation state can only come about when community members feel capable of integrating and accepting other citizens in a spirit of tolerance.

Education can, of course, play a part in this process. However, as Barakat (1977) noted two decades ago, the Lebanese education system corresponds to the existing religious and ethnic communities. This is more or less still true today. Schools and universities attract their students from specific religious and socio-economic backgrounds, reproducing social distinction. In this sense, therefore, education in Lebanon promotes individual passivity, social and economic continuity, conservatism and tradition, rather than social change, progress and justice. Bakarat concluded that *'such patterns of socialisation prevail throughout Lebanon's institutions – home, school, church, government and university. These are complementary rather than conflicting agencies of socialisation. They reinforce each other, maintain the status quo and preserve the culture of silence'* (Barakat 1977: 50). The war has added to the maintenance of tradition by certain groups, mainly the Maronites, and radicalised other groups who have risen from their deprived state and subscribe to nationalistic, revolutionary ideologies.

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The implications of seventeen years of conflict on sectarianism and education

The war in Lebanon began in 1975, and peace was not reinstated before 1991. In 1967, the Cairo Accord gave Palestinians permission to bear arms, and this, according to some views, was the catalyst that led to seventeen years of violence. In order to defend the *status quo* and protect Maronite civilians from the Palestinians, Christian militias were set up. In response, Muslim militias were organised in support of the Palestinians and to oppose the current political system (Gordon 1983). During the 70s and 80s there were approximately 75 militias active in Lebanon, with some wanting to preserve the *status quo* and others wanting to change it. Most were ready to go to any lengths to achieve their purpose. A weak central government was not able to crush the militias. The government became increasingly powerless, and its own army was riven with divisions. Basic services such as electricity and water were only available through an alliance with the militias, as the government could not provide these necessities. The war aggravated confessionalism by rallying the masses closer to their confessional leaders both for physical aid and for spiritual sustenance. It was impossible to sit on the fence, and forced migration to the cantons intensified polarisation. Each subcommunity also produced their own war literature, propaganda and newspapers, possibly leading to the indoctrination of sectarian groups into religious fanaticism.

Clearly, an analysis of the war is beyond the scope of this paper: it is far too complex to even attempt to describe, as it is a combination of international politics (Arab/Israeli, USA international relations), civil unrest, and religious and ethnic divisions. It has also been a result of the conflict of interest between the privileged and the deprived, the west and the east, the educated and the non-educated. But this brief overview gives a sense of the tensions and conflicts that are at the heart of Lebanon, and helps develop an understanding of how the war both added to ill feelings and divisions between the different confessions as well as diffused much of the hatred that was already intrinsic to the community. Although schools tried to teach a national curriculum, introducing students to a narrative that stressed a national history as well as civic education, this did not help nationalise all of society. The students' link with their religion (not necessarily faith) became stronger, and further education was not a remedy for the division and intolerance which still exists today.

The war was a culmination of sectarianism and political divisions which have not ceased to be issues for concern amongst the underprivileged. Although the education system tried to nationalise the country, the war created more divisions – as well as sectarian and isolationist groups – than there were previously. Why

have some students remained conservative, and unable to accept others? The answer perhaps lies in the atrocities committed by the different sides as well as the concept of family ties and confessional links.

The war saw the emergence of the pro-Palestinian cause and many students' anti-Jewish sentiments were highlighted. The majority of Palestinian supporters were the struggling Islamic communities. For this reason, Muslim militias showed solidarity towards the Palestinian, illustrating that religious ties were stronger than the project of national identity.

The country during this time was divided. The green line literally ran across east and west Beirut. Since St. Joseph University – a French Jesuit institution founded in 1882 – was in the east where the majority of Christians lived, the university remained secluded, sectarian and French. The American University of Beirut was in the west, the area controlled by Muslim militias. Many of the Christians enrolled there had to discontinue their studies, with some going overseas to continue their education, while others waited for peace or attended courses in a campus set up in east Beirut. This, however, did not remain open for long. The intense conflict in a relatively circumscribed area in Beirut is an ironic and dramatic comment about Koury's (1976) theory that Lebanon could unite as a country because of 'short distances'!

The war was the ultimate manifestation of competition for power and resources in a polyethnic society and was bound to intensify sectarianism and identification with the ethnic group. Civil upheavals and social turmoil raised group consciousness and ingroup solidarity. Strong identifications that emerged served to support as well as reinforce ethnocentricism and sectarianism. Furthermore, those who participated in the war demonstrated stronger sectarianism than those who did not. Many unemployed youth found themselves members in the militias, and education no longer remained a priority. Instead of attending formal education, which might have reduced intolerance and divisions, young people turned to the militias for education on how to defend their towns and families. This, naturally, further fuelled sectarianism and division in Lebanon (Freidman 1990). Research by Der-Karabetian (1984) showed, for instance, that the war had sensitised the Armenian community about its differentiation from other groups. In response to a situation of national conflict, the Armenian community redefined its ethnic boundaries and increased ingroup allegiance. The same research also showed that ethnic identity changes over time, and is influenced by socio-political and economic transformation. Civil strife raises sectarian solidarity, although the strengthening of ethnic identity is not necessarily associated with a weakening of national identity.

Peace was reinstated in 1989 through the Taif agreement, signed by members of the Lebanese multi-confessional Parliament. The election of a billionaire (Rafic

Hariri) as Prime Minister in 1992 was greeted by many with relief and optimism. The dismantling of the Green Line which had divided Beirut saw curious visitors from both sides. For some of the youth it was the first time they had seen the other side (Van der Gaag 1994).

The seventeen years of violence has had a profound effect on the education system as well as on individuals. Every teenager in Lebanon had known nothing but war, and depending on the extent and duration of the exposure to conflict and violence, tends to display some kind of psychiatric disorder (Rutter 1994). Many had lived in bomb shelters for long periods of time. Some students had never attended schools and others had done so only sporadically. Even then, the quality of the educational service was low, since schools suffered from a drastic lack of material and human resources. Qualified teachers were a rarity. Those who had the means or the opportunity had taken on private tutors, while others had received their education from their parents.

The distribution of educational services was again differentiated along ethnic and religious lines. The Muslim Shia, for instance, generally attended public schools which were inferior in quality to private schools. Christians mainly attended private, Church-run or foreign schools. Not all areas were affected by conflict in the same manner and to the same extent. As a consequence, some were more deprived than others, and a few communities were even able to use the war to their advantage. A number of businessmen prospered during the war years, and their families endured less suffering and deprivation because they lived in such areas as Byblos and Jounieh. The war therefore intensified the divide between the rich and the poor (van der Gaag 1994), and this is reflected presently in the differentiated access to health and education services. The wealthy go to private clinics and schools, while the poor have no option but to turn to a dismally under-resourced public service.

In a sense, the end of the war has only made matters worse, with many foreign relief and aid agencies stopping their support, believing that the problems have been solved since open conflict has subsided. A look at the Lebanese education sector quickly shows how wrong such perceptions are. 86% of schools are still dysfunctional, for instance, and UNESCO is presently concerned with improving the quality of the public sector schools, with upgrading teaching and administrative standards, and with improving the curriculum of technical and vocational education. One of the major problems stemming from the war is the task of reintegrating the former members of the militias into society, through a properly organised programme of vocational training and civic education. Those individuals who joined the militias at a very young age have been subjected to indoctrination and have been socialised into an ethos of extreme violence; they probably cannot help but still feel hostility towards rival sects.

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In this sense, the hope of shaping a new ideology and building a genuinely secular state marked by respect for one another's cultural and religious affiliations lies in the a new generation of young people who have not been raised up in a context of war and violence.

Education for the future of Lebanon

As mentioned earlier, the most important issue for the future of Lebanon is the improvement of the quality of education, particularly that provided in the national schools. This is currently under way as finance and aid is arriving from overseas investment, and the prominent and wealthy Prime Minister, Mr Hariri, together with his ministers, have initiated scholarship programmes for university students. At the tertiary level, there is a need to reassess the role of the Lebanese University – the state-financed national university – in the reconstruction of the country. There also needs to be a reconceptualisation of the role of education and training, a process that is currently part of a national project.

Other initiatives have been set up in order to facilitate educational development in post-war Lebanon. One of the more prominent of these is located in Byblos, where the *Bureau Pédagogique des Saints-Coeurs* organises annual seminars on the future of Lebanese education. The *Bureau* is a Papal organisation (The French Cultural Mission), concerned mainly with programmes that offer pastoral and humanitarian support. Its goal is to promote social and individual development, and the seminars emphasise the need for a common education policy based on harmony and acceptance of religious diversities. The *Bureau*'s seminars promote the study of history, civics and religion as key components of the curriculum, constituting a vital contribution to a country which is home to seventeen ethnic and religious communities (Chidiac et al. 1989, 1992). Because of the experience of war, where loyalty was given to groups rather to the country, the concept of nation has become weakened, and has even disappeared in the minds of many. The *Bureau* reaches out to young people, and helps them identify with the national project rather than with individuals and groups, such as militias, political leaders, and so on.

The government therefore has a major challenge in front of it. It has to embark on reforms so that it can guarantee all young people access to education. This education has, as one of its key tasks, the building of a unified community. To do this, it has to address students' psychological needs, and to promote, in each and every school, an ethos which socialises young people into a culture of harmony, and away from sectarianism and intolerance. A number of important

challenges have to be dealt with in achieving these aims. In this context, I would like to consider the issue of teaching history and religion in Lebanese schools.

History and civic education

The question of history as a subject and contributor to civic education has been at the forefront of the latest research on education in Lebanon. Is there a means of unifying the study of history in the curriculum and reconciling subcultural diversities? The two main confessional sides are until now still unable to agree on a national history curriculum. The temptation is to represent and construct a national society absent of the pluralism of the population. On the other hand, even if one were to present a common historical narrative, it would not necessarily lead to the desired overall effect, for one must not overestimate the role of schools in shaping attitudes and in socialising the new generation. The family, the media, the environment and the lingering influence of the militias play a large role in socialising young people.

But does Lebanon need to arrive at a common education policy in order to gain political stability? Is there a way of arriving at an agreement on cultural diversity and national unity? The role of the school, of educators, and of the government is of prime importance in the task of organising and developing a level of coexistence and respect for each other. There is a level of popular support for this goal. A survey of economically-active people during the 80s found, for instance, that 86% believed that coexistence between communities was still possible. However, as Van Der Gaag (1994) pointed out with regard to the findings of this survey, *'the Taif agreement [1989] which ended the war set the blue print again for a multi-confessional state. For this to be a reality, the Government has to have an agenda for reconciliation as well as reconstruction. It must have a commitment to invest in education and health as well as roads and airports. Reconstructing a city and a country is... about building a democratic consensus which allows people to live in peace'* (p.5).

If the war brought out some of the worse aspects of human nature, it also revealed and promoted a number of admirable qualities and values, such as patriotism and altruism. Various youth movements – such as Green Line, and the Lebanese National Museum Society – have emerged, and are a living proof of the commitment of young people to socially valid goals, compensating for the lack of unity that has marked Lebanon thus far. Even in distant Australia, the Lebanese student movement (The National Union of Lebanese Australian Students Inc.) stipulated in its mission statement the importance of uniting in their adopted country to make up for the divisions in Lebanon.

However, despite such good intentions on the part of young people, there are nevertheless several difficult challenges to be faced before Lebanon finds unity as a nation. Young people, for instance, have to strive for unity in the face of pessimism, and with hostility and sectarian rivalry still smouldering in the adult community. The issues of religion, ethnic identity, and language – three of the cornerstones of national identity – are still sensitive matters that can flare up at any time and lead to fresh antagonism. There is always the temptation for Lebanese Muslims to think of themselves as first and foremost members of the Arab-Islamic community, rather than Lebanese. Christians, on their part, might still find it difficult to integrate themselves in a Pan-Arab community, fearing the loss of what identifies them as unique from other people in the Middle East. They fear losing western identity, particularly the association with French civilisation.

In the face of such anxieties, it is not possible for civic education to gloss over differences, and to promote homogeneity without confronting genuine understanding and acceptance of different cultures, customs, traditions, and religions.

Religion

Youmna Salhab (Chidiac et al. 1992) states that in a pluralistic community like Lebanon, religious instruction is essential in order to uproot that community from its past and to enable it to comprehend its present. Is it possible to create education programmes that neglect the religious beliefs that make up the social and political character of a nation? Salhab attempted to answer this question through a survey conducted with 75 Lebanese students, asking them about their beliefs as well as about their relationships with other young people having a different religious confession. Students seemed ready to accept each other regardless of religious beliefs, believing they have a common faith and that they fell under the protection of the same God.

However, Salhab's research also shows the extent to which students were ignorant of each others' religions. Multisectarian schools have tended to avoid discussion about religious matters, fearing that this would lead to hostilities among students. At one level, this reluctance is understandable, as during the war people fought and laid down their lives in the name of their religious community or subcommunity, failing to distinguish between spiritual and political leaders.

However, Salhab concludes that in a country such as Lebanon, religion cannot be ignored in history and civic education as it is a study of the nation's civilisation. She states that modern education must recognise that religion has its role in defining individual and collective identities. Religion in Lebanon is part of a culture, a history, a tradition and text books in schools need to represent a

pluralistic society which is able to coexist through tolerance and acceptance of differences. Salhab indeed concludes her study by arguing that ignorance about the different religions in Lebanon is dangerous; and that the school can play an important part, mediating between the family and national policy in order to facilitate the development of mutual understanding among young people.

Conclusion

The complexity and intricacy of the Lebanese situation is difficult to deal with in a limited space, and there are many factors concerning religious diversity and the implications for education reform in Lebanon. The country is an intricate fusion of sectarian loyalties rather than a crucible of religious diversity.

Although by 1995 most of the militias had been disarmed, there is still a sense of fear and distrust among citizens, and sectarian divisions in the country are still present. Deep and open dialogue between the religious communities is slowly emerging, but has as yet failed to make any significant difference. What could very well bring about a qualitative shift in the prevailing situation is the development of a unified and accessible national education system which provides a quality service to all citizens, and which strives to remove traditional, sectarian socialisation and intense religious segregation.

In a report by van der Gaag, the author writes about an encounter with a student in a school in a suburb of Beirut. The student states, *'Families who have lost someone in the war – and there are many of us – will take more than one generation to forget. The war has created hatred between people'* (van der Gaag 1994: 7). Clearly, some wounds can only be healed by the passage of time. However, education can facilitate the removal of disparities that mark sectarian affiliations, and can help reduce antagonistic religious differences and the polarisation between Muslims and Christians. But the challenge and the responsibility for unity cannot be laid only at education's door. This fragmented country with a mosaic society must come to terms with its conflicting loyalties and external forces, which are interfering in its internal affairs and undermining its sovereignty.

Helen Tannous *lived in Lebanon for four years between 1971 and 1975, where she also attended school. She obtained a B.A. degree, a Diploma, and a Masters degree in Education from the University of Sydney. She has returned to Lebanon in 1994 and 1995/6 to carry out educational research, and is currently a high school teacher in Sydney. Contact address: 36 Carnation Avenue, Bankstown 2200, NSW Australia.*

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LIVING TOGETHER: THE IMPACT OF THE INTIFADA AND THE PEACE NEGOTIATIONS ON ATTITUDES TOWARD COEXISTENCE OF ARAB AND JEWISH PUPILS IN ETHNICALLY SEGREGATED AND MIXED SCHOOLS IN JAFFA

RUTH ZUZOVSKY

Abstract − *Changes in the willingness of Jews and Arabs to coexist was the subject of two studies conducted in 1989 and again in 1994 among 12-year-olds in schools in Jaffa, an Israeli town where a large population of Arabs coexists with a Jewish population. The Palestinian uprising, the commencement of direct negotiations between Israel and the Palestinians, and the peace treaty with Jordan have marked the attitudes of Jewish and Arab pupils in ethnically mixed and segregated schools. The study also explored the interaction effect between time when attitudes were measured and type of school. An increase was found in separatist tendencies, especially among Arab students studying in Arab schools. There was also a drop in faith in coexistence especially among Jewish pupils. Reality was increasingly perceived to offer equal occupational opportunities on the part of both Jewish and Arab pupils in integrated schools. Finally, we observed a growing faith in coexistence among Arab students studying in integrated schools. Since joint Jewish and Arab schooling decreases isolationist tendencies and increases willingness to coexist, findings seem to justify this type of schooling.*

Introduction

ttitudes to the Arab-Israeli conflict have been characterised over the last ten years, in both the Israeli and the Palestinian populations, by two conflicting trends: the first is a political extremism, supported by religious fundamentalist ideology, and the second is a growing fatigue with the protracted conflict and the repeated attempts to find a political solution to end it. Public opinion in the Arab and Jewish populations in Israel oscillates between despair and the tendency to isolationism, on the one hand, and hope and faith in peaceful coexistence, on the other. These fluctuations are very sensitive to changes in the region's political climate.

The willingness of the Jewish and the Arab populations to live together was the subject of a study conducted in the late eighties among 12-year-old pupils in schools in Jaffa, an Israeli town where a large population of Arabs coexists with

a Jewish population. The assumption was that the views of these pupils reflect those of the adult population and that children's responses are sincere, free of fears and outside interests.

The findings of this early study revealed a low willingness among the Jewish pupils for close relations with the Arab people, and a clear preference for living with and among Jewish rather than Arab people. Arab pupils, in contrast, were more willing to live together in close relations with Jewish people.

The above-mentioned study was conducted during the early stages of the Palestinian uprising in the Palestinian Territories. During the five bloody years that followed, the intifada also spread slowly into the small Arab villages and towns within the boundaries of Israel. The intifada had a tremendous effect, although not necessarily in the same direction, on the willingness of both parties to live together. Other events occurring in the course of this period, e.g., the commencement of direct negotiations between Israel and the Palestinians, the Oslo agreement and the peace treaty with Jordan, also made their impact on both parties' attitude toward coexistence. We hypothesised that all these events would affect the earlier studied two population groups as regards their feelings about coexistence. Repeating the same study in similar population groups was meant to test this hypothesis.

Theoretical framework

Studies of relations between minority and majority groups that live together in a pluralistic society (Ashmore & Del-Boca 1976) distinguish between two types of relationship: a) a 'paternalistic' relationship typical of pluralistic societies where an underdeveloped minority exists under the patronage of a highly developed majority group and b) a 'competitive' relationship characteristic of societies where the two groups have similar socioeconomic status or where the two groups are parties in political conflict.

In the paternalistic type of relationship members of the majority group are highly appreciated by the minority members who show a high degree of willingness for close contact with the majority group. In the competitive type of relationship on the other hand, other processes occur. The more symmetrical the relations between the two groups, the higher are the expectations for mobility on the part of the minority group. When these expectations are not met, frustration and feelings of deprivation arise. The positive image of the members of the majority group is eroded, the nationalistic pride and sense of identity of the minority group grows, ethnocentric tendencies appear (LeVine & Campbell 1972; Sumner 1906), and the groups tend to withdraw from each other and reject social

contacts (Bisman & Amir 1983, 1982; Hofman 1977; Hofman & Najjar 1986; Schwartzwald & Yinon 1977). When the majority and minority groups are in 'real conflict' i.e., they have incompatible goals or compete for scarce resources (LeVine & Campbell 1972), the above processes are accelerated.

This framework provided a basis for interpreting the findings of the present work which aimed to understand changes in attitudes of Israeli-Arab minority members (i.e. the Arab population and its descendants, who lived in Israel before 1948 ad stayed in Israel during the War of Independence), and the Jewish majority in Israel toward close contacts, in the face of present changes in the political context of the conflict.

An historical perspective

The relationship between Arab and Jewish groups in Israel in the last 50 years is marked by a dramatic change in the status of the Arab population in Israel. From constituting a majority group in the region prior to 1948, Arabs came to be a minority in a Jewish State, living largely in segregation, geographically and economically, from the Jewish majority. This state of affairs was accepted by both sides since they perceived the situation as temporary. Arabs believed that sooner or later Israel would cease to exist, and the Jews believed that sooner or later the Arabs would voluntarily emigrate to neighboring Arab countries. As a result a paternalistic type of relationship between the Arab and Jewish people evolved.

With the improved socioeconomic status of the Israeli-Arabs over the following years, the paternalistic relationship shifted in the direction of a competitive type of relationship. Studies carried out during the 70s and 80s demonstrated an increase in a sense of deprivation among the Arab population (Alper 1987; Bareli & Schmida 1981; Smooha 1976, 1988, 1989), as well as increased nationalism and a shift from Arab-Israeli identity toward Arab-Palestinian identity (Alper 1987; Nakhleh 1975). All this led to a decreased desire for close relationships with the Jewish population. Nevertheless the Arab minority remains more favorable to interaction than the Jewish majority.

Israel's official policy has been segregationist and almost all social institutions, including schools, maintain separate frameworks for Jews and Arabs. There have been attempts to integrate Arab and Jewish populations in mixed towns, but with limited success (Benjamin 1975; Deutsch & Kehat 1986) and the relations between the two peoples remain instrumental in their nature (Smooha 1984).

With the passing years, both sides have begun to realise that they must find ways of living together (Peled & Bar Gal 1983). Nonetheless, today, 50 years after

the establishment of Israel, only 10% of Arabs in Israel live in mixed towns, usually in separate neighbourhoods.

As is often the case when political institutions fail to bring about a desired (social) change, the educational system is recruited to perform the task. Since the early 70s, official attempts at intervention have been made through the educational system, with the aim of bringing the two groups together.

Two documents named after the heads of two committees, the 'Yadlin Report' (1972) and the 'Peled Report' (1976) illustrate the shift in educational decision makers' attitude to Jewish-Arab relationships: from a pragmatic approach mainly aimed to guarantee the loyalty of the minority group to Israel, to a more in-depth understanding and legitimisation of the Islamic unique culture. As a result of this change a more balanced approach that seeks a way to bridge the gap between the two cultures was adopted.

Two models were applied by the educational system in order to achieve this goal. One, called the 'contact' model, and the other the 'information' model. The contact model assumes that opportunities for contact between Arab and Jewish pupils either in schools or through out-of-school activities will, by themselves, lead to mutual understanding and acceptance (Ben Ari & Amir 1986, 1988). This model spawned hundreds of organisations that initiated meetings between Arabs and Jewish youngsters, mainly in non-formal frameworks. The other model, the 'information' model, assumes that it is the lack of information about each other that causes negative stereotypes and prejudice. Thus intensive official activity in the realm of curriculum development occurred.

Both models did not reach their expected goals: the level of implementation of the curricular materials remained low, leaving effectiveness of these curricular interventions unclear. Curricular materials and educational programs that deal directly with the Israeli-Arab conflict were found to be used only in 28% of schools (Rasel & Katz 1991). The percentage was found to be much higher in the Arab sector than in the Jewish sector and extremely low in religious Jewish schools.

The only study on the effect of such a curriculum that was carried out as part of its formative evaluation (Puckan & Moshkowitz 1976), showed that 75% of Jewish pupils observe social discrimination against Arabs and the majority of pupils do not believe in peaceful coexistence. As for the 'contact' model, some scholars were sceptical about its benefits and pointed at negative effects – polarisation and intensification of existing negative attitudes (Har-Even 1993). The policy in favour of real contacts between Arab and Jewish pupils learning in the same schools was not adopted.

The present study, along with looking at the changes due to contextual effects in student attitudes over the years from 1989-1994, can be viewed as another

attempt to determine the effect of the contact model. It explores the impact of contact among Jewish and Arab pupils studying in ethnically mixed schools vs. no contact between Jewish and Arab students in ethnically segregated schools, on their willingness to live together with the other people. The research questions were as follows:

1. What is the effect of studying in ethnically segregated schools versus ethnically integrated schools on the attitudes of Jewish and Arab pupils toward coexistence?
2. Has there been a change during the five years of the Palestinian uprising regarding the attitude of Jewish and Arab pupils' willingness to live together?
3. Is there an interaction effect between the time when the attitudes were measured (at the beginning and at the end of the intifada) and the type of school (ethnically segregated or ethnically integrated) on the attitudes of Jewish and Arab pupils toward living together?

Research Methodology

Sample

Pupils from the fifth and sixth grades of five elementary schools in Jaffa – one with Jewish students only, two with only Arabs pupils, and two with mixed populations – made up the sample. These schools were visited in 1989 and again in 1994. Table 1 presents some of the characteristics of the sample.

TABLE 1: Sample Characteristics

School Identity	Type	No. of Students 1989	No. of Students 1994
1	Jewish	56	60
2	Integrated	13	65
3	Arab	35	–
4	Integrated	45	–
5	Arab	–	69
SUM		217	194
Boys		45%	55%
Girls		55%	45%
Born in 1977/78		89%	–
Born in 1982/83		–	92%

In the 1989 study, the majority of sampled pupils (89%) born between 1976-79, were between the ages of 11-12. In 1994, 91.6% were of this age level.

Instruments

Ten items related to pupils' background characteristics – age, sex, family size, parents' occupations, origin of parents and grandparents – were matched with 25 Likert-type items expressing on a 1-4 scale of agreement (1 – do not agree, and 4 – totally agree) preference for close relations only with ones' own people, in the same town, neighborhood, building, flat (6 items) and in the same school (5 items), perception of equal opportunities in society (6 items) and perceptions of equal opportunities in school (8 items). These items constituted the main part of the questionnaire that was used in this study. Additional items dealt with the students' ethnic identity and with both Jewish and Arab perceptions on the identity of Jaffa as an Israeli, Arab-Israeli, or a Palestinian town and with their perception of their school identity. The full text of the items in the questionnaire appears in Appendix A. In building the questionnaire the author consulted an Arab educational sociologist living in Jaffa, thus ensuring the questionnaire's face validity. Several scales were extracted later on from the responses to the questionnaire, and their homogeneity was found to be high. This guaranteed the content validity of the questionnaire.

The same instrument was administered in 1989 and in 1994 to pupils studying in the same or neighbouring schools in Jaffa.

Variables

The independent variables of this study were: the time when the questionnaire was administered: in 1989 (1); in 1994 (2). ethnicity: Jewish (1); Arab (2). *Type of school:* Jewish segregated (1); integrated (2); Arab segregated (3), and *population:* a combined variable describing ethnicity and type of school: i.e., Jewish students in Jewish schools (1), Jewish students in integrated schools (2), Arab students in integrated schools (3), and Arab students in Arab schools (4).

The dependent variables of this study were extracted from the pupils' responses to the questionnaire items. A principal component factor analysis procedure with oblique rotation, carried out on the responses of the entire Arab and Jewish pupil population, n = 411, resulted in four factors that together explained 61% of the total variance in these responses. Table 2 presents the findings of this analysis.

The first factor explains 28% of the total variance in pupils' responses. It expresses the personal preference of students for close relations with other

TABLE 2: Factor Analysis with Oblique Rotation on Resonses to Items on Pupils'
Attitudes Toward Coexistence

No.	Item	Loading			
24	I prefer for my group mates to belong only to my own people	0.89			
23	I prefer to learn in class with pupils belonging only to my people	0.88			
22	I prefer to study in a school only with pupils belonging to my people	0.84			
25	I prefer for the pupils sitting next to me to be one of my own people	0.86			
12	I prefer for my next door neighbor to be one of my own people	0.66			
4	Jewish and Arab citizens have equal job opportunities		0.75		
3	Jewish and Arab citizens have equal opportunities to study at university		0.78		
5	Jewish and Arab citizens earn equal salaries for similar jobs		0.59		
15	Jewish and Arab pupils have equal chances of being elected as class representatives		0.61		
20	Jewish students prefer to play with other Jewish pupils during recess			0.76	
19	Arab students prefer to play with other Arab pupils during recess			0.78	
17	Arab teachers favour Arab pupils in their class			0.78	
16	Jewish teachers favour Jewish pupils in their class			0.74	
18	Teachers tend to support the arguments of Jewish pupils more than Arab pupils			0.55	
9	I prefer to live in a mixed Jewish and Arab neighborhood				0.88
11	I prefer to live in a mixed Jewish and Arab building				0.86
10	I prefer to live in a mixed Jewish and Arab street				0.84
8	I prefer to live in a mixed Jewish and Arab town				0.83
6	Jewish and Arab citizens have an equal chance of being elected mayor of the town				0.71
2	Jewish and Arab citizens have an equal opportunity of being elected prime minister				0.71
13	Jewish and Arab citizens have the same opportunity to become school principal in my school				0.73
1	The Israeli government treats Jewish and Arab citizens equally				0.58
14	Jewish and Arab citizens have equal opportunies of teaching in my school				0.52
	No. of items	5	4	5	9
	Eigen value	6.7	3.7	3.0	1.4
	Percent of explained variance	28%	15%	12%	6%

students of their own ethnic group. This factor is termed 'Close relationship with your own people' *(Close).*

The second factor explained 15% of the total variance. It expresses perception of equality in the occupational opportunities of Arab and Jewish citizens in the Israeli social reality. This factor is termed 'Equality in occupation opportunities' *(Equality).*

The third factor (explaining 12% of the variance) describes perceptions of separation and discrimination in the school reality. This factor is termed 'Separation in school' *(Separation).*

The last factor, explaining only 6% of the variance, consists of two elements: items describing preference for living together in a mixed Jewish and Arab residential setting and other items describing beliefs in the general equality norms prevalent in the Israeli society. This factor describes a whole belief system rather than a narrow preference and was termed 'Faith in living together' *(Faith).*

These four factors describe, on the one hand, personal preferences for and beliefs in living together, and on the other hand, the perception of equality in the near environment, i.e., the classroom and the school, and in the wider environment, i.e., the entire Israeli society.

It should be noted here that separate factor analyses of pupils' responses in 1989 and again in 1994 yielded almost identical factors. The factors were used for the construction of four indices that were named after the factors. Table 3 presents Cronbach's coefficients of these indices.

TABLE 3: Cronbach's α Coefficients of Indices Describing Attitudes Toward Coexistence and Beliefs in Equality

Index	No. of Items	a
CLOSE	5	.89
EQUALITY	4	.71
SEPARATION	5	.77
FAITH	9	.90

The relationship between the four indices are presented in Table 4.

As expected there is a positive relationship between personal preferences or beliefs and the way reality is perceived: Preferences for close relationships with one's own people – *Close* – were found to be positively and significantly correlated with perception of school reality as ethnically separate and unequal – *Separate* – ($r = .28$ $p \leq 0.0001$). Similarly, faith in living together and in the

TABLE 4: Pearson Correlation Coefficients Between the Four Indices Describing Attitudes Toward Coexistence and Beliefs in Equality

	1	2	3	4
1. CLOSE (with your own people)	—			
2. EQUALITY (reality)	—	—		
3. SEPARATION (reality)	0.28***	-0.36***	—	
4. FAITH	-0.11*	0.48***	-0.32***	—

prevalence of equality norms in the Israeli society – *Faith* – is highly and positively correlated with the perception of reality as offering equal occupational opportunities *(Equality)* $\underline{r}$ = .48 $\underline{p} \leq$ .0001.

Significant but negative correlations exist between perceptions of equality in occupational opportunities – *Equality* and perception of *inequality* and discrimination in school – *Separation* ($\underline{r}$ = -.36 $\underline{p} \leq$ .0001). Significant and negative correlations also exist between perceptions of inequality in school – *Separation* and the subjects' general faith – *Faith* in the possibility of living together and in the equality norms that prevail in the Israeli society ($\underline{r}$ = -.32 $\underline{p} \leq$ 0.0001).

The relationship between the indices of attitudes toward coexistence and those of perceptions of equality or inequality is as expected: e.g., the index of *Close* relations with own people correlates negatively with *Faith* in coexistence, and perceived *Equality* in society correlates positively with *Faith*. These relationships support the assumption that attitudes are related to the way reality is perceived, that experience gained in school reality might shape children's perception of this reality and can thus be associated with their attitudes toward coexistence with other ethnic groups.

Results

Changes in the attitudes of Jewish and Arab pupils toward living together during the years 1989 - 1994.

Students' scores on the four indices in 1989 and in 1994 reveal substantial differences. Table 5 presents these differences.

TABLE 5: Change in Attitude Toward Coexistence (Means and t-values)

Index	1989 n=217	1994 n=194	t-value
CLOSE	2.03	2.93	-7.1**
OCCUPATIONAL EQUALITY	2.48	2.83	-3.7**
SEPARATION	2.42	2.41	0.09
FAITH	2.98	2.48	5.7**

The following trends could be observed:

- Increase in the preference for close relations with one's own people
- Increase in the perception of occupational equality in Israeli society
- No change in the perceptions of segregation and inequality in school reality
- Decrease in the general faith of pupils of both ethnic groups in the possibility of living together in peaceful harmony.

The effect of school type (ethnically segregated or ethnically integrated) on the attitudes of Jewish and Arab pupils

A multivariate analysis of covariance (Manova) on pupils' responses to items 1-25 in the questionnaire was carried out. The effect of two independent variables and that of their interaction on the four indices describing beliefs in the prevalence of equality norms, and faith in the possibility of coexistence was estimated. The two independent variables and the interaction variables are: *Time* (events that occurred during the five years between 1989-1994) and *Population* (groups of Jewish and Arab pupils studying in ethnically segregated or integrated schools) and their interaction variable *Time* x *Population*. Table 6 presents the summary of this analysis.

The multivariate model is very powerful. The *Time* variable explains 32% of the total variability of the dependent variables, the type of population (Jewish or Arab pupils in ethnically segregated schools and Jewish and Arab pupils in ethnically mixed schools) explains 16% of that variance, but the most powerful of all independent variables is the interaction variable of *Time* x *Population* which explains 47% of the variability in the dependent variables.

TABLE 6: *Summary of Multivariate Analysis of Covariance*

Independent Variables	Wilks's Lambda	F	DF	P
TIME	0.68	43.5	4	0.0001
POPULATION	0.84	5.52	12	0.0001
TIME x POPULATION	0.53	22.55	12	0.0001

All univariate models for each dependent variable were found to be statistically significant. In two of these variables (*Close* and occupational *Equality*), all three independent variables play a significant role in explaining the variability in the index scores. In *Separation* it is the *Time* effect which is not statistically significant. While in *Faith* it is the *Population* effect which is not significant. In occupational *Equality* and in *Separation* it is the interaction variable *Population.Time* that explains most of their variability. However, in *Close* (relations with one's own people), it is *Time* alone that has the dominant effect. Table 7 presents these findings.

TABLE 7: *Summary of Univariate Analysis of Covariance*

Dependent Variable	Close	Occupational equality	Separation	Faith
Independent Variable	F & Sig.	F & Sig.	F & Sig.	F & Sig.
TIME	51.28***	13.7***	0.01	33.11****
POPULATION	7.52***	4.12***	5.64***	0.71**
TIME x POPULATION	5.25***	22.9****	30.89***	59.57****
R2	17.6	20.3	22.9	48.0
DF	7	7	7	7
F for the univariate model	11.64***	13.94***	16.21***	50.37

p=≤0.05* — p=≤0.01** — p=≤0.001*** — p=≤0.0001****

The amount of variance explained in each of the univariate models varies. The most powerful model is the one that explains the variability in respondents' *Faith* in the coexistence of both people. The model explains 48% of the variance in the index score. Here *Time* plays the greatest role amongst the independent variables. *Faith* decreased over *Time*. It seems that the Arab pupils, both in segregated and integrated schools, were most affected by this factor. Similarly, *Time* is the most important variable in explaining the increased preferences for CLOSE relations with one's own people (ethnocentricity). Here the model explains only 17.6% of the variance in the index scores.

In the two remaining models – the one that explains the variability in the perceptions of occupational *Equality* in the society and the one that explains the variability in the perceptions of *Separation*, i.e., the inequalities and discrimination in school reality – it is the interaction effect of *Time* x *Population* that accounts for the largest portion of the explained variance (20.3% and 22.9% respectively).

Changes over time in the means of the indices in the four populations

Table 8 presents the mean values of all the indices and *t*-statistics of the differences found in their measurement at the two points in time.

TABLE 8: *Differences in the Indices Means Over Time and their t-Values and Significance*

Population	Close (relationship ones own people)			Occupational Equality (in society)			Separation (Inequalities in class)			Faith (in coexistence)		
	1989	1994	t	1989	1994	t	1989	1994	t	1989	1994	t
1. Jewish pupils in Jewish schools	2.54	2.91	-2.0*	3.17	2.50	4.7**	1.72	2.85	-7.3	3.71	1.58	16.6**
2. Jewish pupils in mixed shcool	2.09	2.85	-.45**	2.26	2.9	-.49**	2.81	2.12	4.8**	3.10	2.34	6.5**
3. Arab pupils in mixed schools	2.32	3.12	-2.3*	1.74	3.1	-5.1**	3.31	2.30	3.5**	2.27	3.37	-4.6*
4. Arab pupils in Arab schools	1.19	2.82	-6.2**	2.74	2.82	NS	1.86	2.39	-2.4*	2.85	2.61	NS

An overall increase over time in the preferences of youngsters to stick to their own people is found in all population groups. This tendency is greatest among Arab students studying in mixed schools but it also appears amongst the Jewish students in these schools. In 1989 it was the Arab students in Arab schools that scored the lowest on this index (preference for close relationship with their own people exclusively), while in 1994, a preference for segregation is common among all populations.

Faith in coexistence and in the prevalence of equality norms in Israeli society has declined, especially among the Jewish students. The greatest drop occurred among the Jewish students in Jewish schools, followed by a lesser decline among Jewish students in integrated schools. Almost no change occurred amongst Arab students in Arab schools. Their *Faith* was not very high to start with and did not change significantly.

A promising trend of change can be detected concerning *Faith* among Arab students studying in integrated schools. Their *Faith* in coexistence and equality grew over this period of time.

As regards changes in the perception of *Equality* in society, on the one hand, and the perception of inequality and separation at the school level *(Separation)*, on the other, a shift can be distinguished among Arab as well as Jewish students who are studying in integrated schools, toward viewing reality both outside the school and inside the school as much more equal than five years ago. This finding is another sign of the positive effect of integrated educational settings on the development of favourable attitudes toward coexistence between the Arab and Jewish people in Israel.

National identity and its relations with indices describing attitudes toward coexistence

The perception of Jaffa as either an Israeli, Arab, Palestinian or mixed town, and the extent to which Arab pupils identify themselves as Palestinians was checked through two items. The first item (Jaffa's national identity) was administered to both populations and the second (students' national Palestinian identity) only to Arab participants. Table 9 presents the frequency of pupils' responses to these two items.

In 1989 the majority of the pupils regarded Jaffa as a 'mixed' town. his perception decreased during the five year interval in all populations, especially amongst the Arab pupils in Arab schools, who increasingly view Jaffa either as a Palestinian (30%) or as a mixed town (51%). Jewish students in integrated schools who earlier viewed Jaffa either as an Israeli town or as a 'mixed' town, had a greater tendency in 1994 to view it as a 'mixed' town. If we add to this information

TABLE 9: Changes in the Frequency of Students' Responses by Ethnic Origin and Perceptions of Jaffa

	Jewish in Jewish schools		Jewish in Mixed Schools		Arabs in Mixed Schools		Arabs in Arab Schools	
Year	1989	1994	1989	1994	1989	1994	1989	1994
	n=55	n=58	n=104	n=50	n=18	n=14	--	n=67
Jaffa is an:								
Israeli Town	21.8	31.0	50.0	24.0	0	21.4	*	19.4
Mixed	78.2	67.2	50.0	76.0	88.9	78.5	*	50.7
Palestinian	0	0	0	0	11.1	0	*	29.9

				1989	1994	1989	1994
I regard myself as a Palestinian				n=17	n=15	n=34	n=34
Very much				35.3	26.6	0	61.9
Medium				17.6	13.3	0	4.8
Only to a small extent				23.6	26.6	5.9	9.5
Not at all				23.5	33.3	94.1	23.8

* Non-existent data

data on the increase in the percentage of Arab pupils who regarded themselves Palestinians in 1989 vs. 1994 – from 0% to 61% – our findings indicate the strengthening of nationalistic attitudes on behalf of the Arab pupils in Arab schools.

Where responses of Jewish pupils are considered, the perception of the ethnic character of Jaffa is negatively correlated (r = -0.18) with the index of CLOSE relations with one's own people. Jewish pupils who are more ethnocentric tend to perceive Jaffa as Israeli while Arab ethnocentric responses are positively correlated with a Palestinian identity for Jaffa (r = 0.35**). This tendency means that the more Jewish people regard Jaffa as a mixed or Palestinian town, the less they tend to prefer close relations with their own people exclusively (i.e., they are prepared to entertain close relations with Arab people). However, the more Arab pupils perceive Jaffa as 'mixed' or Palestinian, the more they tend to prefer close relationships only with their people and the less is their willingness to live together

with Jewish people. Among the Jewish pupils, it is the other direction – the more Jaffa is perceived as a mixed or Palestinian town, the more they are willing to live together with Arabs. The perception of the Palestinian identity of Jaffa can be regarded thus, as a differential indicator of willingness to live together with the other group.

Discussion

Summing up all the tendencies that were revealed in this study, it has become clear that where the majority of students study in ethnically segregated schools, the preference to stick to one's own people and the perception of inequality and segregation in schools increased among both the Arab and the Jewish students. Positive perception of equality and faith in the possibility of coexistence did not change among Arab students in Arab schools and deteriorated among Jewish pupils in Jewish schools. Over time, *Separation* tendencies increased among Arab pupils in Arab schools and *Faith* in the coexistence of both nations decreased among Jewish pupils in Jewish schools. The strengthening of nationalism among Arab pupils (Palestinian identity and perception of Jaffa as a Palestinian town) is positively correlated with perceived segregation in schools.

However, some comfort may be derived from the changes that have occurred among Jewish and Arab pupils studying in integrated schools. Here we find, for both groups, an increase in the perception of existing Equality in the social reality and a decrease in the perception of inequality in schools. In 1994 more Jewish pupils who study with Arab pupils than in 1989 tend to view Jaffa as a 'mixed' town and these views are negatively correlated with ethnocentric tendencies. These findings highlight the effect of integrated schooling on bringing the two peoples closer together.

The results of this study are in line with the above discussed theories of inter-group relations between minority and majority groups in a context of increased symmetry in relations and real conflict.

The events that have occurred since 1989 have left their imprint on the attitudes, perceptions, and beliefs of young Jewish and Arab pupils in a town with mixed Jewish and Arab populations.

Several trends could be distinguished over time:

1. An increase in separatism (isolationist tendencies). This tendency occurs especially among Arab students studying in Arab schools.
2. Decreased faith in coexistence is especially characteristic of Jewish pupils.

3. Increased perception of reality as offering equal occupational oppor-tunities, especially on the part of both Jewish and Arab pupils in integrated schools.

It is important to note that the coexistence of Jewish and Arab people in Jaffa is a forced situation, a consequence of the war in 1948, and does not reflect the preferences of either of the parties. Attendance of mixed schools reflects, to a large extent, Arab parents' wish to have their children study in a Hebrew-speaking school. This preference, although by no means always reflecting a political choice, might have an impact on the political reality.

Since Jewish and Arab pupils' studying together decreases isolationist tendencies and increases willingness to live together, our findings would seem to justify an extension of this type of schooling.

Ruth Zuzovsky *is Head of Pedagogical Studies, Science Department, State Teachers College, Israel. She graduated in 1987 from the Hebrew University, Jerusalem. Since 1962 she has worked at the State Teachers College, Seminar Hakibbutzim, Tel Aviv, and concurrently, from 1970, at the Israel Science Teaching Centre, School of Education, Tel Aviv University. Her professional areas of interest in regard to teacher education are: Professional development of teachers and student teachers, pre- and in-service training programmes, supervision and mentoring and values education. Contact address: State Teachers College, Seminar Hakibbutzim, School of Education, Tel Aviv University, 149 Namir Road, Ramat Aviv 69978, Israel. Fax: 972-3-640 7752; Tel.: 972-3-640 7790; E-mail: ruthz@ccsg.tau.ac.il*

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Appendix A — Questionnaire Items

1. The Israeli government treats Jewish and Arab citizens equally.
2. Jewish and Arab citizens have an equal opportunity of being elected as Prime Minister.
3. Jewish and Arab citizens have equal opportunities to study at university.
4. Jewish and Arab citizens have equal job opportunities.
5. Jewish and Arab citizens earn equal salaries for similar jobs.
6. Jewish and Arab citizens have an equal chance of being elected mayor of the town.
7. In a neighborhood where both Jews and Arabs are living together there are plenty of problems.
8. I prefer to live in a mixed Jewish and Arab town.
9. I prefer to live in a mixed Jewish and Arab neighborhood.
10. I prefer to live in a mixed Jewish and Arab street.
11. I prefer to live in a mixed Jewish and Arab building.
12. I prefer my next door neighbor to be one of my own people.
13. Jewish and Arab citizens have equal opportunities to become school principal in my school.
14. Jewish and Arab citizens have equal opportunities to teach in my school.
15. Jewish and Arab pupils have equal chances of being elected as class representatives.
16. Jewish teachers favour the Jewish pupils in their class.
17. Arab teachers favour Arab pupils in their class.
18. Teachers tend to support the arguments of Jewish pupils more than Arab pupils.
19. Arab pupils prefer to play with other Arab pupils during recess.
20. Jewish pupils prefer to play with other Jewish pupils during recess.
21. The school I attend is mainly an Arab school.
22. I prefer to study in a school only with pupils belonging to my people.
23. I prefer to learn in class with pupils belonging only to my people.
24. I prefer my group mates to belong only to my own people.
25. I prefer the pupil sitting next to me to be one of my own people.

		for Arabs	for Jews
26	I regard myself as	Israeli	Israeli
27	I regard myself as	Arab	Jew
28	I regard myself as	Palestinian	—
29	Jaffa is an: Israeli town		
	Arab town in Israel		
	Arab - Jewish town		
	Palestinian town		

INTRODUCTION OF SYSTEMIC QUALITY ASSURANCE IN SLOVENIAN HIGHER EDUCATION

SONJA KUMP

Abstract – *The paper aims to describe some characteristics of Slovenian higher education and the new endeavour to establish a quality higher education system. A draft plan for gradually introducing a system of quality assurance has been developed on the basis of foreign experiences, with due attention being given to national circumstances and particularities. Higher education in Slovenia comprises two universities, the University of Ljubljana and the University of Maribor, together with some free-standing higher education institutions. In such a small higher education system, a key challenge is the introduction of flexible quality assurance mechanisms which can be implemented without too great a difficulty. The evaluation process is to be supported by research and development work from the very start. It will include continual development of evaluation methodology and procedures, as well as an analysis of the institutional effects of quality assurance.*

Introduction

$\mathcal{P}$ublic interest in higher education quality is rising throughout the world. The main reasons for the increased attention paid to the problem of quality in higher education are the expansion and diversification of higher education systems, competitiveness among national economies, and a general trend towards decentralisation of higher education. Added to these are movements towards institutional autonomy and the internationalisation of higher education.

For Slovene higher education to be well prepared to compete and co-operate with higher education all over Europe and other parts of the world, it must prove its quality at the international level. Due to the present trends of internationalisation, it is necessary to establish a higher education system that will be comparable with other systems. In Slovenia, the heritage of the University's past will have to be considered in great detail during the establishment of such a system. This heritage has, at least over the past fifty years, many characteristics in common with the conditions in the countries of Central and Eastern Europe (Cerych 1990). However, this history also displays certain specific national traits.

Heritage

The small higher education system in Slovenia has recently developed in a very new country and is still undergoing change. Currently it has two universities and seven free-standing higher education institutions. The University of Ljubljana has a longer tradition and consists of twenty-five highly diversified faculties, art academies and professional higher education schools. It was established in 1919 following the pattern of central European universities from the end of the 19th century. The University of Maribor had been developing from individual higher education institutions for twenty years before it was founded in 1975. It consists of eleven member institutions.

After World War II Slovenian higher education was part of the former, very decentralised Yugoslavian higher education system. It was designed according to the policy of 'real socialism' which included a number of reforms. Since then, there have been ten laws passed regarding universities. The result of all the enforced reforms of the Yugoslavian era was the disintegration of the university into isolated parts with very little co-operation and communication among the schools. The university wielded less power and authority in comparison with individual faculties during those times. Also, the funding was dispersed over the entire educational apparatus. At the university level there were no instruments for supervision or strategic management in place and policy-making with planning was often non-existent. The quality of work and the autonomy of the university were especially badly damaged by the Career-Oriented Education Act, which was passed in 1980. This covered both higher and secondary education. The law reduced higher education to granting a qualification for a vocation in a system of artificial manpower planning. The idea of simultaneous education for work and further education (for profession and scientific work) 'unified' the goals of all the higher education institutions of the university and non-university type.

There are a number of key developments and factors that characterise the post-war period, and which exercised an important influence on the quality of university education in Slovenia. I set these out schematically in the following section, before I consider the present situation.

- After the Second World War, the state founded independent research institutes. As a result, the university function of teaching and learning within numerous disciplines was separated from the basic, theoretical forms of scientific and research work. The university carried out its function of transmitting existing knowledge to new generations, but its creative output continually declined. The principal task of the university became vocational education, while scientific research work stagnated. Consequently, the educational level of the university

was impoverished. At the university, service and teaching orientations predominated. Individuals and smaller groups did scientific work within its framework, nurturing academic excellence and attaining top-level achievements, but because of the prevalence of pragmatic mediocrity, they fell into isolation. This led to professional and social exclusivity disconnected from social events.

- The disintegration of the university into isolated parts led to very low levels of co-operation and communication. Heterogeneity and the further fragmentation of the university enabled the political forces to manipulate the higher education sector. The university, for instance, had uniform state standards enforced upon it, and these did not correspond to the nature of academic work, and failed to consider the extreme heterogeneity of the university, the nature of certain disciplines and the historical creation of individual institutions as well. The state's emphasis was on efficiency, not quality.

- These pressures led to the break-up of academic studies into various levels: less demanding two- or three-year study programmes which are essentially of the non-university type, and the more demanding academic programmes. That legacy still prevails. Presently, for instance, approximately a quarter of the programmes at the University of Ljubljana are of a non-university level.

- As the research findings of a number of university scholars during this period suggest (Marentic Pozarnik 1989; Mihevc, Marentic Pozarnik 1992), the quality of university freshmen fell drastically after the adoption of the Career-Oriented Education Act, which abolished grammar schools.

- What can be referred to as 'negative selection' became a common policy in procedures of academic 'habilitation', where staff were engaged on the basis of political suitability or loyalty, rather than on the basis of academic ability.

- Study programmes were inflexible, crammed and obsolete. Research surveys carried out with students and graduates (Stergar 1988; Ule and Miheljak 1989; Kump 1990, 1994) showed the extent to which universities were failing in a number of key areas associated with quality provision. Students, for instance, declared that they were not being given enough opportunities to work independently, that the relations between teachers and learners left a lot to be desired, that more modern forms of assessing knowledge should be introduced, and that study programmes had to be modernised and the methods of teaching improved.

- The post-war period was also characterised by an absence of internal institutional mechanisms for ensuring the quality of university work. Under the previous law, assessment of the quality of education was mentioned in the article which determined that educational institutions were obliged to report annually on the efficiency of their work and management to the government department of education. The law specified the data such an analysis was to contain, but the university, which was obliged to create a uniform methodology, did not develop uniform indicators. The analysis did not have direct financial consequences. After 1989, when a number of changes and amendments to the law brought about increased freedom to the universitities, many higher education institutions did not send such analyses to the government any more.

Despite expected problems (including a resistance to change, the traditional hallmark of academic institutions) and despite the weight of the heritage of the past, the Slovenian higher education sector will necessarily have to confront and deal with the issue of quality provision. It thus faces the challenge of developing quality assurance and assessment mechanisms that are responsive and sensitive to its particular historical, cultural and political context. Failing that, there is a risk that the former regime of political control of the university will be replaced by another regime: instrumental control.

Recent developments

The higher education system took off in a new direction in 1991, when the Parliament of the Republic of Slovenia adopted the declaration of independence from the Socialist Republic of Yugoslavia, based on a previously held referendum in which more than 93% of the voters declared themselves in favour of Slovenian independence.

In December 1993 the Slovenian parliament passed a new Higher Education Act which introduced far-reaching changes. The most important of these concerns the external diversification of the higher education system (i.e. non-university sector). These changes assured the autonomy of the higher education institutions and encouraged competition by the establishment of private institutions. An important new element is 'matura' as a form of external student assessment after a four year cycle of secondary school education. It is required for admission to undergraduate study programmes leading to a university degree, while a final examination is sufficient for enrollment into professional higher education programmes.

In the new legislation special attention has been paid to systemic development of higher education quality (Zgaga, Jurkovic, 1995). The Council for Higher Education, which is the consultative body of the government, is made up of the representatives of higher education institutions together with other experts, and its task is to define the criteria for the assessment and evaluation of quality and efficiency of teaching, research, artistic and expert work. It is also the state body which accredits new higher education institutions. When higher education institutions adopt new study programmes or award titles to teaching and research staff, they must first get the approval of the Council. The Higher Education Quality Assessment Committee has recently been established and appointed by the higher education institutions themselves. It will be responsible for monitoring and evaluating the quality of higher education at the national level. The criteria for the assessment of quality and efficiency in higher education will be defined by the Council for Higher Education in co-operation with the Higher Education Quality Assessment Committee. The Committee's brief is to act in accordance with the rules determined in co-operation with the senates of institutions of higher education, and in accordance with the criteria determined by the Council for Higher Education and the Council for Science and Technology. A copy of the Committee's annual report, which must be published, must be submitted to the senates of institutions of higher education, to the Council for Higher Education, and to the Council for Science and Technology.

In the framework of the research project *Evaluation of Higher Education*, which is financed by the Ministry of Science and Technology and the Ministry of Education and Sport, a draft plan for introducing a system of quality assurance in Slovenian higher education has been prepared. The draft plan was first discussed by members of a specially appointed working group, and subsequently by members of the Council for Higher Education.

Premises and objectives of quality assurance

The proposed system of national quality assurance has drawn on elements that are common in other national systems such as Britain, Denmark, France, and the Netherlands (Van Vught and Westerheijden 1993; Westerheijden et al. 1994; Neave 1994). Such elements are: the setting up of a meta-level co-ordinating body, self-evaluations undertaken within institutions, external peer review, publication of reports, and an indirect link to funding. These common elements form a basis for setting out a general international model that will in the future provide comparative quality assurance of higher education systems and recognition of academic qualifications gained throughout Europe (EC-C 1993; Brennan and van Vught 1993; Vroeijenstijn 1995).

The reasons for developing the Slovenian national quality assurance system based on these common elements are presumably the wish to learn from the experience of other higher education systems, and the need to promote the international recognition of Slovenian higher education. The premises for establishing a Slovenian system of quality assurance are thus foreign experiences, adapted to national circumstances and the particularities of the local higher education sector. The system, which will be introduced gradually, intends to be flexible, feasible, and general enough to be able to be adapted to different institutional and disciplinary contexts, while at the same time preserving its basic structure.

The main objectives of quality assurance in Slovenian higher education are international comparability, increased responsibility, improvement, and the self-regulation of the higher education sector. As has already been noted above, Slovenian higher education has been under central state control for over half a century. Because an effective quality assurance system implies autonomy (Clark 1983; Becher and Kogan 1991), it is very important to guarantee the independence of higher education institutions, and to replace the tradition of political control with an a new ethos, that of academic control and responsibility.

Due to the internationalisation of higher education, and the increasing levels of mobility of students, teachers, and researchers, a need is growing for an information system on higher education research, and on understanding national and international trends. Consequently, there is a need for outlining the equivalence of qualifications and standards in different higher education systems. For this reason, one of the chief objectives of the quality assurance system is the establishment of international equivalence and comparability of Slovenian higher education.

Institutions of higher education (universities, faculties, academies of art and higher professional schools) are responsible to the wider public (for example, tax-payers, students, employers, professional associations) for the quality of their work (Barnett 1992; Harvey et al. 1992; Vroeijenstijn 1995). Responsibility for quality carries with it the implication that institutions of higher education introduce internal systems for quality assurance through which they are capable of demonstrating to the wider public the methods that have been adopted in the pursuit and achievement of their goals. A question arises of how to design a suitable mechanism that would co-ordinate the higher education system's responsibility to the public whilst retaining institutional autonomy. Historical experiences show that forceful interventions by the state have always had destructive consequences, causing malfunctioning of the university as a social institution (Kump 1994).

The dominance of extrinsic values, such as responsibility and relevance, over intrinsic values, such as searching for truth and the pursuit of knowledge, may lead to excessive intellectual servility, and subsequently to academic servility. The paradoxical consequence of governmental agencies' efforts to promote the evaluation of quality of higher education activities has, in many aspects, led to a fall in this quality, since more and more energy has been put into writing bureaucratic reports, while higher education activities have adapted to trends towards simplified quantification of results (Frazer 1993; Trow, 1994).

Quality can therefore be threatened by state interventions, and a measure of autonomy has historically been associated with the work of universities (Neave and van Vught 1991; Trow, 1994). Autonomy of the higher education system is therefore necessary if the goal is quality provision. Higher education may meet the requirements for responsibility to society only by supervising academic standards in all disciplines and through maintenance and improvement of the quality of work in all institutions of higher learning. In this way, the higher education system will be able to protect its relative and variable autonomy. For this reason, and as international experience in this field has shown, institutions of higher education should develop internal systems of maintenance and improvement of work quality, and, by following international education standards, they should design their own standards and procedures for testing and assuring quality of teaching and research, which would be derived directly from the criteria of intellectual work. For quality control to be efficient, it will be necessary to develop a culture that looks upon the continuous improvement of quality as a way of life. Teachers in higher education and other higher education workers should understand and accept self-evaluation as part of their normal activities, and as an integral part of the reflected academic process. The crucial element in successfully introducing a mechanism for quality assurance is personal motivation, which also plays the most important role in introducing new elements, that is, in updating study programmes.

Since assurance and quality supervision are constituent parts of the reform process and of the development and modernisation of higher education, self-evaluation and collegial supervision should contribute both to more efficient planning, as well as to the renovation of institutions of higher education. There is a preference for systematic, structured and on-going self-regulating strategies rather than for the establishment of external, state-governed supervision control and regulation. Towards this end, it is planned that the key instrument for quality assurance will be triangular quality evaluation carried out by means of self-evaluation, peer review and institutional audits.

The process of evaluation and self-evaluation

The process of evaluation will consist of a combination of organisational and disciplinary approaches. Since the quality of research groups and projects is already undergoing evaluation (MZT 1995), the initial phase of the evaluation will focus on the field of teaching and learning, while the process of evaluating education will observe the link between teaching and research.

A disciplinary approach will initially be carried out on the programme level (within specific disciplines or departments) following the self-evaluation method, which will be supported with data and combined with the method of peer review, or with the opinions of (foreign) experts in individual fields. The organisational approach will be at the level of the institution of higher education, which will introduce the method of visits of external experts in higher education quality, and experts in educational processes and programmes. This evaluation will not be aimed at the contents of the programme, but at the quality of teaching, learning and assessment of students, and the credibility of the self-evaluation procedures. Additionally, the efficiency of the mechanism for quality assurance of higher education activities will be examined occasionally by using the method of institutional audits (that is, visits by external domestic and foreign experts in higher education quality).

Internal quality control will thus be supplemented with external evaluation. The crucial link between the external evaluation and internal quality assurance will be self-evaluation, which will be presented to the external expert committee by the institution of higher education.

The method and course of self-evaluation will be determined by the institutions of higher education themselves. However, in order to facilitate the work of the external expert committee, certain common guidelines will be adopted (the use of a guidebook with instructions), regulating the form and contents of self-evaluation which must be observed by all institutions of higher education. Attention will be drawn to the inputs, contents, context, and to the educational process and outcomes. The self-evaluation will include a description and critical analysis of the following aspects of programmes:

- *Programme objectives*, i.e. compliance of objectives with the institutional mission, achievement of objectives, acquainting higher education teachers and students with purposes and objectives.

- *Programme description*, i.e. the formal and organisational structure of the programme (for example, forms of study, progression and completion, duration of the programme, professional titles, further education of graduates).

- *Conceptual programme structure*, i.e. the relation between the core of the programme and optional subjects, the balance of general and specialised programme contents, the relation between theoretical and practical training.

- *Student issues*, i.e. strategies for passing information to candidates, enrolment policy, selection mechanisms, the monitoring of student progression, the level of study load imposed on students, student fluctuation.

- *Consulting and advising students*, i.e. strategies for consulting and advising, the introduction to studies, mentorship, study guidance, acquainting students with different study techniques and job-searching techniques, supervision of students' learning difficulties.

- *Higher education teachers and other staff*, i.e. recruitment, promotion and mobility of staff, relations between teaching and research, the input of external domestic and foreign lecturers, programmes for specialisation of teachers and other workers, staff development, assisting new lecturers in adapting to the new environment.

- *Facilities, equipment, and study accessories*, i.e. condition and suitability of facilities, access to information technology and other teaching accessories and equipment necessary for the implementation of the programme.

- *Teaching, learning, and student assessment*, i.e. methods and strategies of teaching in relation to the purposes and objectives of the programme, the relation between education and research, methods and forms of assessing and evaluating of student knowledge, care for the intellectual and personal development of students, development of general and transferable skills, assistance in the process of independent learning.

- *Graduates*, i.e. the expected and actual qualifications of graduates, employment capability, contacts with former students, contacts with prospective employers, definition of jobs, modification of professional profiles, type and extent of further education of graduates.

- *Internal quality assurance*, i.e. the continual maintenance and improvement of quality through the regular and systematic monitoring of the implementation and evaluation of the programme, through mechanisms for collecting feedback (from students, graduates, employers, professional associations), and through the ongoing process of updating and improvement of programmes.

- *External relations*, i.e. international co-operation and exchange of students and teachers, links with industry, the business world, the public services; co-operation with non-higher education research institutions and the private sector, co-operation with other research and educational institutions both inside the country and abroad.

One aspect of the quality assurance programme that, given the small size of the Slovenian higher education system, is bound to be problematic, is the constitution of a group of external experts who will monitor the evaluation of institutions. In many cases there is only one centre of higher education in a particular discipline, and it therefore proves difficult to evaluate colleagues objectively in the framework of a specific discipline where everybody knows everybody else. It will therefore be necessary to engage experts from other countries, and to combine these with national experts in order to ensure sufficient understanding of the educational-political premises within which the study programmes function, and to avoid feelings of frustration that are bound to prevail when scholars are monitored by a group made up exclusively of foreign consultants (Thune 1994). The group of experts will have the task of evaluating the extent to which institutions have implemented the purposes and objectives they set out for themselves. Within this procedure, the group of experts will take care to consider the particular nature and specific circumstances relevant to the institution, but ultimately, it is only through such external peer review that an institution's self-evaluation reports can be considered valid and credible.

Institutional quality audit will focus on the evaluation process, that is, on internal systems and procedures that assure quality. Its scope of work will not be aimed at quality itself, but at introducing mechanisms for quality assurance, because quality of education can only be assessed at subject level. Since the purposes, objectives and the nature of institutions of higher education and programmes are very different, absolute criteria of quality would be inappropriate. For this reason, standards will be derived from the institutional mission and from the purposes and objectives of individual programmes. The evaluation of the quality of programmes will be descriptive, since it will provide more approximate information, unlike the evaluation expressed in one word or in numeric signifiers as part of a classification scale.

Process of gradual introduction of self-evaluation

The preparations for gradual introduction of self-evaluation in Slovene higher education was started in autumn 1996 with the experimental phase of

self-evaluation of some study programmes and institutions of higher education which decided to participate on a voluntary basis. Methodological instructions were prepared for this purpose in the frame of the project *Evaluation of Higher Education* (Kump 1995).

After this experimental phase, one should be in a better position to analyse whether the proposed quality assurance system will work according to the expectations and initial goals, and there will be an opportunity to modify the first plan. On this basis, it will be possible to carry out a gradual transition to self-evaluation as a regular element in the functioning of institutions of higher education, to which common rules and procedures will be applied, and which will later on be developed within an integral system. In this connection it will be necessary to determine the frequency with which the entire Slovenian higher education system is evaluated: the practice in a number of foreign university systems is five to six years. The time schedule must be based on realistic expectations and the estimation of the period of time in which it will be possible to carry out quality assessment of all higher education programmes. The self-evaluation process, from the planning phase to the phase of visits by external experts, is estimated to last one year. Approximately two months would be available for self-evaluation report examinations, while visits by external experts would last three to four days, as in similar approaches abroad. Institutional audits would be carried out periodically, for example, every six years. The sequence in individual institutions and of programmes, will have to be determined subsequently. In cases of experimental programmes or acute problems in existing programmes, the possibility of *ad hoc* evaluation will be included.

Bodies involved in the evaluation process

At the system level, the evaluation process will include members of the Committee for Higher Education Quality, experts in the field of the functioning of quality assurance systems, and experts in the field of educational processes and programmes. At the level of institutions of higher education, the management and members appointed to self-evaluation groups will be responsible for the course and success of the evaluation process. At the level of departments, (that is, programmes) the self-evaluation process will include (foreign) experts in individual disciplinary fields and teachers in higher education. It will also be necessary to set out a method of including feedback from users (students, graduates, employers, professional associations) in the evaluation process.

The management and self-evaluation groups in the institutions of higher education will be responsible for drawing up self-evaluation reports, while the Committee for Higher Education Quality will be responsible for the preparation of the final annual report by external experts in higher education quality, as determined by law.

The main result of the evaluation process will be the final report, including evaluation supported with evidence. The final report will be drafted by members of the Committee for Quality and external experts on the basis of the self-evaluation report, as well as on the basis of impressions obtained during the visit to the institution, or observation of an individual programme.

The final report will include an analysis of strengths and weaknesses with proposals and recommendations for quality improvement. The report will not judge or rank institutions or programmes, but will rather encourage institutional changes, thus serving to support the process of quality improvement of the institutions and programmes under observation. The self-evaluation report, which will include an evaluation by experts in different fields, will be confidential, submitted only to the co-ordinator of the evaluation process and the institution of higher education, representing support for its plans for quality improvement. The final report will be published, in order to provide the public (particularly potential students and employers) about the quality of individual programmes and institutions of higher education.

Evaluation and financing

Several experts point out that no direct connection should be allowed between the evaluation results and decision-making on financing of higher education activities (Kells 1992; van Vught and Westerheijden 1993). They argue that a direct link to funding undermines quality improvement purposes. Rigid relations between evaluation reports and financial decisions would lead to additional money for a good mark, while a bad mark would result in lower funding. Such relations would harm the operation of the evaluation system, since it would concentrate merely on satisfying external requirements and seeking weaknesses, which would lead to promotion of negative sanctions instead of improvement of quality.

Therefore, if a link is to be established between quality assurance and higher education financing, it should support the innovations designed to lead to improvement.

Effects of evaluation and the role of research within the evaluation process

The effects and influence of the evaluation process on higher education quality can only be determined over a long time period. It will therefore be necessary to introduce systematic supervision of the methods used, analysis of the effects of evaluation, and continual development of evaluation methodology and procedures. Research work is an important constituent part of the evaluation process from the very beginning: it includes a description of institutional (systemic) characteristics of the environment in which the evaluation is being introduced; research also contributes to the selection and application of the model which is the most suitable for the determined characteristics, defines possible influences and changes, and so on. To be effective, research into the operation and impact of the evaluation process should be included at all the different phases: from the planning phase and information collection, through reflection and consent, to evaluation, reformulation, planning of changes and improvement of evaluation procedures.

Institutional and organisational support

The successful implementation of the quality assurance system also requires the introduction of a national meta-agency, which should be constituted by all institutions of higher education in agreement with the government. The operation of this agency should be included in the national higher education programme as an activity necessary for development, and for the promotion of efficiency within the higher education system. The agency would be given the role of an independent and neutral professional body, while its tasks would chiefly be the following:

- co-ordination of the entire evaluation process;
- administrative and professional support to the Committee for Higher Education Quality and the Council for Higher Education;
- information, instruction, and consultation within self-evaluation processes;
- development of methodological bases for quality development;
- training and qualification of personnel responsible for implementing self-evaluation and of external quality evaluators;
- preparation of evaluation manuals;
- organisation of visits and promotion of the evaluation process;

- publication of reports;
- dissemination of domestic and international experiences;
- promotion of mutual assistance and co-operation among evaluators.

International co-operation

Comparison of international quality findings with the Slovenian higher education situation will be carried out in the framework of international co-operation. The absence of opportunities for internal comparison at subject level in a small country makes an international element essential. It can also help to achieve the aim of ensuring that Slovenian higher education is part of the mainstream of European developments. For this reason it will be necessary to strengthen co-operation with foreign experts in higher education quality, and to join international linking bodies, such as:

- the International Network of Quality Assurance Agencies in Higher Education (INQAAHE);
- the International Consortium for Maintenance of Higher Education Quality;
- the Conference of Rectors of Europe (CRE), that is, its experts, who carry out institutional audits in European universities;
- the UNESCO and the OECD, which are drawing up an international convention on the recognition of academic qualifications, which will be based on already introduced national systems of higher education quality assurance;
- the OECD project: Quality Evaluation, Quality Management, and Decision-Making Processes, which investigates the institutional effects of quality assessment.

Concluding comment

Currently, the main obstacles in the way of successful implementation of the proposed quality assurance system lie in the power relations in Slovenian higher education. In spite of the new Higher Education Act, which assures the autonomy of higher education institutions, the latter are in fact tightly controlled by governmental funding. The fact is that the Ministry of Education and Sport provides funds and controls expenditures for salaries, meets direct costs and part of maintenance costs for buildings and equipment, taking into account the type and scope of higher education programmes and the number of students and graduates. The funds are still allocated to the university members specifically, and

for this reason the locus of authority inside higher education is to a large extent at faculty level. Consequently, authority and power at the university level is still weak. In the future, and according to the new legislation, a lump sum will be awarded to universities directly. For the time being we have to take into account the relatively large discrepancy between the normatively prescribed system of Slovenian higher education and the 'real' one in which we are intending to interfere with quality assurance methods.

In such circumstances the implementation of a proposed quality assurance system could have a lot of unclear effects and unpredictable consequences. Institutions which decided to participate voluntarily in experimental self-evaluations are aware of such unexpected consequences and they still hesitate to start the self-evaluation process. An open question is how to encourage motivation and necessary enthusiasm for self-evaluation, which is a decisive element in the processes of quality assurance and quality improvement. My conclusion would be that in this initial period of scepticism, there is an urgent need to start an open and nation-wide debate about quality issues, a debate where all stake-holders in the higher education system have an equal opportunity to express their views.

Sonja Kump *is a researcher and a leader of the national project* Evaluation of Higher Education *at the Institute for Social Sciences, University Ljubljana, Slovenia. Her research interests include academic and disciplinary cultures, access to higher education, relationship between research, teaching, and learning, quality assurance, and institutional change in higher education. Contact address: Institute for Social Sciences, Kardeljeva ploscad 1, 1109 Ljubljana, Slovenia. Tel. +386.61.168.30.58. Fax. +386.61.168.23.39.*

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THE ROLE OF VARIOUS SOCIAL SUPPORT VARIABLES ON TURKISH CHILDREN'S ANXIETY LEVEL

FÜSUN AKKÖK
OYA GÜNERI
GÜNSELI ORAL
ZEYNEP (HATIPOĞLU) SÜMER

Abstract - *This study investigated the role of various social support variables on the state and trait anxiety levels of elementary school children. The subjects were 196 4th and 5th graders. The data were collected by the Social Support Form, State Anxiety Inventory, and Trait Anxiety Inventory. Results revealed a significant effect of living together with parents on state and trait anxiety levels. Furthermore, a positive correlation between state anxiety and love and affection for the teacher was explored. No significant difference on the state and trait anxiety levels of children was another finding of the study. The effects of the nature and continuity of home and school environments on the anxiety levels of children were discussed in relation to these variables.*

Introduction

*S*tress and anxiety are not only adult phenomena. Children are also exposed to stressful situations that might affect their psychological and social states. Students experience stress in different situations, they may vary in their ability to control their emotions, and they experience more anxiety in problematic academic situations than in social conflict situations (Boekaerts 1993). It is known that, in addition to other factors, a highly competitive academic environment, peer relations, or teacher-student relations, may lead to an increase in children's level of anxiety. Recent discussions of stress have emphasised the role of social support which has frequently been defined as the existence of availability of people with whom one can associate and on whom one can rely, as a potential moderator of the impact of stress. According to Barrera (1986), social support encompasses perceived support, social embeddedness and enacted support. From this perspective, people who believe that they belong to a social network of communication and mutual obligation experience social support. It is possible that social support facilitates coping with stress, anxiety and adaptational change, and its absence or withdrawal may have a negative effect on the individual (Sarason 1981).

Cohen and Wills (1985) described two models that illustrate possible roles

played by social support, as well as the specific aspect of social support, likely to be involved in each model. These models are the main effect model and the buffering model. The main effect model suggests that social support produces a generalised positive effect on the individual, regardless of the level of stress. The second model, the buffering model, suggests that social support interacts with stress such that high levels of social support moderate the negative effects of stress on adjustment.

Several pieces of research show that certain types of social ties (social support) may have a protective, stress buffering effect and that their effect may be more important for some individuals than for others (Sarason 1981). Bowlby (1969, 1973), after an extensive literature review, concluded that human beings of all ages are at their happiest and most effective when they are confident that they have trusted people behind them who will come to their aid when difficulties arise. Such trusted people provide a secure base from which to operate and constitute social support for the individual.

Attachment theories have argued that the nature of children's bonding with their parents has a significant impact on their adjustment throughout adult life, affecting ease of socialisation and susceptibility to anxiety and depression (Bowlby 1969). Specifically, children with secure, caring attachments to their parents are more likely to have secure relationships as adults. Wagner, Cohen, and Brooke (1990) reported that a perceived warm relationship with the mother insulated the adolescent from negative reactions to stress. Furthermore, Shell, Roosa, and Eysenberg (1991) reported that 10 year-olds' perceptions of maternal warmth were related to problem-focused coping and the use of social support. Korkut (1996), in a study conducted with high school students, found that when family relations in Turkey were examined, parent-child relations appeared to be more important determinants in reducing anxiety and developing communication skills than sibling relations.

Sarason (1981) concluded that the problem of anxiety is, to a significant extent, a problem of interfering in cognition and direction of attention. Individuals' self-preoccupying thoughts may interfere with attention to the environment and to the task that must be dealt with. Therefore, social support may be effective because the presence of an interested other shakes the individual's assumption that he or she must face a challenge alone. The belief that others have similar interests and concerns and that help is available may contribute to the extinction of anxiety. Although not especially concerned with performance, Schachter (1959) suggested that social affiliation had anxiety reducing effects.

It is strange that social support has been extensively studied in adult populations, but only scarce data are available on the effect of children's social support, especially when they are faced with anxiety provoking situations such

as a competitive school environment, peer relations, or teacher-student relations. There are gender differences in the use of social support to reduce anxiety in such situations, but the literature is not very consistent on this issue. Studies carried out in some European countries (Rauste-Von Wright 1987; Seiffe-Krenke, 1990) reported that girls in early adolescence more often try to find social support to cope with difficulties than boys, whereas boys are more likely to try to manage by themselves.

The quality and quantity of relationships with other people moderate responses to stress and anxiety, and influence health and adjustment. This has stimulated researchers to investigate the characteristics of social support. In the light of the existing literature, family support, as a form of social support, is perceived as an important variable. However, investigators have found that children distinguish among various sources of support, and because of this, there is a need to examine these sources separately. The purpose of the present study is therefore to investigate the relationship of various social support variables on the state and trait anxiety level of elementary school children.

Method

Subjects

The subjects of the present study were 196 students, aged 10-11 (99 girls, 97 boys). These were 85 4th and 111 5th grade students who were selected from the primary schools located in middle class regions of Ankara, Turkey.

Instruments

a) *Social Support Form (SSF):* The SSF was developed by researchers in order to provide information from social resources related to family and relatives, friends and school. SSF items consisted of questions including number of visits to relatives, number of friends liked and relations to the class teacher.

b) *State Anxiety Inventory (SAI):* The SAI included twenty items about children's feelings at the particular time when the inventory was delivered. The SAI was composed of a three point-Likert type scale (never, sometimes, frequently) developed by Spielberger (1973) and adapted to Turkish culture by Özusta (1993). Test- retest reliability for males was .65, $p < .001$, for females .53, $p < .001$, and .60, $p < .001$ for the whole group. The internal consistency of the inventory was assessed by Cronbach alpha, and the alpha coefficient for the total scale was .82.

c) *Trait Anxiety Inventory (TAI):* The TAI included twenty items about how children feel generally. Similar to the SAI, the TAI also included a 3 point Likert type (never, sometimes, frequently) scale developed by Spielberger (1973), and adapted to Turkish culture by Özusta (1993). Test-retest reliability for males was .74, p< .001, for females .48, p< .001, and .65, p <.001 for the whole group. The internal consistency of the inventory was assessed by Cronbach alpha, and the alpha coefficient for the total scale was .81.

Procedure

Subjects were presented with three scales: The Social Support Form, the State Anxiety Inventory and the Trait Anxiety Inventory. The subjects were asked to fill out the inventories which were given simultaneously.

Results and discussion

In this study, social support is assessed in a variety of social spheres. The three inventories were given to the 4th and 5th graders on scheduled days, specified by the school principals. MANOVA and Pearson's Product Moment Correlation Coefficient were conducted as statistical analyses. Findings revealed that living with both parents had a significant effect on both state and trait anxiety (F= 4.98, p< .05; p= 5.92, p< .05, respectively). The Pearson Product Moment Correlation Coefficient indicated a negative significant correlation between living with both mother and father, and state-trait anxiety (r= -.16, , p <.05; r= -.17, p <.05, respectively). This reveals that children who live with both parents have lower levels of state and trait anxiety.

However, the results of MANOVA did not indicate a significant effect of living together with grandparents on state-trait anxiety of children (F=.027, p>.05; F=.016, p>.05, respectively). Furthermore, frequency of visits to grandparents and close relatives had no significant effect on both types of anxiety. In addition to these findings, there exists a positive correlation between state anxiety and love and affection for the teacher (r=.22, p<.05), indicating that the more children love their teacher, the higher the state anxiety scores they have. This is an interesting finding that reflects teacher-student interaction in the Turkish educational system, which is based on conditional love on the side of the teacher. The system, which is achievement-oriented, encourages competition in the classroom, rather than cooperation and affection. Hence, children are oriented to be competitive and socially accepted and approved by their teachers by keeping their success at optimum level, and demonstrating good manners at school. Thus,

the love and affection that children have for their teacher can be thought of as the feeling of responsibility that the child feels for the teacher's good opinion of him or her. Aydyn (1992) claimed that 60.41% of girls and boys have high levels of test anxiety or performance anxiety depending on the factors above.

Another interesting finding of the present study was that gender had no significant effect on either the state or the trait anxiety scores. This finding seems to be inconsistent with the literature (Özusta 1993; Anderson, Williams, McGee & Silva 1987; Bell-Dolan, Last & Strauss 1990) which states that girls have higher levels of state and trait anxiety.

The results also indicated a significant correlation between state and trait anxiety of children. Consistent with the findings of Spielberger (1966), individuals with higher levels of trait anxiety tend to generalise this to other situations, and experience state anxiety at a more frequent level.

In conclusion, the findings of the present study reveal that mothers and fathers who live together are the primary sources of social support system for 4th and 5th grade children in Turkey. This may originate from the family structure in which the parents are the main source from whom children can receive help when solving problems. In other words, the family, and especially the mother, creates a shield which filters out external problems encountered by the child, and creates a safe and secure environment in the family. Perceiving the parents as warm, accepting and nurturing care givers promotes various aspects of mental health and psycho-social development. On the other hand, the positive correlation between love and affection for the teacher and state anxiety seems like a cultural variable, since the teachers' attitudes toward children are mostly authoritarian. The development of communication, speaking and listening skills among the teachers, students, and parents may also function as an important social support mechanism. It is possible that high levels of social support resources may be useful to children regardless of anxiety level by providing opportunities for stable positive experiences and the development of social skills.

Being aware of the fact that social support can reduce the children's state and trait anxiety levels is not enough for developing tactics to minimise stress at school. It is also considered that home experiences such as the time that parents spend at home, the quality of activities performed together with the parents, and the way that parents respond to their children, are important contributors to the nature of social support (Akkök, Askar & Sucuoglu 1995). When school and family relations are considered, it seems that family and social influences are usually interrelated (Edwards 1993). At school, the teacher's role in providing positive discipline and effective schooling is critical. In Turkey, discipline is mostly perceived as 'conformity to school rules and norms' (Günçer & Oral, 1993). This, in a way, demonstrates that there is a need for a well-planned,

individual approach to discipline on the side of the teachers, rather than giving priority to obedience and conformity as criteria of achievement, order and good manners which inhibit the development of self-esteem, creativity, and self- confidence.

Consistent with the findings about teacher-student interaction which is based on conditional love, it appears that not only the social support given at home, but also home and school interaction which are continuous, consistent and complementary in terms of unconditional positive regard are necessary; especially when one considers that Turkish elementary school children spend more time at school than at home, this necessity for building up a more intimate and loving environment through the interaction of home and school becomes vital.

Future research in this area might be strengthened by identifying those variables that might protect children from the impact of stressors and moderate the negative effects of stressful events. Furthermore, future research into children's social support might examine the specific functions performed by different support systems.

Füsun Akkök, Oya Güneri, Günseli Oral, and **Zeynep (Hatipoğlu) Sümer** *are all scholars working at the Middle East Technical University of Ankara, Turkey. The names of the authors are in alphabetical order. Requests for offprints should be sent to Professor Füsun Akkök, Middle East Technical University, Department of Educational Sciences, Ankara 06531- TURKEY. Fax: 0090.312.210.12.54. Email address: Fusun@rorqual.cc.metu.edu.tr*

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MOTIVATION AND LEARNING PREFERENCES OF HIGH SCHOOL STUDENTS LEARNING ENGLISH AS A FOREIGN LANGUAGE IN MOROCCO

CHRIS KYRIACOU
NAIMA BENMANSOUR

Abstract – *This study explores the motivation and learning preferences of high school students in Morocco regarding their learning of English as a foreign language. The study sought to identify the students' preferences in relation to a number of instructional practices, and to identify the nature and strength of their motivation towards learning English. Teachers' views concerning the usefulness of different instructional practices were also investigated. A factor analysis of students' sources of motivation produced five factors, which were labelled intrinsic motivation, short-term instrumental motivation, long-term instrumental motivation, social integrative motivation, and cultural integrative motivation. The students had well defined and coherent learning preferences. They were highly visual and kinaesthetic, but weakly auditory. They highly valued cognitively oriented activities which involved grammatical awareness. The students' preferences seemed to be at odds with their teachers' views, who saw communicative activities as the most useful for learning. Such findings suggest that there is a need to bring teachers and students closer together, in a learner-centred approach to teaching.*

Introduction

*T*his study explores the motivation and learning preferences of high school students in Morocco regarding their learning of English as a foreign language. The study sought to identify the students' preferences in relation to a number of instructional practices, and to identify the nature and strength of their motivation towards learning English. Teachers' views concerning the usefulness of different instructional practices were also investigated.

Morocco's history and geographical position have always facilitated contacts and relations with both the USA and Great Britain, and have as a result contributed to the introduction of English and its culture in Morocco. English Language teaching (ELT) was first introduced into Moroccan secondary schools during the era of the French protectorate, in the 1930s, with French as the first language of instruction. Since independence in 1956, a strong trend for learning English has

dominated Morocco amongst both pupils and adults (see Abu-Talib 1985). This growing interest in English has been accompanied by an explosion of private courses. At university level, a degree in English studies is widely seen to secure more job opportunities than a degree in French studies (Sadiqi 1988).

English is taught to secondary school students from the age of 15 to 18, as part of their Baccalaureate studies. The aims of ELT at the secondary level are set out in official Ministry texts (Ministère de l'Education Nationale 1994). These outline the main aims as follows:

1. To help learners meet the requirements of the English Baccalaureate paper.
2. To enable learners to communicate with other users of English, either in speech or writing.
3. To develop students' awareness of the language system of English, and to enhance their awareness of the specificity of their own language.
4. To promote students' understanding of other cultures as well as awareness of their own cultural identity.
5. To enable the learners, in the course of post-secondary education to use reference material in English.
6. To meet the needs of the job market.

As a result of such developments, increasing interest is now being paid in Morocco to key issues concerning ELT, particularly regarding student motivation, and the teaching and learning activities used to foster progress.

Much research has been conducted in other countries over the years, exploring the main sources of motivation amongst students for learning a foreign language (see Ellis 1994; Cook 1996). The study reported here draws upon earlier work by Gardner (1985) in Canada, who developed a socio-educational model of foreign language learning. In this model he identified two important sources of motivation: integrative motivation (learning a language in order to take part in the culture of its people) and instrumental motivation (learning a language for practical reasons or rewards, such as enhancing educational and career opportunities). In addition to these two sources of motivation, it was felt that a third source of motivation was also important: intrinsic motivation (learning a language because one finds it an interesting and enjoyable experience). The importance of intrinsic motivation has been identified in a number of models of foreign language learning (see Crookes and Schmidt 1989).

Research on students' learning preferences has received increasing attention in recent years in the wake of research exploring students' learning styles. The point has been made by a number of writers (e.g. Ellis 1994) that if students have preferred styles of learning, then the effective teaching of a foreign language needs

to take account of such preferences in order to maximise pupil progress. This study drew upon a number of studies which have explored students' learning preferences (e.g. Duda and Riley 1990; Nunan 1988).

Research design

The data for this study were collected in a number of high schools in Rabat, the capital city of Morocco. The study was divided into two phases. In the first phase, two preliminary studies were conducted based on questionnaires which explored students' motivation and learning preferences, and also obtained teachers views of their students' motivation and behaviour in classes. The first preliminary study involved 54 students (aged 16-18) from two schools, and the second preliminary study involved a further 65 students (aged 16-18) from two schools.

In the main study, conducted in phase two, 336 high school students (aged 17-18) from seven schools completed a 59-item questionnaire regarding their motivation and learning preferences, and 25 teachers completed a 32-item questionnaire regarding the usefulness of different learning activities. The questionnaires used Likert-type rating scales. Follow-up semi-structured interviews were then conducted with 26 of the students and 11 of the teachers. In total, 455 students and 26 teachers completed questionnaires, and 26 students and 11 teachers were interviewed.

It is important to note here that French is an important language of teaching and discourse in these schools (Sefrioui 1996). As such, all the questionnaires were written in French. The interviews were conducted in French and Arabic.

Findings and Discussion

The percentage of students in the main study ($N = 336$) who 'strongly agreed' with each of the 19 items concerning the sources of motivation learning English ('*pour quelles raisons apprenez-vous l'anglais?*') is shown in Table 1.

It was expected that the students' motivation would be accounted for in terms of three main sources of motivation: intrinsic, instrumental and integrative. However a factor analysis of the motivation items revealed five factors. The factor loadings are also shown in Table 1. The first factor (Factor I) was labelled intrinsic motivation. Instrumental motivation was split into two factors, one focusing on short-term goals for learning English (Factor V) and the other on long-term goals (Factor II). Integrative motivation was also split into two factors, one dealing with

TABLE 1. Percentage of respondents (N = 336) who 'strongly agreed' with these state-ments as reasons for them learning English ('pour quelles raisons apprenez-vous l'anglais?') grouped together in terms of their loading on each of the factors extracted. The original statements were written in French.

Factor loading for each statements (with percentage who 'strongly agreed')

FACTOR I: INTRINSIC MOTIVATION
(Eigen Value 4.68)

0.78   Because I like English (48%)
0.77   Because I find English very interesting (40%)
0.65   To speak English with a good accent (60%)
0.60   To speak English as fluently as the English or Americans (49%)
0.57   Because English sounds pleasant to hear (44%)

FACTOR II: LONG-TERM INSTRUMENTAL MOTIVATION
(Eigen Value 1.78)

0.75   Because I may need English at university (46%)
0.74   To inform myself about scientific and technological developments (24%)
0.72   Because English may help with my job later (54%)

FACTOR III: SOCIAL INTEGRATIVE MOTIVATION
(Eigen Value (1.52)

0.69   To get to know English or American people (28%)
0.63   Because my favourite singers/writers are English or American (31%)
0.63   To visit anglophone countries (36%)
0.61   Because I like the culture and manner of anglophones (9%)

FACTOR IV: CULTURAL INTEGRATIVE MOTION
(Eigen Value 1.38)

0.70   To get to know about anglophone culture (23%)
0.69   To understand the way of life of anglophones (10%)
0.60   To copy the good aspects of anglophone culture (13%)

FACTOR V: SHORT-TERM INSTRUMENTAL MOTIVATION
(Eigen Value 1.23)

0.67   To get good baccalaureate grades (53%)
0.55   To learn and use beautiful English expressions (45%)
0.49   To understand documents or references written in English (52%)
0.47   To inform myself about what is going on in the world (39%)

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social integration (Factor III) and the other with cultural integration (Factor IV). These results suggest that Gardner's model of motivation towards foreign language learning (developed in Canada) may not readily apply to other cultural and educational settings. This point has now been made by a number of authors (e.g. Dörnyei 1990; Lennon 1993; Oxford and Shearin 1994). It is also interesting to note that intrinsic motivation, which was somewhat played down in the Canadian context, was particularly prominent in the Moroccan context.

Intrinsic motivation items were highly endorsed by the students (i.e received a relatively high percentage of 'strongly agree'), and this dimension was significantly correlated with students' (self-reported) strength of motivation and classroom level of (teacher-reported) motivation. This would suggest that intrinsically motivated students tended to display a stronger desire to learn English, seemed to deploy more effort to do so, and manifested a higher level of interest in the class.

In terms of strength of item endorsement by the students, the two instrumental motivation dimensions (short term and long-term) received a relatively moderate level of endorsement, and the two integrative motivation dimensions (social and cultural) received the lowest levels of endorsements. This suggests that the language itself seemed to be a more powerful source of motivation than a desire for social and cultural integration.

The strength of students' agreement, in the main study ($N = 336$), with each of the 32 items concerning their learning preferences ('Comment *préférez-vous apprendre l'anglais?*') was recorded, and placed in rank order. The ten activities with the highest preference ratings were as follows:

1. Listening to and understanding the teacher's explanation of grammar.
2. Practising English pronunciation.
3. Listening to English songs and the teacher explaining the words.
4. Reading in English, and guessing the meaning of words.
5. Noting the rules of grammar with examples in my exercise book.
6. Reflecting on and finding solutions to problems discussed in class.
7. Speaking and participating in class discussion.
8. Looking for words in a dictionary.
9. Reading aloud in English.
10. Doing grammar exercises.

A factor analysis of these data revealed seven factors. These seven preferred learning styles were labelled as follows: studial learning, naturalistic learning, reflective learning, concrete learning, communicative learning, active learning, and learning through songs.

Overall, it appeared that the students' learning preferences were well defined and coherent. They were highly visual and kinaesthetic, but weakly auditory. They highly valued cognitively oriented activities which involved grammatical awareness.

Students' self-reported strength of motivation was measured using eight items. A factor analysis of these items revealed two factors. The first factor (comprising five items) was concerned with the effort made to learn English (an example item was 'I always work hard at English'), and the second factor (comprising three items) was concerned with the desire to learn English (an example item was 'I really want to learn English'). This suggests that students' strength of motivation may be made up of two components, one concerned with an awareness of their 'internal' wish to learn (desire), and the second concerned with a recognition of their 'external' behavioural manifestation (effort). It was thus decided to compute a separate score for 'desire' and 'effort' rather than to use the eight items to compute a single score for strength of motivation.

A number of significant correlations between the key variables used in the study were obtained. Of particular interest was the fact that intrinsic motivation correlated more strongly with effort ($r = .48$, $p < 0.05$) and desire ($r = .47$, $p < 0.05$) and with a wider range of learning preferences than did the other four sources of motivation. This suggests that intrinsically motivated students were more likely to have a wider repertoire of preferences. This finding was supported by the interview data from both teachers and students, who frequently maintained that 'a motivated student likes everything'!

The interviews with students and teachers enabled their views to be probed further. Of particular note was that the students attached more value to traditional activities, whilst teachers attached more value to communicative activities.

Conclusion

One of the most interesting findings that emerged from this study was that students' most powerful source of motivation for learning English was intrinsic in nature. In addition, the factor structure which emerged here indicates that in attempting to characterise student motivation, the underlying factors may need to be investigated within each cultural context. This study was the first of its kind in a Moroccan setting. The factor structure reported here will need to be replicated by further research before we can be confident of it. Nevertheless, it indicates that researchers must be prudent and explore the factor structure which underpins student motivation afresh in each new setting, rather than generalising readily across cultures and contexts. The concern expressed by several writers that

Gardner's framework may not adequately generalise to other cultures and contexts appears to be supported by the findings here, and it is clear that the development of a framework for understanding students' motivation towards foreign language learning requires more attention to be given to settings (see Dörnyei 1994; Gardner and Tremblay 1994).

The study indicates that students' perceptual modality preferences were strongly visual and kinaesthetic, but weakily auditory. The students also highly valued cognitively oriented activities which involved grammatical awareness over behavioural, audio-lingual practice involving mindless repetition. Another noteworthy finding was that the teachers expressed a greater preference for communicative activities over traditional ones than did the students. Taken together, such findings suggest that there is a need to bring teachers and students closer together, in a learner-centred approach to teaching.

An important area for further research is to explore the degree to which teachers are aware of and can take account of students' needs and preferences, and whether doing so can lead to greater motivation and progress amongst students.

Chris Kyriacou *lectures in the Department of Educational Studies, University of York, Heslington, York YO1 5DD, England*

Naima Benmansour *lectures at the Faculté des Sciences de l'Education, University of Rabat, Rabat, Morocco.*

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KNOWLEDGE AND ATTITUDES OF FRENCH AND ISRAELI 12TH GRADERS IN AGRICULTURAL OR RURAL SECONDARY SCHOOLS ABOUT WATER AND IRRIGATION RELATED ISSUES

AMOS DREYFUS
DANIEL JACOBI
YOSSEF MAZOUZ
JEAN-LOUIS LACROIX

Abstract – *In arid countries, the use of water by agriculture raises important social, economic, and moral issues. This study attempted to compare the knowledge and attitudes of agricultural secondary schools 12th graders in Israel (essentially a Mediterranean arid or semi-arid country) with those of comparable students in France, a country where water is not a central limiting factor in agriculture, concerning six aspects of the use and misuse of water by agriculture. Students were required to assess the desirability of existing situations, the possibility to change them, and the potential influence of five factors of change (scientific knowledge, government authorities, social customs, laws of economics, and the individual citizen). The Israeli students systematically put a strong emphasis on scientific knowledge and authorities. The reactions of the French students were weaker than those of the Israelis. Also, there were only two aspects in which they considered that any of the factors could have a significant influence. And finally, the individual citizen, and not scientific knowledge or authorities, was regarded by the French students to be the potentially most influential factor – actually the only one.*

Introduction

$\mathcal{T}$ here is no agriculture without water, because there is no life without water. The productivity and the profitability of agriculture depend on the availability of water of suitable quality in appropriate amounts. Water, in some countries, as far as the agriculturist is concerned, is a gift from heaven: it rains all year round in sufficient quantities. In some regions, although the annual distribution of rain is not optimal, water resources are still abundant (lakes, rivers), so that agriculture is easily provided with the necessary amounts of water by means of irrigation. In other countries, however, the natural precipitations are so limited, and their distribution often so inadequate, that irrigation is indispensable. In such countries,

the shortage of water is a crucial economic problem. Since agriculture, in arid countries, may use the best part of the available fresh water resources, its allocation to different sectors of the population raises important social issues. A tremendous amount of scientific and agro- or bio-technical knowledge is invested by research institutions, in an effort to increase the efficiency of irrigation methods, so as to reduce the need for water in agriculture.

However, reducing the need of water is not the only problem. In the whole world, water *pollution* has become an acute environmental-educational issue. Already a long time ago, Blum (1979), in a study of environmental curricula in the US, France, Germany and Britain, showed that water pollution was their most common element. More recently, studies like *Quelle Eau Demain?* (Menard 1992) in France, a country where water exists in apparently unlimited quantities, display a symptomatic feeling of urgency about the need to increase teachers' and students' awareness of the nature and intensity of the problem. Because agriculture is one of the main polluters of underground water, various *economic, social and moral* problems are connected with agrotechnical practices. Modern *knowledge* is invested in an effort to solve the conflict between the need for chemicals (fertilizers, insecticides, pesticides) and the need for the prevention of the resulting pollution of ground water.

The topic of irrigation, in countries where water-supply is a crucial issue, appears to possess, built-in, all the elements which may induce a deep involvement of the students. The *scientific knowledge* basis (plant physiology, soil and water sciences), the relevant *technologies* and the *social* issues (economic, moral) should be part and parcel of any rational teaching of the subject. Research about STS (Science, Technology and Society) approaches in science education has shown (see Aikenhead 1994) that involvement may have a strong influence on students' attitudes or feelings towards science related social issues. According to Solomon (1990, 1993) for instance, the involvement of students in discussions about science-related social issues brought about a high degree of enthusiasm, and students became more cognizant of their civic responsibilities.

Israel is essentially a Mediterranean arid or semi-arid country, with some desert areas, and all the summer crops are irrigated. France has an essentially temperate climate, with some southern areas of a Mediterranean type, where irrigation is more common than in other regions. It can therefore be hypothesised that students who have learned the topic of irrigation in a country like Israel, where water-supply is an acute problem, should develop strong attitudes towards relevant social, moral and economic problems (the second S of STS), as a result of their deep involvement in an extremely relevant national issue. In France, on the other hand, water is not a central limiting factor in agriculture, but for a few areas where the rainfall is insufficient, mainly in summer (inadequate

distribution). The role of irrigation in France is less crucial than in Israel. It is either to make up for a temporary shortage of rainfall, or to optimise the production of crops. The social issues are therefore less relevant, and students, while learning about irrigation, could be expected to develop less extreme attitudes in France than in Israel. However, several successive years of drought, together with the increasing pollution of underground supply of fresh water, have recently underlined the role of agriculture concerning water resources. In France, as in Israel, farmers are now regarded to be water polluters, a view to which students of agriculture should not remain indifferent.

It can also be hypothesised that people who live in a small and centralised country like Israel, may develop specific attitudes concerning what can and should be done about the use and misuse of water resources, as compared with people who live in a big country, where the more 'distant' authorities, may be perceived as exerting less direct influence, and as less responsive to influence.

This study attempted to compare the attitudes of French 12th graders in agricultural secondary schools, with those of comparable Israeli students. Because scientifically literate citizens must possess some basic knowledge to be able to 'engage in a scientifically informed discussion of a contemporary issue' (Champagne and Lovitts 1989), and develop sustainable values and reasonable attitudes on the basis on some sound scientific knowledge (Dreyfus 1995), the knowledge of the students was also to be assessed, to some extent.

Two questionnaires were therefore developed, the first to assess students' knowledge concerning plants' physiological mechanisms in the context of the relations between plants, soil and climate, and the second to assess their attitudes towards some issues concerning the use, misuse or pollution of water in an agricultural context.

The questionnaires will first be described, and then the populations of students in both countries.

The 'knowledge' questionnaire

Since all the subjects in this study were 12th grade students, all the questionnaires had to be relatively short, so as to interfere as little as possible with their daily schedule. On the other hand, the questionnaire had to be representative of the knowledge which could reasonably be expected of a 12th grader in a rural or agricultural school. However, since its aim was to assess only the students' general literacy concerning water and irrigation, and since the scientific

knowledge was not expected to serve directly as a tool to solve the social problems referred to in the attitudes questionnaire, the questionnaire dealt mainly with what has been termed 'domain knowledge'. Domain knowledge (Alexander, Schallert & Hare 1991) deals with 'familiarity with general information in an area, even though it *may not be specifically referred to* in a particular passage' (Tobias 1994), as contrasted with 'topic knowledge', which is closely related to the material covered in a particular text.

In order to determine 'what to ask', a group of Israeli educators including 6 teachers (in secondary agricultural and/or rural schools), 2 inspectors of the Ministry of Education (Department of Rural Education, Sciences of Life and Agriculture), 2 members of the Department of Agricultural Education of the Faculty of Agriculture (Hebrew University) were asked: *'Which scientific principles, on the subject of 'WATER', would you expect to have been mastered and remembered by graduates of agricultural or rural schools who have studied an agrobiological curriculum'*. The precise meaning of 'on the subject of water' and the selection of sub-topics was intentionally left to the judgment of the members of the group. However, two points were specified: firstly, the question referred only to students in fully academic streams, which lead to full matriculation examinations. Secondly, knowledge of technical know-how was *not* to be referred to in the questionnaire.

A consensus was relatively easily obtained, and the decisions of the Israeli group were sent to the French partners, who checked it with a group of educators more or less equivalent to the Israeli one (teachers and curriculum developers of the INRAP, the national institute for research in agricultural pedagogy). The questionnaire was finally developed on the basis of a consensus between the partners from both countries.

Five sub-topics were specified in that way, all relevant to general biology or to soil and water sciences: a) Evapotranspiration; b) the function of water in the plant; c) the movement of water in the plant and the soil; d) the quality of water; and e) sources – or resources – of water.

An open-answer test was now designed and administered to a group of Israeli 12th graders, (two classes, about 50 students), who were not to participate in the study. All the questions in the final test were ultimately based on the right and wrong answers of this group.

To cover, even superficially, the wide field of required knowledge, while keeping the test, as required, relatively short, the time necessary to read the questions was to be strictly limited. Essay questions could therefore not be used, and even multiple choice questions, which usually require the reading of a stem and three distractors in addition to each right answer, were found to be too time consuming. A 'right – wrong' system was finally adopted, in which the subjects

were required to state if statements were right or wrong. In this way, for each item in the test, the respondents had to read only *one* statement. Because of the high probability that a right answer could be obtained by guessing, the respondents were also asked to indicate the level of confidence they had in the correctness of their answers. This method is believed to reduce the influence of guessing, and also, to some extent, to give a better idea of the 'true knowledge' of the students, such a knowledge being represented by a right answer given with a high level of confidence (Hobden 1989). Anyway, since it was made very clear that the only purpose of the questionnaires was to yield research data, and that results would not be transmitted to the staff of the schools, and would therefore have no influence on marks, the students had no strong incentive to cheat, or not to give an honest answer regarding their level of confidence.

Two items will exemplify the type of items in the questionnaire: (correct) *'In clay soils, a good structure allows both infiltration and retention of water';* (wrong) *'In clay soils, the infiltration of water in capillary spaces is rapid'* (I am **sure** that the statement is correct, I **think** that the statement is correct, I **think** that the statement is wrong, I am **sure** that the statement is wrong).

The test was designed in Israel, where its scientific accuracy was approved by scientists (plant physiologists and soil science specialists). After a pilot run, the questionnaire was translated into French with the cooperation of the French partners, and adapted to the needs of the French students. Some original Hebrew questions had then to be reformulated, in order to ensure the equivalence of the two versions.

The final versions included 44 statements in the Hebrew version, and 42 in the French one. The reason for this difference was that two of the statements referred to a problem which was regarded by the Israeli to be of crucial importance, but which does not exist in France (penetration of sea water into underground layers of fresh water, due to over-exploitation of fresh water reserves).

The final Hebrew version included 25 correct and 19 wrong statements, and the French version 24 and 18 respectively. Obviously, all the statements could not be correct, for no student would ever consider that in a test, all the items may call for a uniform answer. Wrong and correct statements had therefore to be included in reasonable proportions; they could however be expected to confront the students with tasks of unequal difficulty. According to Tamir (1993) for instance, the difference is related to cognitive reasoning requirements, to space memory, to the contents of items and to information processing. However, since in everyday life one is not confronted only with true statements, the wrong statements represented a meaningful and indispensable part of the questionnaire.

The 'attitudes' questionnaire

In this test, the main idea was to assess the attitudes of the students about various aspects of the use or misuse of water resources. Since the students came from two countries, in which the situation, concerning water resources and their use, is very different, a common ground had to be found. This was done by referring to the situation which was supposed to prevail in an hypothetical *western modern* country', appropriately named 'Irrigland'. This method had an additional advantage: the students may have found it awkward to express opinions or attitudes about *their own* country i.e., to become personally involved in a social environment which they may have perceived as not entirely friendly.

Six aspects of the allegedly existing situation were included in the questionnaire: a) Agriculture makes use of 80% of the total quantity of fresh water used in the country; b) farmers pay less per cubic metre of water than any other sector of water consumers in the country; c) agriculture causes soil-water pollution because of its use of herbicides, pesticides and chemical fertilizers; d) the major portion of the water used in homes and industry goes 'down the drain' and is *not* recycled; e) part of the household and industrial waste water is used - after purification - to irrigate agricultural crops; f) a part of the agricultural enterprise in the country, 'organic agriculture', does not make use of chemical fertilizers, chemical pesticides or insecticides.

About each of these aspects, the students were required to express their opinions on a) the *desirability* of the existing situation (1, desirable; 2, it does not make any difference; 3, undesirable), and b) the possibility to *change* the situation (1, changeable; 2, it may change but not as a result of any human intervention; 3, unchangeable). It can be seen that these scales were actually measures of *un*desirability and *un*changeability.

In addition, 5 potential factors of change were suggested: a) scientific knowledge; b) the government authorities; c) social customs; d) the laws of economics; e) the individual citizen. The students were required to give their opinion about the ability of each factor to bring about changes in each aspect of the situation. The choices were, in ascending order: 'no influence at all' (0), 'some influence', a 'tangible influence' and 'more influence than any other factor' (3).

The questionnaire was presented in the shape of a 6X7 matrix, one line for each aspect of the situation (6 lines), one column for the level desirability, one column for the level of unchangeability, and one column for each potential factor of change, i.e., five columns (a total of 7 columns). The students had thus only to tick 42 cells in the matrix, a task which could be performed relatively quickly (see full matrix in Appendix 1).

The population samples

The Israeli and the French samples could not be absolutely equivalent, because of the differences between the two educational systems. In the French system, agrobiology is studied in vocational agricultural secondary schools, which serve rural regions, and are expected to provide the future farmers, or other agriculture related professionals, with the necessary practical and theoretical knowledge. Graduates of such schools obtain either a *baccalaureat* (the French matriculation examination, the main aim of which is to open the door to tertiary education), or a degree of agricultural technician (*technicien agricole*) or higher technician (*technicien superieur*), which prepare more than the *baccalaureat* to the professions of agriculture. In Israel, agrobiology is studied in agricultural secondary schools, and also in rural-regional comprehensive secondary schools, which serve the whole population of rural areas, but do not provide any practical training in agriculture. Most of the Israeli agricultural secondary schools are boarding-schools, where students are sent for socio-economic reasons. The main population of agricultural schools in Israel is therefore not of rural origin, and in such schools, agriculture is generally viewed *more as a means than as an objective* of education. Some rural schools in Israel are of a 'mixed' type, both residential-agricultural and rural-regional. There are no post-graduate studies in Israeli rural or agricultural secondary schools, so that they confer no professional diplomas of technicians. The able students sit there for regular academic matriculation examinations, which may lead to tertiary university education.

For the purpose of this study, all the selected classes, in both countries, were of the 'academic' type, in which students are expected to graduate with a full matriculation examination, or with a degree of equivalent or higher level.

The Israeli sample

In view of the extreme heterogeneity of the Israeli population in rural-agricultural schools, the sample included schools of all the types described above, and roughly, of three academic levels:

Level 1: High level secondary schools, where most of the students are admitted to matriculation examination, and on the average obtain marks which are not below the national average (60 students).

Level 2: Medium level schools, where most students are admitted to matriculation examination, but on the average, score below the national average (65 students).

Level 3: Low level schools, where most of the students are not admitted to full matriculation examinations, and where those who are, tend to obtain scores well below the national average (29 students).

4 schools were of the agricultural residential type (67 students), 2 rural regional (30 students), and 3 were mixed regional-agricultural (57 students).

All the Israeli students (N=154, about 10% of the relevant population) were in 12th grade, 17.5 to 18.5 years of age. One school is located in the north of the Negev desert (annual rainfall about 200 mm), one in an area where the annual rainfall (about 400 mm) is somewhat lower than the country average, and the others in areas with the usual amount of rain in central Israel, i.e., between 500 and 600 mm.

All the Israeli students in agricultural schools had worked for prolonged periods on irrigated school farms, and *all* the rural areas in these rural areas are irrigated. However, only a minority of parents were active agriculturists. The genders were more or less equally distributed in the Israeli sample.

A reference group of 37 students in a higher technicians course (post-secondary institution) were of a different type: all of them were already *experienced active agriculturists*, either in kibbutzim or in other types of villages, who held full matriculation examinations, and had resumed studies in order to up-date their professional knowledge. The average age of this group was around 32, the youngest member was 28 years old. This group is not shown in Table 1 and its responses to the questionnaires will be treated separately.

The French sample

All the students in the French sample came from agricultural secondary schools. Some of them (see Table 1) studied in *terminales* (12th grade) which lead to *baccalaureat* examinations (i.e., *terminale D*), other in *terminales* which confer a degree of agricultural technician (BTAG). A third group was to graduate with a diploma of Higher technicians (TS, *Techniciens Superieurs*). This group includes the high-level and selective *TS Gemeau* (*GEstion et Maîtrise de l'EAU*) students, who are more professionally knowledgeable than any of the other groups. Their results were therefore compared with those of the Israeli technicians, although they were also included in the analysis of the whole French sample, since they were essentially school students, and not experienced agriculturists.

Out of the 447 students, 257 lived in areas of temperate climate, and 190 in the Mediterranean south. The parents of about 40% were active farmers, but only 92 of them (46% of the farms, 21% of the total sample) used irrigation. However, 209 students (47%) had had at least two weeks of experience on irrigated farms. There is a strong predominance of males in the French sample.

The composition of the samples is shown in Table 1.

TABLE 1: The Israeli and the French samples of population

ISRAEL (N=154) (*)		FRANCE (N=447) (*)	
Level of School		**Type of Class**	
High Level	60	Agricultural Technicians	129
Medium Level	65	High Technicians Gemeau	58
Low Level	29	Other High Technicians	28
		Agric. Baccalaureat	133
		Other Baccalaureat	99
Age of Students		**Age of Students**	
17.5 – 18.5	ALL	17 – 18	156
		19	125
		Above 19	166
Gender		**Gender**	
Male	67	Male	374
Female	55	Female	71
No Information	32	No Information	2
Prof. of Parents		**Prof. of Parents**	
Active Agriculturists	23	Active Agriculturists	201
Other	102	Other	241
No Information	29	No Information	5
Irrigating Farmers		**Irrigating Farmers**	
	ALL	Yes	93
		No	324
		No Information	30
Has worked on an irrigating farm		**Has worked on an irrigating farm**	
	ALL	Yes	209
		No	207
Annual Rainfall (at school location)		No Information	31
About 200mm	18	**Area (climate at school location)**	
About 400mm	11	Temperate	257
500-600mm	125	Mediterranean	190

(*) 67 Israeli students came from agricultural schools, 30 from regional schools, and 57 from mixed type schools.

Main findings

Knowledge

The results were analysed in three different ways:

a) Correct/wrong answers: any answer in the right direction ('I am sure that the statement is...', or 'I think that...') was marked as correct.

b) Confident/non confident: any answer of the type 'I am sure that ...' was marked as 'confident', whether it was a right answer or not.

c) Correct *and* confident/others: In this method, only right answers with a high degree of confidence were marked as correct.

The test, when administered to the Israeli higher technicians, was found to be very easy: they all answered correctly practically all the questions (98% right answers), with a negligible percentage of wrong, and about 80% correct and confident answers. It can be seen that the difference between the number of correct answers and that of the confident-correct ones stemmed only from some not rare cases of lack of confidence, but not from erroneous knowledge.

The data in Table 2 show that the results of the school students were far from satisfactory.

In both French and Israeli samples, the average level of correct answers was around 60%, with a quite similar distribution (S.D. about 10%). Still, the achievements of the French students (61.1% correct answers) were significantly (p<0.02) but only slightly higher than those of the Israeli (56.05%). Actually, in the French group, 18 questions yielded 75% right answers, whereas in the Israeli group, there were only 9 such questions (also, 8 items yielded over 85% right answers on the French side, as compared with 3 for the Israeli).

There was some tendency toward a similar perception of the difficulty of particular items: the correlation between the French and the Israel mean 'correct answer' scores on each item was .63.

It was also found that the *TS Gemeau* group achieved significantly better than all the other French groups. Their average number of correct answers 28.19 out of 42, or 67%, with a narrow standard deviation (2.97), as compared with the agricultural technicians (60.5%), the Baccalaureat classes (58.9% and 59.5%) and a second group of higher technicians (59%). The best school in the Israeli sample was of a 'high-level' mixed type, who scored an average of 28.21 out of 44, or 64.1%, also with a relatively narrow standard deviation (4.24), and significantly higher than all the other schools. No significant differences were found between the other Israeli schools, the means of which were slightly lower than those of the French classes. The best French individual score was 34 (out of 42), and the best Israeli one, 37 (out of 44).

TABLE 2. *Mean scores of the Israeli and the French students on the knowledge test, in absolute numbers and in percentages of numbers of items. (N for Israel= 154; for France = 447).*

CORRECT ANSWERS		TOTAL		WHEN STATEMENTS WERE			
				CORRECT		WRONG	
		Mean	S.D.	Mean	S.D.	Mean	S.D.
ISRAEL	No.	24.66	4.57	15.95	3.29	8.70	2.52
	%	*56.05*	*10.39*	*63.80*	*13.16*	*45.79*	*13.26*
FRANCE	No.	25.66	3.83	16.40	2.72	8.85	2.43
	%	*61.10*	*9.12*	*68.33*	*11.33*	*49.17*	*13.50*

CONFIDENT ANSWERS		Mean	S.D.	Mean	S.D.	Mean	S.D.
ISRAEL	No.	25.65	8.74	14.95	5.22	10.70	4.13
	%	*58.30*	*19.86*	*59.80*	*20.88*	*56.32*	*21.74*
FRANCE	No.	25.83	7.71	15.4	4.61	10.43	3.61
	%	*61.50*	*18.36*	*64.17*	*19.21*	*57.94*	*20.06*

CORRECT AND CONFIDENT ANSWERS				Mean	S.D.	Mean	S.D.
ISRAEL	No.	....	....	11.08	4.43	5.18	2.92
	%	....	....	*44.32*	*17.72*	*27.26*	*15.37*
FRANCE	No.	....	....	11.57	3.86	5.50	2.90
	%	....	....	*48.21*	*16.08*	*30.56*	*16.11*

	Israel	France
NUMBER OF ITEMS (TOTAL)	44	42
CORRECT STATEMENTS	25	24
WRONG STATEMENTS	19	18

Results in Table 2 also show that the number of *confident* answers was not lower than that of the *correct* answers, but the confidence was not always justified: the number of 'correct *and* confident' answers was much lower in both samples than that of confident answers

The most striking outcome of the knowledge questionnaire is that both French and Israeli pupils found it much easier to identify a correct statement than to recognise a wrong statement as such: the percentage of correct, confident, and 'correct and confident' answers (Table 2) were much lower (and significantly so) when the statements were wrong than when they were right. The percentages of 'correct and confident' answers was only about 48% in the French group, and 44% in the Israeli one, and it decreased to about 30% on both sides when the statements were wrong.

The correlations between the number of right answers and the number of confident ones were significant at any level (p<.000), although not very high: .47 in the Israeli sample, and .39 in the French one. When referring only to the part of the questionnaire in which the statements were wrong, these correlations were even lower: .27 (p<.01)and .31 (p<.000) respectively.

To sum up, the general pattern of response to the knowledge questionnaire in both samples of students was quite similar, although the *average* level of knowledge of the French students was somewhat higher.

Attitudes

As explained above, the matrix of the questionnaire included six lines (aspects of the existing situation in Irrigland) and seven columns (seven vertical scales assessing in part one, the *un*-desirabiltity and the *un*-changeability of the six aspects, and in part two, the potential influence of five factors of change. The reliability of all the seven scales was between .7 and .8 in both samples.

The attitudes of the Israeli experienced and knowledgeable Higher Technicians may be regarded as a frame of reference, to be compared with the attitudes of the French *Gemeau*, and on the other hand, with those of the Israeli and French students.

Part one: un-desirability and un-changeability

The range of values for this part of the questionnaire was from 1 (desirable or changeable), to 3 (undesirable, unchangeable), mark 2 being the axis of symmetry. Table 3 shows that the patterns of response of the Israeli and the French higher technicians were relatively similar.

TABLE 3. The attitudes of the Israeli higher technicians compared with those of the French 'Gemeau' group, concerning the undesirability and unchangeability of the six aspects. (Mean ratings on a scale from 1 to 3).

THE SITUATION DESCRIBED IS		ISRAEL (N=154)		THE ASPECTS OF THE SITUATION	FRANCE (N=447)	
ITEM		MEAN	S.D.		MEAN	S.D.
1	Undesirable	2.47	0.81	Use of 80% of fresh water	2.83	0.50
	Unchangeable	1.38	0.64	by Agriculture	1.17	0.50
2	Undesirable	1.41	0.69	Farmers pay less for	1.79	0.96
	Unchangeable	1.74	0.78	water	1.48	0.72
3	Undesirable	2.65	0.64	Agriculture causes pollution	2.57	0.81
	Unchangeable	1.29	0.62	of soil-water	1.07	0.31
4	Undesirable	2.91	0.28	Major part of home and	2.78	0.62
	Unchangeable	1.06	0.24	industrial water not recycled	1.12	0.42
5	Undesirable	1.59	0.77	Purified household and	2.07	0.96
	Unchangeable	1.76	0.77	industrial water for irrigation	1.31	0.59
6	Undesirable	1.88	0.87	Organic agriculture does	1.17	0.53
	Unchangeable	1.59	0.73	not use chemicals	2.03	0.81

Strong reactions were brought about on both sides by the high consumption of fresh water by agriculture, by the pollution of water by agriculture, and the non-recycling of the water used by homes and industry, which were regarded to be undesirable. In the eyes of both samples, all the other aspects were on the desirability side, although, concerning the utilisation of waste water, and the low price of water in agriculture, the French were less enthusiastic than the Israeli, and the attitude of the Israeli about organic agriculture was more ambiguous than that of the French.

Both French and Israeli considered everything to be 'Changeable', the French doing so a little more than the Israeli. It is worth noting that there was no clear French majority on the problem of the changeability of the organic agriculture situation.

On all measures, French as Israeli, standard deviation is wide, indicating a lack of uniformity in the reactions of the respondents.

The patterns and tendencies found in the samples of students were more or less similar to those of the technicians (Table 4).

TABLE 4. The attitudes of the Israeli high-school students compared with those of the French, concerning the undesirability and unchangeability of the six aspects. (Mean ratings on a scale from 1 to 3).

THE SITUATION DESCRIBED IS		ISRAEL (N=154)		THE ASPECTS OF THE SITUATION	FRANCE (N=447)	
ITEM		MEAN	S.D.		MEAN	S.D.
1	Undesirable	2.49	0.83	Use of 80% of fresh water	2.71	0.65
	Unchangeable	1.43	0.79	by Agriculture	1.31	0.68
2	Undesirable	1.48	0.83	Farmers pay less for	1.63	0.90
	Unchangeable	1.61	0.83	water	1.81	0.86
3	Undesirable	2.46	0.87	Agriculture causes pollution	2.59	0.79
	Unchangeable	1.19	0.55	of soil-water	1.14	0.47
4	Undesirable	2.47	0.87	Major part of home and	2.68	0.71
	Unchangeable	1.31	0.68	industrial water not recycled	1.10	0.38
5	Undesirable	1.13	0.46	Purified household and	1.97	0.95
	Unchangeable	1.56	0.74	industrial water for irrigation	1.79	0.60
6	Undesirable	1.30	0.68	Organic agriculture does	1.27	0.64
	Unchangeable	1.54	0.73	not use chemicals	2.02	0.78

Part two: factors of influence

The range of values in this part of the questionnaire was from 0 (no influence at all) to 3 (more than any other factor). Mark 2 indicated a clear, tangible influence, and 1, some influence, i.e. a very limited one.

The technicians

Table 5 shows the comparison between the responses of the Israeli higher technicians and that of the French Gemeau.

It also shows how each factor of change was *rated* (the mean score it obtained), and how it was *ranked* (its position in descending order of mean scores).

On five of the six aspects of the described situation, the French *Gemeau* attributed a predominant influence to the *individual.* The Israeli technicians *never* did that. They ranked high *scientific knowledge* or *authorities.* Furthermore, the responses of the Israelis were much more extreme than those of the French: on each of the six aspects, one factor of change at least obtained a mean score above 2, and on three aspects, two factors did so.

TABLE 5. The attitudes of the Israeli higher technicians compared with those of the French 'Gemeau' group, concerning the potential factors of influence, in rank order of mean ratings, on a scale from 0 to 3.

	ISRAEL (N=37)		FRANCE (N=58)		
	MEAN	SD	MEAN	SD	
FACTORS OF INFLUENCE					**FACTORS OF INFLUENCE**
FRESH WATER CONSUMPTION					
The Authorities	2.32	1.05	1.64	1.09	The Individual
Scientific knowledge	2.29	1.10	1.53	1.07	The Authorities
Economy	1.56	1.24	1.48	1.05	Economy
The Society	1.21	1.23	1.47	0.95	Scientific Knowledge
The Individual	0.85	1.19	1.05	0.99	The Society
PRICE OF CUBIC METER					
The Authorities	2.38	1.16	1.81	1.11	The Authorities
Economy	1.76	1.31	1.60	1.19	Economy
The Society	0.65	1.03	0.69	1.00	The Individual
The Individual	0.47	0.98	0.67	0.95	The Society
Scientific Knowledge	0.41	0.91	0.26	0.60	Scientific Knowledge
SOIL WATER POLLUTION					
Scientific Knowledge	2.29	1.10	2.17	0.91	Scientific Knowledge
The Authorities	2.15	1.22	1.86	1.09	The Individual
The Individual	1.79	1.30	1.71	1.03	The Authorities
The Society	1.71	1.25	1.33	1.15	Economy
Economy	0.97	1.20	0.95	1.04	The Society
NON RECYCLING OF HOME AND INDUSTRY WATER					
The Authorities	2.50	0.98	2.16	1.01	The Authorities
Scientific Knowledge	2.38	1.03	1.79	1.17	Scientific Knowledge
Economy	1.76	1.37	1.07	1.14	Economy
The Society	1.50	1.22	0.93	1.10	The Individual
The Individual	0.82	1.12	0.86	1.06	The Society

PURIFICATION OF WASTE WATER

The Authorities	2.09	1.22	1.66	1.17	Scientific Knowledge
Scientific Knowledge	1.82	1.34	1.36	1.24	The Authorities
Economy	1.24	1.33	1.19	1.09	The Individual
The Society	0.82	1.07	0.93	1.08	Economy
The Individual	0.41	0.81	0.91	1.10	The Society

BIOLOGICAL AGRICULTURE

Scientific Knowledge	2.53	1.01	1.48	1.22	Scientific Knowledge
The Society	1.82	1.34	1.40	1.17	The Individual
The Individual	1.68	1.39	1.07	1.14	The Society
The Authorities	1.65	1.37	0.95	1.15	Economy
Economy	1.44	1.35	0.86	1.06	The Authorities

On the French side, only two aspects yielded a factor of influence with a score above 2. The French Gemeau tended to attribute a weak influence to *scientific knowledge*: for water consumption, 1.47, compared with the Israeli 2.29; for pollution, recycling, purification of waste water, and organic agriculture, 1.33, 0.93, 0.93, and 1.48, compared with 2.29, 2.38, 1.82 and 2.53 respectively. Although ranking *authorities* quite high, they assigned them low scores, in comparison with the importance that the Israelis conferred to them.

The high-school students

The responses of the Israeli high-school students (Table 6) displayed trends similar to those of the Israeli technicians, but the differences between them and their French peers were somewhat less marked than those found between the technicians.

The Israeli high-school students, just as their experienced technicians compatriots, attributed a strong influence to *scientific knowledge*, on all counts but the price of water, where, quite logically and in agreement with the technicians, *authorities* and *economy* prevailed. The *individual* was, on the average, rated very low. The *authorities* were, in general, given a relatively high rank, but were rated lower by the Israeli students than by their technicians fellows. On the Israeli side, high rankings corresponded to high ratings, (rank 1 above mark 2 on all counts, and rank 2 reached scores above or very near 2 òn four aspects). The French students reacted more or less like the *Gemeau* alone, with some differences which made them a little less different from the Israelis: like their Israeli peers, they believed that the *authorities* may influence the price of water; also, concerning the

TABLE 6. The attitudes of the Israeli high-school students compared with those of the French, concerning the potential factors of influence, in rank order of mean ratings, on a scale from 0 to 3.

	ISRAEL (N=154)		FRANCE (N=447)		
	MEAN	SD	MEAN	SD	
FACTORS OF INFLUENCE					**FACTORS OF INFLUENCE**

FRESH WATER CONSUMPTION

Scientific knowledge	2.01	1.14	1.76	1.06	Scientific knowledge
The Authorities	1.91	0.98	1.65	1.05	The Individual
Economy	1.68	1.09	1.51	1.06	Economy
The Individual	0.97	1.03	1.47	1.03	The Authorities
The Society	0.92	0.97	1.12	1.00	The Society

PRICE OF CUBIC METER

The Authorities	2.37	0.92	2.02	1.05	The Authorities
Economy	2.17	0.98	1.78	1.09	Economy
The Society	0.83	1.03	0.78	1.00	The Individual
Scientific Knowledge	0.79	1.06	0.75	0.98	The Society
The Individual	0.66	0.91	0.51	0.84	Scientific Knowledge

SOIL WATER POLLUTION

Scientific Knowledge	2.28	1.04	2.30	0.95	Scientific Knowledge
The Authorities	1.98	1.06	1.88	1.09	The Individual
The Society	1.26	1.13	1.51	1.06	The Authorities
The Individual	1.18	1.10	1.41	1.12	Economy
Economy	1.05	1.14	1.12	1.04	The Society

NON RECYCLING OF HOME AND INDUSTRY WATER

Scientific Knowledge	2.19	1.07	2.02	1.00	The Authorities
The Authorities	1.97	1.05	1.92	1.07	Scientific Knowledge
The Society	1.37	1.16	1.33	1.12	The Individual
The Individual	1.22	1.18	1.31	1.08	Economy
Economy	0.91	1.12	1.22	1.08	The Society

PURIFICATION OF WASTE WATER

Scientific Knowledge	2.22	1.08	1.68	1.11	The Authorities
The Authorities	1.72	1.07	1.67	1.13	Scientific Knowledge
Economy	1.63	1.14	1.36	1.11	Economy
The Society	0.81	1.04	1.09	1.08	The Individual
The Individual	0.70	0.95	1.00	1.06	The Society

BIOLOGICAL AGRICULTURE

Scientific Knowledge	2.51	0.91	1.79	1.21	Scientific Knowledge
Economy	1.55	1.17	1.71	1.17	The Individual
The Authorities	1.50	1.06	1.29	1.11	The Society
The Society	1.17	1.11	1.27	1.16	Economy
The Individual	1.16	1.15	1.11	1.07	The Authorities

consumption of fresh water by agriculture, they ranked *scientific knowledge* in first place, but with a relatively low mark. Furthermore, like the Israelis, they ranked and rated very high *scientific knowledge* in relation to pollution of soil water. The French students displayed a tendency to rate the *individual* higher than the Israeli students did, and to be much more indifferent than the Israelis to the problems of waste water and of organic agriculture. In the view of both sides, the *social customs* had no potential influence on the issues at stake in the questionnaire.

The overall differences between the trends of the Israeli and the French sample of students are well demonstrated by the mean ratings obtained by each of the five factors of change on the whole questionnaire (averages of vertical scales). Such a computation shows the tendency of the respondents to attribute a high importance to a given factor of change. The students had six opportunities to rate each factor (once for each of the six aspects of the described situation). An average score of at least 2 (equivalent to the average of 6 times 2) would obviously indicate the attribution of a strong importance to that factor.

The percentage of French students who rated *scientific knowledge* at or above such an average, was 36.9, as compared with 64.8% of the Israelis. 52.41% of the Israelis allotted such an importance to *authorities*, and only 38.26% of the French. On the other hand, 23% of the French students did so for the *individual*, but only 13.64% of the Israelis.

Also, the Israeli average rating of the six first ranking factors was 2.26, and for the French, only 1.92, indicating, as mentioned above, that in most cases the Israeli students tended to make more extreme decisions.

There were no significant correlations whatsoever between levels of knowledge or confidence and any of the seven scales in the Attitudes questionnaire, or between achievements in any of the sub-tests of the knowledge questionnaire and the attitudes. In the Israeli sample, socio-professional variables (gender, profession of parents) had no influence on either knowledge or attitudes, and in the French sample, gender had no influence at all, and the other social parameters (area, work on a farm, experience in irrigation, profession of parents) had some minor effects which did not change the main patterns. An ongoing research project is now attempting to assess the impact of these variables on a similar French population.

Discussion and conclusions

The comparison between the knowledge of French and the Israeli students is somewhat awkward because the two samples could not be really equivalent. While the French students came from vocational or to some extent, from post secondary professional training, very few of the Israelis who studied agriculture in agricultural schools were there for reasons of 'agricultural motivation'. As for the high level rural schools in Israel, they do not teach agriculture as such. However, all the students of both countries had in common that they were young people who had some relations to agriculture, studied a relevant curriculum, which included water and soil sciences, and had not yet gained personal experience as independent farmers or as professional technicians. In as much as the questionnaire could give a representative idea of the students' knowledge, the French students were found to have mastered a little better the scientific basis of the topic under scrutiny, namely plant, soil and water relations.

In principle, it could be claimed that the knowledge of both samples was quite satisfactory: About 60% of the answers were right in both samples, and, considering that the students had not been warned or given any opportunity to prepare themselves for the test, such a level of achievement is not bad at all. However, the main findings showed that on both sides, the students' knowledge displayed the characteristics of school knowledge, i.e. knowledge which is in great parts ill internalized or easily forgotten. The level of 'true knowledge', i.e., correct *and* confident, was low on both sides. Furthermore, the ability of the students in both groups to recognise a wrong statement as such, was much lower than their already not too high ability to recognise true statements. The students also felt less confident with the wrong statements, and the correlations between confidence and correct answers was quite low. Such findings are not uncommon in the literature (Tamir 1993), but it is also well known that a concept (or a principle) is considered

to have been learned only when the learners are able to recognise positive and negative instances of the concept. In other words, wrong notions, which are not recognised as such, may have the same effect as correct knowledge on the development of the attitudes or opinions of students in a study like this.

The knowledge of the older and already experienced Israeli higher technicians was much more robust. It appeared to have the quality of the meaningful, reality-bound knowledge of educated practitioners, to whom the level required here was that of the already obvious, so that they answered not only correctly, but also with great confidence.

However, as mentioned above, attitudes and opinions on civic issues of the type presented here in the Attitudes questionnaire are seldom directly and clearly related to precise items of scientific knowledge. Everyday life problems are not as well defined as scientific or technical ones. It is only when the 'ill-structured' (Simon 1973) real life problems are divided into smaller, well-structured, *partial* problems that the need for exact 'topic' scientific knowledge becomes predominant. It is therefore quite understandable that students, as citizens, when confronted with wide issues, form opinions on the basis of a general social perception of the nature of the problem. Opinions are influenced by attitudes, and may therefore be quite as consistent as attitudes. Such a consistency was to some extent demonstrated by the relatively high reliability of all the vertical scales in the attitudes matrix.

The Israeli students, for instance, reacted very much as their more knowledgeable and experienced technician fellows, by systematically putting a strong emphasis on *scientific knowledge* and *authorities*. This is quite understandable in a country where agriculture depends heavily on science, and where on one hand, water – a national problem – is provided solely by one central authority and on the other hand, the use of water (price, quota) is strictly regulated by the government. Most of the Israeli students, as individuals, apparently considered themselves to be basically unable to act in such a way as to protect sources and resources of water. Such a perception may influence their approach to situations in which they should be expected to recognise the potential influence of the individual farmer (or citizen). It is indeed disturbing that the Israeli students rate the individual's influence on the issue of pollution of soil water by chemicals so low, since it is well known that many farmers tend to use chemicals indiscriminately, and since scientific and technological education is expected to enhance the students' feeling of personal involvement in issues of public interest.

The French students, including the *Gemeau* group, reacted quite differently. Firstly, their reactions tended to be weaker than those of the Israelis. Secondly, there were practically only two issues in which they considered that any of the factors could have a significant influence: soil-water pollution and

recycling of household water. And thirdly, on both issues, the individual was regarded to be the potentially *most* influential factor. This tendency to consider the individual as the main factor of change was quite consistent on the French side (5 out of 6 fields of intervention). The attitudes of the French students are quite consistent with the fact that in France, the main source of irrigation water is private wells, i.e., and not a central authority. Also, many of the French farmers are just not bothered by problems of irrigation, and when they are, there is no shortage of water. It is worth noting that, while the individualistic character of the French students is encouraging, their lack of perception of the role of scientific knowledge is disturbing.

Finally, the attitudes of the French and the Israeli students could be explained in terms of their social and professional environment. They had in common that their attitudes appeared to have been heavily influenced by a sensible and knowledgeable evaluation of that environment.

The study presented here has not been able to show that subject matter knowledge had a strong influence on the attitudes of the students concerning some issues which are relevant to the farmers of the 20th or 21st century, when these attitudes are not systematically treated in the curriculum. However it has shown that there are some basic differences in the approaches of the students of the two countries. These differences may have strong implications concerning the motivations of the students and their approaches to civic issues, and as such, they may have provided useful information to the rural educational authorities and to the curriculum developers in both countries.

Amos Dreyfus, *BSc.Agr., MSc.Agr. holds a PhD degree in Science Education. He is Professor and Head of Agricultural Education and Extension Studies at the Faculty of Agricultural, Food and Environmental Quality Sciences of the Hebrew University of Jerusalem, and also a member of the Israel Science Teaching Centre at the Hebrew University.*

Daniel Jacobi *holds a Doctorat d'Etat in linguistics, is a professor of Sciences of Information and Communication at the Université de Bourgogne, France, and heads there the Centre de Recherche sur la Culture et les Musées (CRCM).*

Yossef Mazouz, *BSc.Agr., holds a MSc degree in Science Education. He is a secondary school teacher of biology and agriculture, and a Ministry of Education inspector for Agricultural Education in Israel.*

Jean-Louis Lacroix, *Ingénieur Agronome, is a researcher at the Centre de Recherche sur la Culture et les Musées, France.*

Correspondence *should be addressed to Professor Amos Dreyfus, Agricultural Education and Extension Studies, Faculty of Agricultural, Food and Environmental Quality Sciences, POB 12 Rehovot 76100, Israel. Tel. 972-8-9481908; Fax: 972-3-9473305; Email Dreyfus@agri.huji.ac.il*

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APPENDIX 1. The matrix of the 'Attitudes' questionnaire

Aspects of the existing situation	In a modern western country		Which of the following factors are responsible for the existing situation or able to modify it?				
	is the existing situation desirable?	can the existing situation be changed?	scientific knowledge	the government authorities	social customs	the laws of economy	the individual citizen
Agriculture makes use of 80% of the total quantity of fresh water used in the country	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
Farmers pay less per cubic meter than any other sector of water consumers in the country	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
Agriculture causes soil pollution because of its use of herbicides, pesticides and chemical fertilizers	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
The major portion of the water used in homes and industry goes 'down the drain' and is not recycled	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
Part of the household and industrial waste water is used – after purification – to irrigate agricultural crops	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
A part of the agricultural enterprise in the country, 'organic agriculture', does not make use of chemical fertilizers, pesticides or insecticides	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3

RESEARCH REPORT

DIETARY FATS AND OILS: KNOWLEDGE AND PREFERENCES OF SCHOOL-AGED CHILDREN IN GREECE

ELENI ZIMVRAKAKI
GEORGE MAKRIS
KYRIAKOS ATHANASIOU

Abstract - *The study described in this paper investigates the knowledge and preferences of 176 Greek children, aged between nine and eleven, with regard to fats and oils. The results show that the majority of children cannot classify oils, butter, and margarine in the correct nutritional category. The great majority were of the opinion that it is healthier to use olive oil, rather than than seed oils, for salads and cooked meals. However, they also answered that seed oils are healthier than olive oil for fried meals. No statistically significant differences between the sexes was found in the answers, except for their preferences regarding the use of olive oil in cooked meals and salads. The results indicate that Greek children lack the information they need to make healthy food choices. In addition, there is a need to develop teaching strategies that focus on lipids and their impact on health.*

Introduction

*T*he history of the olive tree, from whose fruit olive oil is produced, goes back to ancient times, and archaeological finds indicate that olive oil has been used for many centuries. Olive oil has always been one of the most important constituents of the Mediterranean diet, and cholesterol levels and the incidence of heart disease are much lower in people whose diet is rich in oleic acid in the form of olive oil, than in the inhabitants of northern Europe and North America.

Although, during the 1950s, Greece had the lowest rate of deaths from coronary heart disease in eight industrialised countries (Keys 1984), there is evidence that the death rate due to heart conditions has risen in Greece since the early '80s (Uemura & Pisa 1988). The reason seems to be that Greeks have moved away from the traditional Mediterranean diet, turning to a more 'northern' diet regarding the consumption of lipid acids. Between 1983 and 1990, consumption of butter and seed oils (in Greek terms, *seed oils* are all oils except olive oil) increased by 65% and 159% respectively, while olive oil consumption increased

by a mere 10%. The total per capita consumption of lipids (in Greek terms, *lipids* are all fats and oils, fats are solid fats, and oils are fats in liquid form) in Greece went up from 30.1 kg in 1983-4 to 43.5 kg in 1989-90. This was accompanied by a change in consumer habits. Whereas olive oil accounted for 70% of all lipid acids consumed in Greece between 1983 and 1984, it fell to only 54% in 1989-90 (Giannopoulou 1991).

Epidemiological, laboratory and clinical studies have established beyond any reasonable doubt the close relationship between elevated blood cholesterol levels and coronary heart disease (Keys 1972). When present in excess in the blood, low-density lipoprotein cholesterol (LDL) is deposited in the tissues and forms a major part of a build-up of atherosclerotic plaque on the artery walls. High-density lipoprotein cholesterol (HDL) levels, however, are inversely related to the incidence of coronary heart disease (Gordon 1977; Heiss 1980).

In recent years, a great many randomised trials of the effects of fat-controlled diets have been reported (Schaefer 1981; Kuusi 1985). The findings have established a relationship between high consumption of saturated fatty acids and elevated blood cholesterol levels. The beneficial effects of diets rich in polyunsaturated fatty acids on plasma lipids and platelet function has also been described (Jackson *et al.* 1978; O'Brien *et al.* 1976). Moreover, a diet rich in oleic acid has proved to be as hypolipidemic as a similar diet rich in linoleic acid, with no change in high-density lipoprotein levels, which tend to be slightly reduced by polyunsaturated fatty acids (Sirtori *et al.* 1986; Mattson *et al.* 1985).

The fact that the process of atherosclerotic build-up begins in childhood is attested by two findings. Firstly, autopsy studies have shown that in some populations aortic and coronary atherosclerosis starts early in life: the WHO Five Cities Study (Kagan *et al.* 1976), for instance, demonstrated that in certain European Countries about 10% of 10-11 year-old children already have atherosclerotic plaque in their coronary arteries. Serum cholesterol and other lipid fractions, pathologic fibrous plaques, and fatty streaks have also been found in the arteries of children (Wynder *et al.* 1989). Secondly, cross-sectional and prospective studies have identified a number of factors related to the development of clinically manifest coronary heart disease. When present in young children, these factors are likely to continue into adult life, thus both promoting the formation of early morphological lesions in the child and acting as precursors to clinical coronary heart disease later on (Tell *et al.* 1986).

These findings demonstrate the necessity for the early prevention of heart disease, and call for community-based programmes in the area of food and nutrition, targeting children and young people. Intervention through nutrition

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education programmes directed at children is essential, as adult knowledge, preferences, and behaviour in health matters are known to be acquired and consolidated in the formative years of childhood (WHO 1993: 37-38).

School-age children in particular are a target group for nutrition education programmes for many reasons. They are very curious and eager to learn; their ideas, including these related to food and dietary habits, are still forming, in contrast to adults, whose ideas are more fixed (Fieldhouse 1982); children are open-minded and accept new ideas as part of the growing-up process, especially when they attend schools where there is continuous knowledge and behaviour interaction (Fieldhouse 1982); they also form a link with the family, whose dietary habits seem to be influenced by food and nutrition knowledge and behaviours that children bring home.

A number of researchers, including Contento and Michela (1984) and Turner (1991), have argued that, before developing health education programmes, it is necessary to examine children's 'common-sense' understanding of nutrition. This information increases the effectiveness of educational communication, since the way people perceive and understand their world is crucial to how they act (Contento *et al.* 1984). This research is part of an ongoing programme (Makris *et al.* 1994) that is investigating what children know about lipids as part of their diet and how they perceive the relationship between lipids and health.

The research focuses on the following questions:

1. How do children classify fats and olive oil as nutrients ?
2. Do children know about the suitability of various lipids for different types of food?
3. Are children aware of the connection between heart problems and oils?
4. What sort of lipids do children prefer in their food?

Research Method

The study took place in Thessaloniki, the second largest city in Greece, with a population of about one million. A random sample of nine primary schools was selected for the study, which was conducted in the winter of 1994-5.

Subjects

A total of 176 fifth-grade pupils took part in the study. Males accounted for 52.8% (n=93) of the sample and females 47.2% (n=83). The average age was ten, the range being from nine to eleven.

Instruments

Data were collected by means of a questionnaire. The time allowed for answering the 25 multiple-choice questions was 45 minutes. The questionnaire was designed to elicit information relevant to the research questions.

The internal consistency of the instrument and its specific vocabulary, as also the rate at which the questionnaire was read, were established by means of a pilot study conducted in the autumn of 1994.

Procedure

The survey was conducted by trained university students majoring in education. No teaching staff were present while the pupils answered the questionnaire during one school hour. The children were told that it was a game about knowledge and preferences and that their teacher would not mark or even read their answers. They were assured that the answers would remain confidential. Each question was read out loud by the researcher and the answer was filled in simultaneously by all children in the class.

Data analysis

176 completed questionnaires were collected. The statistical analysis was done with the help of the SPSS/PC. The non-parametric chi-square ($x2$) statistic was used to determine any significant differences in knowledge and preferences between the two sexes.

Results

Classification of fats and olive oil as nutrients

The data showed that, when asked to place the three types of lipids in the correct nutritional category, approximately half the children, regardless of sex, classified olive oil, butter, and margarine as lipids (45.5%, 40.3%, and 47.2% respectively).

The rest gave incorrect answers, classifying them variously as proteins, carbohydrates, or vitamins. Data from the questions as to whether oil, butter, and margarine are animal or vegetable fats showed that 93.2% of the children were aware of the correct answer as far as olive oil was concerned, while one in three was confused about butter and margarine. Butter and margarine were classified as animal and vegetable fats respectively by 63.6% and 64.8% of the children.

Knowledge about the suitability of fats and oils in different types of food

To assess the children's knowledge about the suitability of a specific fat or oil in various types of food, a score was created as the sum of the correct answers to three related questions on three types of food (salad, cooked meal, and fried meal). The maximum possible score was 30, while the actual average was 16.9. 86.4% of the children thought olive oil was the most suitable for use in salad; for cooked meals, 47.2% thought olive oil was the most suitable, 23.9% seed oil, and 13.1% butter; for fried meals, 38.6% thought seed oil was the most suitable, 35.8% olive oil, and 17.6% butter. No significant differences due to sex were observed.

Knowledge regarding the connection between heart problems and oils

The children were asked to choose from a list of oils the one they thought was the 'most healthy': only 42.1% chose olive oil, while 51.7% opted for seed oils (19.9% sunflower oil, 17.6% corn oil, 13.1% soya oil, and 1.1% cotton oil). Although 42.6% responded that the various seed oils help heart function, only 31.3% were aware that olive oil has a positive effect on heart function.

Preferences regarding the use of different lipids in food

From the statistical analysis a score was created as the sum of the answers relating to preference for olive oil in three types of food (salad, cooked meal, and fried meal). The maximum possible score was 30, while the actual average was 13.9. A statistically significant difference was noted between the sexes (p = 0.05): specifically, when the children were asked to choose between olive oil, seed oil, butter, and margarine in their cooked food, 17.6% of the boys and 9.1% of the girls expressed a preference for olive oil. The same difference emerged when the children were asked which oil they preferred for salad: 42.6% of the boys and 29.5% of the girls chose olive oil (see Table 1).

TABLE 1: Children's preferences for olive oil in two types of food

	Boys	Girls	x^2	d.f.	p
Salad	75 (42.6%)	52 (29.5%)	7.09	2	.05
Cooked Meal	31 (17.6%)	16 (9.1%)	10.96	4	.05
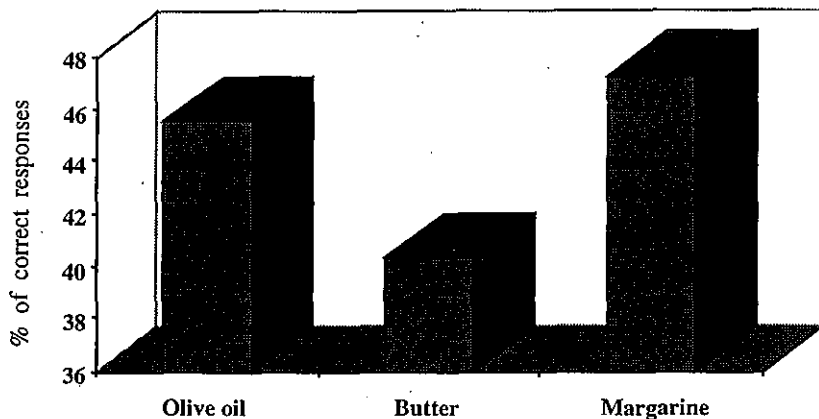
There was no statistically significant difference between boys' and girls' preferences in fried food: olive oil came first (40.3%), seed oil second (22.2%), and butter third (10.2%).

Discussion

Children appear to have only limited knowledge about the correct nutritional classification of oils, butter, and margarine, as is shown in Figure 1. This is not surprising from the point of view of developmental theory. Nutrients are abstract concepts and it has been remarked that: *'It is not clear that young children can, or should be expected to, understand the reason why certain foods are grouped together and others not'* (Contento 1981). This limited understanding could account for some of the response patterns observed in the present study. Furthermore, work with primary-school children in the U.S.A. (Michela & Contento 1984, and Resnicow & Reinhardt 1991), the U.K. (Turner 1991), Scotland (Ross 1995), and southern Australia (Magarey *et al.* 1986) supports the finding that children rarely use formal classification systems when they are allowed to group foods as they wish.

However, the children were more aware that olive oil is a vegetable fat. This may be due to experiential factors, because olive trees are found in abundance in Greece and Greek school textbooks contain frequent verbal and pictorial references to the origin of olive oil. Unfortunately, as discussed below, these are not accompanied by health education messages.

FIGURE 2: Children's knowledge about how healthy olive oil and seed oils are and their effect on heart function
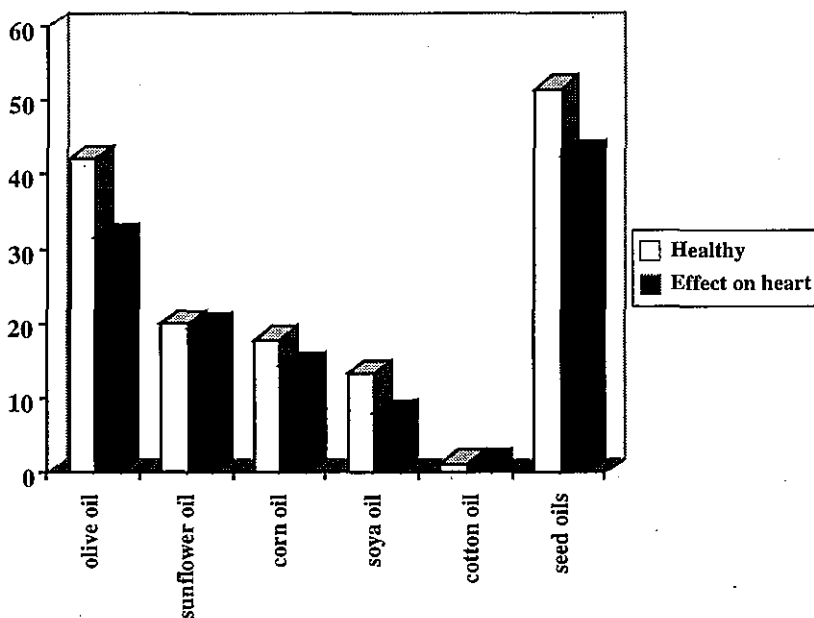
The results demonstrate that children know that olive oil is generally good for their health, as is shown in Figure 2. This finding is supported by Backett and Alexander (1991), who have proved that children recognise that certain foods are 'good for them'. In the present study, the children answered that olive oil is healthier than seed oils for salad and cooking, while they considered seed oil is healthier than olive oil for frying. Children's information about nutrition and health comes mainly from the family and the media; their textbooks make little or no reference to the subject. The link between oils and health is certainly emphasised in every advertisement for olive oil or seed oil. Nevertheless, since firms producing seed oils are either more abundant or more active in promotion and advertising in Greece, they have managed to instil a better impression of their products among the public. This, coupled with the powerful influence of the media on youngsters' nutrition (Garner 1992), may very well explain why children have a more favourable opinion of the use of seed oils for frying.

The present data suggest that children are able to identify and rank different types of oils according to their positive influence on heart function (Figure 2). It seems, therefore, that they are able to conceptualise the relationship between the

health benefits of an oil and good heart function. However, the data also suggest confusion, and possibly misinformation, about the positive effect of various oils on heart function. This classification schema may be based on parental or societal attitudes toward specific oils, rather than on an understanding of their inherent nutritional composition. The extent to which this confusion is due to insufficient education rather than to the media remains to be determined. At the same time, the recording of the children's preferences showed that there are differences between their views and their knowledge. This is not surprising, since it is now known that consumers' behaviour does not always accord with their knowledge. The recording of children's preferences may also be a useful tool for identifying the whole family pattern, since the two parameters are interrelated (Birch & Sullivan 1991; Perry *et al.* 1985). Such preference recording may be of use in the planning of nutrition education programmes.

The fact that the majority of the boys expressed a preference for olive oil in their cooked meals and salads, in contrast to the girls, may probably be explained by psychosocial considerations: although both sexes are subject to the same consumer patterns, girls adopt the stereotype of the mother-housewife role, since they are involved in food preparation at home, and their preferences more closely reflect the habits and 'laws' of the kitchen. As already mentioned in the introduction, in the last ten years there has been a considerable increase in the consumption of seed oil in Greek households. The girls see their mothers using seed oil in various types of food and as a result express a preference for seed oil, rather than olive oil, in their salads and cooked meals. The boys' preferences, on the other hand, are not influenced by the 'laws' of the kitchen and reflect their level of knowledge about the suitability of olive oil for use in the three types of food.

Conclusion

These findings about how children classify different fats and oils and how they conceptualise the effects of lipids on their health provide an insight into the framework within which they view such things. Curriculum developers and teachers therefore should more often ask the children themselves what they prefer and what they eat. This type of information can serve as a basis for developing effective nutrition education programmes, as it is widely accepted that one must study the learners themselves if one wants to find out how they learn.

The present study also suggests that Greek children lack essential information for making positive nutritional choices, and we need to investigate further how issues relating to health and lipids can be meaningfully discussed with children so as to have an impact on their food choices and heart function.

The present study suggests too that it is necessary to examine the role of parental influence in food preferences, as opposed to the influence of the media and other societal factors that have a strong impact on individual values and, therefore, choices. Lastly, there is need for a better understanding of the educational messages presented by the media, as they seem to be easily comprehended and remembered.

Eleni Zimvrakaki, *Chemist, Ph.D. candidate, Department of Primary Education, Aristotelian University of Thessaloniki, 54006 Thessaloniki, Greece.*

George Makris, *Statistician, Ph.D. candidate, Department of Primary Education, Aristotelian University of Thessaloniki, 54006 Thessaloniki, Greece.*

Kyriakos Athanasiou, *Professor of Environmental and Health Education, Director of Environmental and Health Education Section, Department of Primary Education, Aristotelian University of Thessaloniki, 54006 Thessaloniki, Greece. Fax number: +31-842 187.*

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BOOK REVIEWS

Beth Young (ed.), Raj S. Pannu & Toh Swee-Hin (Guest eds.), *Alberta Journal of Educational Research*, **42 (2), Theme Issue: Education and Development, 116 pp, 1996, ISSN 0002 – 4805.**

It is not news to most of us that we are living in increasingly global times. Global communication technologies expedite almost instantaneous transfer of information. Multi-national production capabilities have converted the world into a global assembly line. Billions of dollars in capital circulate the globe each day, most of it outside the realm or reach of nation states. Globalization is heralded as "progress" or "development" and presented as inevitable or enlightened. Not quite so visible to most of us, however, is the underlying ideological agenda nor the accompanying social and ecological devastation. Yet, within the analytical and practical work of education scholars and activists, there has long been evidence of challenges to the dominant paradigm of world development.

It is this work that is accented in a recent theme issue of *The Alberta Journal of Educational Research*, 42(2), 1996. This issue is devoted to the theme "Education and Development: Past Lessons, Present Crises, Future Possibilities." It is a compilation of papers that were first presented at a conference of the same name. This conference, held at the University of Alberta (Edmonton, Canada) in September 1995, honoured the scholarly works of Dr. M. Kazim Bacchus upon his retirement from teaching at the University of Alberta. Gathered together in this volume, the nine published papers signify an ongoing commitment to sustain the critique and highlight the activities of resistance and change. Guest editors and conference organisers, Raj Pannu and Toh Swee-Hin, acknowledge the contributions of these diverse scholars with a similar purpose: *"As a whole the articles are united by common themes of critical analysis that seek to deconstruct dominant understandings and strategies of education and development for South societies"* (p. 75).

Indeed, as each article builds on the next in a progression from broader development issues to specific projects and practices, a strikingly similar critique emerges across the articles. The initial pessimism presented by the analyses of Pannu, Boron and Torres, Ghosh and Samoff is offset somewhat by the optimism of action and resistance revealed in the later articles by Mayo, Floresca-Cawagas, Arnove and Toh.

The lead article is written by Dr. Bacchus himself. It was originally presented by him at a dinner held in his honour. Those in attendance were treated to a glimpse of the experience, dedication and vision from which he speaks. While

recognising that deeper more structural enduring social transformations are needed, Bacchus asks *"How can education in itself help the developing countries to achieve their developmental goals of improving their living conditions, especially among the poor and marginalized groups?"* (p. 79). He proceeds to offer a partial answer to this question through a survey of the necessary ingredients of quality teacher education programs. He denounces traditional "chalk and talk" pedagogy and imported texts and materials, arguing that little changed since colonisers first imposed educational systems on South countries. Instead, he suggests: that teachers develop pedagogical skills to enhance problem-solving, understanding and co-operative learning; that teachers understand and promote their students' cultural identity; that college level supervision and teaching model effective pedagogy; that there be opportunities for regular inservice programming, self-evaluation and reflection.

Bacchus suggests that enhancing the professional competence of teachers in these ways would effectively contribute to *"an improvement in the conditions of life for the masses in developing countries"* (p. 81). The full impact of the article is left to the end, however, when Bacchus reveals that he does not simply present a "wish list" but describes an existing teacher education program which he coordinates at Aga Khan University in Pakistan.

What Bacchus shares with the remaining articles is an unequivocal critique of the modernisation paradigm of development. Using a strategy of posing questions within/to the text, Raj Pannu systematically constructs a framework for understanding the major concepts and strategies in the "neoliberal project of globalization." Like others in this volume, he discusses and problematises the relationship between economic liberalisation and political democratisation, the debt crisis and structural adjustment, international financial institutions (IFI's) and sovereign states. He highlights the contradictions and reveals the inadequacies of the dominant discourses. In the following summative pronouncement, he presages the views of his co-contributors.

> *There is overwhelming evidence in the literature of [the neo-liberal policy] failure either to increase the rate of economic growth or to reduce the rate of inflation... On the contrary, there is mounting evidence that it contributes to mass poverty, increases indebtedness, produces economic disarray, destroys the endogenous basis of economic development thus deepening dependence, and generates fundamental dislocations in the structure of the state.* (p. 96)

The next three articles offer painfully similar insights about neo-liberalism applied to particular contexts. Atilio Alberto Boron and Carlos Alberto Torres present an unrelenting litany of statistics from Latin America which reveal that

"what the policies did without exception... was to cause a regressive transformation of class structure in Latin American society," i.e., the poor grow desperately poorer and the rich disproportionately richer (p. 103). These two authors also contribute a review of the relationship between education and poverty through three recent politico-economic perspectives and conclude with eight theses about the state, poverty and education which punctuate the challenges and contradictions.

In a brief article about women and development, Ratna Ghosh employs statistics and a critical feminist perspective to reveal the gendered effect of development. She demonstrates that fiscal deficit reduction, market competition, privatisation, devalued currencies and globalization result in differential access to education, increased demands on women's time (in the paid and unpaid labour force) and *"adverse effects on women's nutrition and health, education and training opportunities"* (p. 120).

Adopting Africa as the exemplar, Joel Samoff's lengthy article is most notable for identifying the "triumphalism" of the international engineers of the neo-liberal world order. Primarily, he confronts the numerous epistemological issues inherent in the *"increasingly important connection between foreign aid and national education policy"* (p. 132). He addresses such issues as: the interventionist and authoritative posture of "the outsider;" discourses which focus research debates on efficiency, cost-recovery and wastage; and numerous systems of legitimisation for poorly supported findings and propositions. As each new point is introduced, a clear picture emerges of what counts as knowledge and who can claim knowledge. This is clearly articulated in the following quote.

> *In the conjunction of research and funding, scholarship becomes a proprietary process. The investors have the determining voice in the selection of topics, researchers, and methods; they limit access to source materials and often control the dissemination of findings... As African researchers are integrated into the financial-intellectual complex, they are less likely to be able to provide alternative perspectives and a critical vantage point. Knowledge is power in this setting.* (p. 140)

While maintaining the critique, the remaining four articles focus more concretely on transformation, empowerment, emancipation and solidarity. Peter Mayo is the first to clearly introduce the notions of resistance and of hope, signalling the possibility of social change. He employs a synthesis of the works of Antonio Gramsci and Paulo Freire to explore a pedagogy of resistance and transformation discernible by characteristics such as commitment, critical reflection/action and dialogue – ideas brought to life in the last three articles which present concrete examples from grassroots social movements in South contexts and alternative North-South partnerships.

Drawing on her experience with social movements in the Philippines, Virginia Floresca-Cawagas accents the significant role of "people power," often manifested through people's organisations (POs) and non-government organisations (NGOs). Primarily, she discusses the practical pedagogical applications of "popular education" grounded in the Philippine context. She also reviews some of the obstacles and challenges faced by these groups and advocates vigilance against co-optation and an ongoing *"openness to interrogation for contradictions and authenticity"* (p. 162).

The idea of North-South partnerships is presented and problematised both by Robert Arnove and by Toh Swee-Hin. After reviewing and critiquing neo-liberal policies and their impact on education, particularly in universities, Arnove presents a proposal for a project to establish a *"North-South dialogue between North American and Latin American universities, popular education, and alternative credit programs"* (p. 174). Acknowledging some existing partnership endeavours, he outlines a two-stage commitment to an alternative development paradigm which would involve universities channelling resources to community-based groups.

Toh's global commitment is glimpsed in his examination of three paradigms of North-South relationships. He contends that the earlier and long-standing paternalistic and authoritarian approach, unacceptable to the South, has largely given way to a partnership approach with concerns for intercultural sensibility, mutual respect and joint ownership. He cautions, however, that the latter approach be problematised in terms of its adequacy and agenda for international development. He outlines *"four key criteria of adequacy for deepening the partnership paradigm into a paradigm of solidarity and transformation"* (p. 183). These are: acknowledging underlying values and assumptions, commitment to a transformative paradigm of development, priorities established by the grassroots participants, and infusing global concerns into scholarship, pedagogy and organisational structures.

While any scholar in the field would treasure this compendium of critical articles, it is an especially significant contribution to the reading list of graduate students in development studies or international education. Most of the main issues surveyed in introductory courses are covered in these articles. Commonly used terms such as modernisation, structural adjustment, neo-liberalism, liberalisation are defined and the relationships between them examined. Practical pedagogical forms of resistance and transformation are also highlighted. The papers are written in accessible language with many examples and useful references. This issue is clearly a significant contribution to the field. It is a fitting tribute not only to Dr. Bacchus but also to the critical work of eight other dedicated development scholars.

Donna M. Chovanec
University of Alberta, Canada.

Sandra Dingli (ed.), *Creative Thinking: New Perspectives*, **Malta, Malta University Press, 262 pp, 1996, ISBN: 99909-45-12-8.**

Creative Thinking: New Perspectives is a collection of selected essays (26 in total) presented at the second bi-annual International Conference on Creative Thinking at the University of Malta, July 1995. One of the aims of this conference is to provide a forum for academics and professional practitioners interested in creative thinking and how it relates to a variety of disciplines and professions. This conference has attracted presenters from several countries including Australia, Canada, England, France, Hong Kong, Hungary, New Zealand, Turkey, U.S.A and Malta. Diversity is also represented in the variety of topics dealt with (for example, art, education, business, management, nursing, computers, music and theatre) as well as the background of the presenters (for example, psychologists, teachers, university professors, artists, philosophers, and business and management consultants).

The first section, 'Developing Creative Culture', includes essays by Edward de Bono, Sidney Parnes, Jacques Richardson and Otto Brodtrick, the last mentioned being formerly of the Office of the Auditor General of Canada. de Bono's essay, while clear and succinct, offers no new insights for those who have read his major work. He argues against *"the old fashioned view "* that thinking skills are not transferable, and contends that thinking is a skill and that creativity is not a natural quality and hence needs organised and active direction to be developed. He identifies the traditional system with the tradition of Socrates, Plato and Aristotle which, he claims, is based on analysis and judgment. It is unfortunate that his characterisation of these philosophers is simply done through the use of slogans which renders their thinking and contribution almost trivial. He seems to forget that even the traditional system involved a lot of creativity! He concludes: *"The thinking system of the Gang of Three was excellent for discovering the truth but very poor at design and creativity."* (p.9) Does he mean to say that truth and creativity do not mix? Are they to be seen as being mutually exclusive? He contends that, with the new system (lateral thinking), the focus shifts to exploration and design. But is there not a lot of analysis and judgement also involved in exploration and design?

Parnes, whose views on creativity are based on Osborn's seminal work and de Bono's, offers a brief history of certain aspects of creative problem-solving in the Western world. Although Parnes is influenced by de Bono's mechanistic framework of mind, the notion of 'desires' is central to his vision. The very well-referenced and researched essay by Richardson provides several historical, interesting examples of "creation" and "invention" with the aim of

gaining insights about the activity of creativity as well as what causes creativity and inventions. This paper would have be more effective if it were concise and its style less tedious. Brodtrick's essay offers some analysis of the concept of "innovation ", makes suggestions for and discusses cases of innovative societal practices, examines ways innovation occurs, and suggests ways governments could help bring about an innovative society. It is unfortunate that the author perceives criticisms and controversy as being negative - one is left wondering what and whose notion of democracy the author adheres to!

The second section, "The Business of Creativity", is one of the best sections in the collection, although it consists of only three pieces. John Edward's essay which recommends more emphasis on the direct teaching of thinking, provides a skeletal historical background and a highlight of some of the current developments and issues about the teaching of thinking. The author then offers some remarks about the situation of teaching thinking in schools and its application in business. He contends that business has been more receptive of the changes needed to improve thinking. It is unfortunate that the author never addresses any of the criticisms against the direct teaching of thinking in schools. In "The Business of Creativity", Robert Heller offers simple, yet clear, suggestions and reflections on the application of creativity to business management. The author urges companies to move from the traditional model of management to a model based on the notions of "a *learning company*," "*excellence in internal human relations*", "*employee empowerment*", "*management based on trust rather than top-down styles*," and " *Change and creativity*." In a similar vein, Perkins and Prime, in the next essay, based on their work which includes a case study involving an auto factory in Australia, conclude that real change requires that people have: "*techniques to explore and reflect; techniques to escape from dominant paradigms; techniques to build on past experience without being constrained or haunted by it; shared frameworks to support collaborative thinking effort*." (p.106). Quite a difference from the authoritarian model of management which seems to be increasing in educational institutions!

The third section, "Creativity in Education," is the longest and best developed section. Several of the essays in this section focus on strategies or techniques or approaches intended to develop creativity: Doody and Mathias suggest ways how creative thinking in schools could be achieved by integrating science, mathematics and language arts; Jamin argues for "*discussion circles* " and " *the philosophy of perspectivism* " which is distinguished from the popular relativism that espouses an 'anything goes' mentality; Melchior introduces the reader to "Counterpoint Thinking," a programme that aims "*to help students to grow from either/ors, concrete, categorical perceptions to broader perceptions of interdependence, abstractions, and ambiguities*" (p. 124); and Fisher, in

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undoubtedly the most thorough and well developed essay in the entire collection, examines the nature of Socratic Teaching in order to show how it can develop creative thinking – contrary to de Bono's views, Fisher shows that insights from one of *"the gang of three"* can be conducive to creative thinking! Quinn and Russell agree that schooling, in its present form, shackles the development of creativity. Russell believes that teaching and learning are too fragmented and dictated by others outside the learning context. While Quinn presents activities and strategies he has used to encourage creativity and critical abilities in children, his ultimate concern is not a technical one but an educational and ideological one: his aim is to encourage children to develop hypotheses on their own, to move away from the right-answer syndrome, to raise consciousness in order for citizens to be able to decrease the exercise and abuse of power. Quinn's warning not to confuse arguments with quarrelling is very helpful. Contrary to the rest of the essays in this collection, Tibor Vamos, from Hungary, is the only one who explicitly addresses ideological or political issues and concerns, for example, the need to eliminate social inequities. In his paper, Vamos describes the assumptions (based on principles of a *"rational participatory democracy"*) as well as ways of implementing the Jefferson Project as it is adapted to the context of Hungarian schools. Through the use of computers and the internet, the project aims to help students acquire the knowledge, attitudes and skills (such as creativity) needed to develop an active, participatory citizen who lives in a world filled with uncertainties and unknowns.

Sections Four and Five are both short sections; one focuses on art and the other on nurse education and multimedia. The Maltese composer, Charles Camilleri, argues that the Western (i.e. European) musical system is *"cracking"* (p. 219) since it has failed to recognize and integrate different rules of music from other cultures. In a sense, this paper offers a critique of the narrow Eurocentric framework of Western music and urges musicians to look at and be more open to other forms. Camilleri argues this does not imply a total rejection of the tradition, but a *"rediscovery"* of the roots which will enable musicians *"to transcend Western narrowness"* (p. 222) and *"go beyond the rational and passionate thinking of the West"* (p. 222). Camilleri's hope is in the understanding of Mediterranean music. The essays by Borg, Munro and Sinclair focus on several facets of the creative process whether individually or collectively (as in Sinclair's case). The need to go beyond the traditional boundaries is explored by Bugeja who argues for *"creative permission"* in nurse education. Similar to other contributors in this collection, Bugeja insists that traditional approaches to curriculum and teaching need to be changed to an approach based on active experience, reflection-in-action, and experiential knowledge which will allow for autonomy and responsibility to develop. The theme of problems of restraint re-appears in the

essay by Cutajar who, while acknowledging that the information highway is the result of creative thinking and that it can bring forth more creativity, explores its dangers and pitfalls. He is concerned about the control and uniformity governments and big business impose on the internet.

As is evident from my comments, this collection offers diverse perspectives on a diverse number of issues and areas. While not diminishing the centrality and seminal work of de Bono in the area of creativity, one cannot but help note that several of the essays seem to build, perhaps rather excessively, on one conception of the development of creativity, namely that offered by Professor de Bono himself. Hence, with regard to several of the essays, one is left with the question: where is really the new perspective? One also needs to ask: whose new perspective? With regard to the latter question, one needs to note that, in the entire collection, there is only one reference to feminist theory and no references at all to either critical theory or social constructivist theories or postmodern stances. This, of course, is not meant as a criticism of the delicate work entrusted to the editor of the proceedings, nor is it meant to diminish the worthwhileness of such a conference. I was lucky enough to attend the conference and can vouch for the engaging discussions the conference offered. Perhaps, though, the scope of the conference should be wider in order to encourage greater diversity. Introducing brief commentaries by discussants who hold differing views from the presenters may lead to more diversity and more substantive new perspectives.

John P. Portelli
Mount St. Vincent University, Canada.

Klitos Symeonides (ed.), *International Conference: Parents' Education,* **Nicosia, Cyprus, 77 pp, 1996, ISBN 9963-0-0502-0.**

Between the 8th and 10th March, 1996, Cyprus played host to an international gathering of people involved in Parent Education, an area which deserves the attention of all those who have the democratisation of education at heart. The proceedings of the conference, convened by the Cyprus Adult Education Association, especially through the efforts of its President, Klitos Symeonides, and the City Literary (City Lit) Institute, London, have now been published in English. The volume contains addresses by participants from Cyprus, Greece, Israel, Malta, England, Scotland, Wales, Switzerland, France and UNESCO.

The conference itself was attended by thirty five participants from outside Cyprus, besides eighty people from within the host country. It also coincided with a spectacular annual adult education festival, attracting educators and educatees from different parts of Cyprus, to which the conference participants, including the undersigned, were invited. This festival consisted of performances by participants in the various choral and traditional Greek dancing programmes which constitute an important feature of Greek-Cypriot adult education provision. Participants were also taken to the mountain village of Gouri to see some of the community education initiatives there. We could thus develop an appreciation of the variety of Greek-Cypriot adult education provision. Parent Education features prominently in this provision, with the Pancyprian School for Parents having been established in 1968.

The publication under review consists primarily of numerous short contributions by educational researchers, adult educators (including parent educators), school teachers and individuals who have a stake in the schooling of children solely as parents. Alas, the last mentioned are few and far between! Those whose voices are present in this volume were members of the British contingent. The lack of visibility of persons whose primary role in the whole project is that of parent, and not minister, teacher, researcher or policy maker who also happens to be a parent, is always of concern in activities of this kind. Similar concerns were expressed by the organisers of a recent seminar on Parental Involvement in Schools organised by Malta's Association for School Councils. How does one involve parents who are not also engaged in education in a professional capacity?

The City Lit in London provides an answer through the narratives of parents voiced during the conference and reproduced in the publication under review. Parents are encouraged to join parent groups and to become parent educators. The parent narratives, reflecting different class and ethnic backgrounds and other differences in social location, are among the finest and most revealing in the

volume. They relate how these parents gradually overcame those barriers which traditionally keep many parents away from their child's school. One hopes that, in future volumes, more narratives of this kind are provided. One also hopes that more narratives by differentially located parents feature prominently in conferences such as these. They were clearly missing from the other presentations, including the several Greek and Greek-Cypriot presentations. This point was forcefully made in an intervention at the conference by Melian Mansfield, from the Campaign for State Education, London.

Mansfield's piece in this volume focuses on the right of parents *"to expect a good education for their children .....only the best - for all children whatever their needs."* Parent education is here conceived of as an important element in a concerted effort to exert pressure on the State to guarantee a public education system of the finest quality. The point which, I feel, ought to be stressed, time and time again, when discussing parental involvement in education, is that , whatever form such involvement takes, it should not serve as an excuse for the State to shirk its responsibility to provide all pupils with the best educational facilities to which every citizen is entitled. No matter how great the involvement of parents and the community in the running of schools, and the degree of devolution of power in this regard, the State still has the important obligation of ensuring equity and quality provision throughout (cf. Darmanin, 1994).

The Greek-Cypriot presentations reveal the strong commitment to Parent Education that exists on the island. Those engaged in such efforts had to take into account the issue of displacement brought about by the uprooting of Greek-Cypriot families in the wake of the widely known tragic events of 1974. In his address, Klitos Symeonides reminds us that these events *"left 40% of the Cypriot population refugees."* The amount of effort invested in parent education is worthy of admiration. This strikes me as making sense in a country which shares with other Mediterranean countries the fact that family and community ties have traditionally been strong and that the extended family still makes its presence felt. In contexts such as these, the following words, concerning a worldwide aging population, by Paul Belanger, Director of UNESCO's Institute of Education, Hamburg, gain particular relevance: *"Grand-parenthood will become a significant issue in the transition towards learning societies."*

Greek-Cypriot parents endure great sacrifices to see their children succeed in formal education and I have been informed of instances when parents sold their land in order to be able to financially support their children throughout their higher education studies abroad. The Republic of Cyprus has a very high percentage of University graduates, despite the fact that the University of Cyprus started operating, with limited provision, as recently as September 1992 (Press & Information Office, 1995, p. 241).

The Greek-Cypriot presentations place the emphasis on lectures and talks organised for parents in various localities in Cyprus. The projects described by the Swiss and British representatives are less formal and more in keeping with the point, mentioned in the Rapporteur's Report, that *"The static lecture must be replaced by other forms of supply"*. Kathie Wiederkehr, President of the Swiss Association of Parent Education, broaches the subject of the preparation of parent educators. People who take the preparatory course do so while holding a job in another profession. The issue of multifunctional workers is thus introduced and becomes a recurring feature of the Greek-Cypriot presentations which stress the multifunctional roles of the educators involved and of the site where the learning takes place. As with other forms of state sponsored adult education in Cyprus and other micro-states, it is the school which constitutes the site of practice for parent education. Multifunctionalism is a very important feature of adult education in small states where the cost per capita of facilities is higher than in larger states and where the country cannot afford to provide all the specialisations it needs (Farrugia & Attard, 1989). In the case of Greek-Cypriot parent education, it is not only teachers who double up as adult educators but also doctors, psychologists, school inspectors and dietitians, among others (see the contribution by Christos Petrondas, Director of the Pancyprian School for Parents).

Kathie Wiederkehr emphasises the gender factor in her contribution, indicating that 3/4ths of the parent educators in Switzerland are women *"who are offering parent education courses besides the family duties "*. This statistic is very revealing and indicates that the traditional gender stereotypes persist in the context of parental involvement in education. The vast majority of narratives, in the British parents' presentation led by Diana Stalker, Director of the Parents Education Unit, 'City Lit', are those of women (eight out of ten). This might be considered indicative of which parents (gender-wise) are traditionally involved, in a non 'professional' capacity, in the education of children. It is also significant that, of the two men in the same presentation, one is a qualified professional adult educator who happens to be the Director of the Institute which gave rise to the project.

The gender dimension is stressed in Paul Belanger's contribution:

> *The debate on parental education cannot avoid the gender dimension of the evolving patterns of parents-children relations. Parental education is no more to be considered, like a decade ago, as a motherly concern. Parental education has to be revisited through a new gender approach where both men and women have effective and intellectual roles to play in relation to the education of children.*

The other point worth reinforcing concerns the traditional stereotype of the heterosexual married couple as parents. We need to move away from such stereotypes to recognise social difference also in this domain. As Christos Theophilides (General Rapporteur), Head of the Education Department at the University of Cyprus, reminds us in his report: *"The percentage of one-parent families is increasing. A proportional increase in the percentage of divorced parents is also observed."* One ought to underline, here, the presence of single parents in the UK presentation. The notion of difference, regarding parents and guardians, should constitute the guiding thread in the educational programmes involved.

One other point worth highlighting is that concerning the process of communication between the school and parents. In providing a summary of the findings from a research project on home-school relations, Helen Phtiaka, a Professor in the University of Cyprus' Department of Education, underlines the point that schools should *"initiate contact with parents on their own terms refraining from deficit model explanations of parental behaviour."* I would add, using Freire's neo-Hegelian terms, that both should be 'subject' (see Borg, 1994; Sultana, 1994) in a process of 'authentic dialogue' between educator-learners and parents-learners-educators.

Another summary of a research project was provided by Sheila Wolfendale, Professor at the University of East London, who is well known internationally for her widely published work on parental involvement in education. She proposes a typology of parent education which served as the basis for discussion in one of the conference workshops.

Both the book and conference shed light on an important area of educational activity and constitute a significant educational initiative. I sincerely hope that there will be a follow up to this activity in the form of a second conference and through the establishment of a network in this area. I also hope that this initiative by a Mediterranean country, in partnership with a Northern European institution, will contribute towards establishing Parent Education as an important area of activity and enquiry in the vast domain of adult education. In this regard, I concur with the proposal, by William Tyler, Director of the 'City Lit', that there should be an area devoted to Parent Education at the Fifth International UNESCO Conference on Adult Education (CONFINTEA V) which is to take place in Hamburg, 14 - 18 July. But this area is of concern not only to those involved in adult education but also to those engaged in other sectors of the educational enterprise. It constitutes a fascinating area of activity and research in that it can combine the efforts of people involved in initial education with those of others involved in adult continuing education, the two often being so artificially separated from each other (there are universities where a Department or School

of Adult Education exists separately from a School of Education!). I also hope that, if a follow up conference were to be held in either Cyprus or any other Mediterranean country, there should be greater Mediterranean representation for which efforts ought to be made to encourage participation not only from Southern European countries but also from Arab states. Parent Education strikes me as being an excellent topic for a future Selmun Seminar, provided that such a seminar would allow the opportunity for educational practitioners, parents, researchers and other stake holders in the educational enterprise to come together and exchange ideas.

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Peter Mayo
University of Malta.

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Albert S. Alissi and Sandra Christolini (eds.), *Società ed educazione negli Stati Uniti: Razzismo immigrazione devianza / Society and education in the United States: Racism immigration deviance.* **Torino, Italy, 127 pp, 1996, ISBN 88-05-05567-0.**

This book looks at the experience of immigration and cultural diversity in the United States and the impact these have on public schooling. It analyses the issues from a sociological perspective, giving due consideration to the historical context of contemporary phenomena. The book focuses particularly on problems of racism, social integration and deviance, and looks at the response of social control given by the American educational system. In a clear and synthetic way, Alissi depicts historical and present-day difficulties and resistance faced by each of the various ethnic groups as they struggled to gain acceptance in mainstream American society. This has led certain groups to choose to emphasise their diversity and others to become acculturated. The historical process of inter-group conflicts has brought about the complex social stratification that characterises contemporary American society, reducing to myth the melting pot theory.

The publication ensues from a set of papers presented by Professor Alissi during a seminar organised, in 1994, by the Facoltà di Magistero, of the Università degli Studi di Perugia. In her introduction to the book, Christolini allocates the initiative within the field of Comparative Education, which espouses the view of global interdependence and which recognises that no ethnic group is culturally irrelevant. The seminar included the participation of Professor Koichiro Maenosono of the University of Tokyo.

Alissi is the author of the English text whereas Christolini translates freely into Italian. The two texts are presented on facing pages and there is a visual correspondence of the various sub-titles. Christolini however often summarises or visually reorganises the original text and includes boxes with additional information and reflections; in fact, she claims authorship of the Italian text.

The book is divided in four chapters. In the first chapter, five racial and ethnic communities are identified as minority groups. For each group, there is a brief history of their migratory experience, and an indication of the life-chances of the individuals pertaining to this group regarding educational success and social class location. The author then goes on to examine the role played by public education. Whereas originally, the "common school" was intended as an expression of an egalitarian ideology, the disparity in the ownership of resources was sufficient to underline the goal of equal opportunities. At the same time, several beliefs regarding the tasks of education further contributed towards differentiated outcomes for different students. The Civil Rights Movement led to a wide variety

of initiatives seeking to make education more equitable. Alissi gives a critical appraisal of multi-cultural education, outlining its various phases and the issues and controversies it has had to deal with. All in all, the public school in the United States is a reflection of the society that it serves.

In the first part of the second chapter, the author outlines immigration patterns towards the US before 1776 and the Revolutionary War up to the newest immigration movements, from 1965 to the present. The two dates are significant. The first indicates the situation before the colonies broke away from Great Britain; this is a period characterised by an open door policy. The second date marks the immigration amendments enacted during the period of the Civil Rights Movement, which brought an end to the heavy restrictions characterising the previous period, implementing a liberalisation of access. The author looks at the fortunes of the different immigrant populations and goes on to give a more in-depth portrait of the Italian experience. Early Italian explorers play an important role in American history but this is often left unrecognised. Instead, Italian immigrants, arriving towards the late nineteenth and early twentieth century, have had to face prejudice; low paying, unstable jobs, in competition with the Irish; and exploitation by a number of "padroni". Due to this negative experience, upward mobile, second generation Italian Americans tended to negate their cultural origins as they allocated themselves in an uncomfortable in-between identity position. Towards the end of the chapter, the author looks at the impact the American school has on immigrant and second generation Italian children. There is also an evaluation of the role played by the " little Italies" in the process of acculturation.

Chapter Three deals with issues of deviant behaviour and social control in public schools. The first two sub-sections give an extensive discussion of the theories regarding adolescence, the generation gap and youthful deviance. The third section discusses the schools. The first two sub-sections give an extensive discussion of the theories regarding adolescence, the generation gap, and youthful deviance. The third section discusses the phenomenon of violence among American youngsters, particularly on school premises. It is only in the section discussing gang formation that a direct reference is made to ethnic groups, mainly African Americans and Hispanics. The final part of the chapter discusses the rationale behind a number of initiatives enacted within the public school system to counteract violence and gang formation through improved skills in conflict management and interpersonal relationships. As pointed out in the beginning of the book, the role played by the small "primary" groups is an underlying theme of the study at hand. The final chapter gives a brief description of some thirty-six programmes which are either multi-cultural or concerned with violence reduction. Whereas the author does not appraise the success of these initiatives, earlier on in

the text he offers a criterion of evaluation in his claim that the more successful initiatives did not limit themselves to working with the youngsters, but also promoted community empowerment.

The book provides an interesting study and offers important cosiderations on the co-existence of different cultures. The value of such an experience as material for reflection in comparative contexts is highlighted in some boxes in Chistolini's text that look at Italy's, in particular and more generally, Europe's newer experience with immigration. The boxes in the Italian text provide useful additional historical and statistical information, Christolini's reflections and excerpts from other books regarding the themes treated in the particular section. Whereas the free approach adopted by Christolini renders the text agile and takes into consideration the usefulness of mediating the two cultural contexts, I feel that, in a few instances, the translation is flawed, changing the sense of the original text.

In his analysis, Alissi considers categories such as ethnicity, race, class and beliefs but unfortunately the issue of gender is hardly mentioned so that, from this text, it is difficult to conclude how American girls live the experience of racism, immigration and deviancy. Despite this shortcoming, the book brings out well the complexity of the issues with which it deals. The various educational programmes introduced in the American Public School system are placed within their proper social and historical context, making this book an important aid for those educators who want to take into account problems of deviance related with the social phenomena of immigration and racism.

Denise Chircop,
Università degli Studi, Firenze.

Les Terry, Helen Borland and Ron Adams, *To learn more than I have...*
The educational aspirations and experiences of the Maltese in
Melbourne, Melbourne, Victoria University of Technology,
99pp, 1993, ISBN 1 875338 17 9.

This fine little book represents not only the achievements of its authors, which
are considerable, but also the flowering of research on ethnicity and education
which has occurred in Australia over the past thirty years. Today, most Australians
take pride in their multicultural society, one in which people from more than a
hundred nations have worked out a diversity of ways of being 'Australian'. It was
not always like this. When I was growing up in Sydney in the 1950s, Australia was
a drab Anglo-Celtic place. Then, from the 1960s, we had multiculturalism, in both
its 'fruit salad' variety (involving a celebration of cultural diversity and, for the
urban middle class, exposure to diverse culinary delights) and more substantial
policy forms. And underpinning, reflecting and shaping this cultural shift, which
has made Australia such an energetic and satisfying place in which to live, has
been a body of research and scholarship, of which this book is typical.

To learn more than I have... examines the educational aspirations and
experiences of working class adolescents of Maltese descent. The Maltese
community in Australia is significant (120, 000 in 1986), the majority of people
settling here in the 1950s. By the mid-1980s, Maltese-background people were
over-represented as wage earners in comparison with the rest of the populations,
and under-represented in senior high school and post-school education. In 1989,
the Maltese Community Council of Victoria decided it was time to investigate this
situation and, with funding provided by the state Labour government,
commissioned three researchers from the local Victoria University of Technology.

Rejecting both simple culturalist and economistic explanations, the
researchers assumed that economic and educational disadvantage were the
products of complex and contested sets of factors played out at both the policy
level and in particular local sites like schools. In particular, the researchers
recognised that ethnicity, class and gender combine in powerful ways to create
disadvantage. Informed by this theoretical framework, the researchers
investigated the factors that contributed to low levels of educational participation
of Maltese background students, paying particular attention to language use.
Data was collected through surveys and discussion groups from students and
parents in four schools in a working class area of Melbourne.

Analysis of the data revealed that a number of interacting variables – class,
gender, migrant experience – influenced school participation. The data also
put paid to a number of myths about ethnicity and education. Contrary to

assimilationist assumptions, 40 percent of students surveyed identified as Maltese. The overwhelming majority of Maltese background students intended to complete high school, contradicting earlier research that found negative attitudes to schooling among Maltese youth. And most Maltese parents were eager to participate in school activities, challenging the stereotype of ethnic parents being unable or unwilling to do so.

The researchers reject culturalist explanations, developing instead a structural analysis of educational disadvantage. So, for example, they locate the issue of language use in its historical context, pointing out that the Maltese language has been marginalised not only in Australia but also in the home country (where, under British colonial rule, it did not become an official language until 1934!). Most Maltese migrants came to Australia in the assimilationist 1950s and were expected to either have English, because they came from a British colony, or to acquire it with little or no tutorial assistance. Even today, Maltese is not taught in Victorian schools, so young people learn their language in their family and in Saturday language school. In recent years, Maltese in Australia have become more assertive about their own language, with recent census data showing an increasing proportion of Maltese speakers reporting use of the language at home. And this use is itself complex. Terry, Borland and Adam's data indicates that young people's use of Maltese varies with the age and relationship of the people to whom they are speaking, and that their expertise in the oral language is much stronger than in the written language.

In the concluding section of the book, the authors relate their sophisticated structural analysis of educational disadvantage to an important Australian body of scholarship on migrancy and ethnicity. The structural analyses developed in this body of work point to political choices that are continually made in education, between reproducing or increasing inequality on the one hand, and extending social justice on the other. The authors suggest a range of measures that would have the latter effect: providing Maltese-language programmes in schools on an equal basis with other languages, setting up staff development and exchange programmes for teachers, developing anti-racist curricula and pedagogies, providing *English as a Second Language* programmes for Maltese background students. At the time this book was written (1993), there was a chance that policy makers would respond to these suggestions. In 1997, with conservative governments in power at the federal and state levels in Australia, it is most unlikely that the authors' recommendations will be implemented. But this political reality itself confirms the validity of Terry, Borland and Adams' structural and political analysis of ethnicity and education.

Griff Foley,
University of Technology, Sydney.

Marianna Kondyli and Yannis Papamichael (eds.), *School Textbooks: Research and Evaluation*, Patras – Greece, UNESCO Chair (Learning, Teaching & Evaluation) – Patras University, 174 pp, 1996.

The choices that a society makes for its children are manifested in the curriculum. In many countries, school textbooks constitute the main mechanism of implementation of these choices. They are a statement of what a society values. They crystallize all the cultural achievements that a society appreciates as worth preserving, all the situations it perceives as problematic and consequently worth changing and, at the same time, everything that is worth renewing.

This book is a compilation of the presentations made at the workshop, 'School Textbooks in the First School Age,' which was organised and coordinated by the Unesco Chair of Patras University in Patras, Greece. There were twenty six presentations made by participants from seventeen countries as far apart as the U.K., the Ukraine and Mauritania. Fifteen of the papers are written in English and eleven of them in French. The workshop aimed at examining the impact of applied research on educational systems by comparing the *"different national approaches, the educational level, the subject matter, the methodological assumptions, the instructional techniques, the different assessment and evaluation procedures "* and discussing the prospect of organising a network for exchange of information concerning educational research and practice in each of the participating countries. The organisation of the book follows the workshop programme very closely. Unfortunately, this implies that the content of a chapter is not always relevant to the section in which it is placed. The book, on the whole, gives the impression of a hurried publication without much editing. As professed by the editors, many of the chapters adopt the style of an oral presentation and the volume is meant to serve as a working document. However, it is also often littered with typographical mistakes and awkward use of both languages which acts as an obstacle to the reader.

As is hinted at by the book editors, a comparative examination of school textbooks in eighteen countries is an awesome task which can potentially reveal the rich variety in philosophical strands and approaches towards curriculum development, apart from aspects of educational policy and the state of the educational system in each country.

The book is divided into five sections: Epistemological Aspects, Content Analysis, National Dimensions, Evaluation and Didactic Approaches. Most of the presentations concern methodological and epistemological issues pertaining mainly to science, mathematics and language textbooks. Many authors elaborate on the historical, cultural, political and economic conditions that influence

curriculum and textbook development in their respective countries. In particular, many discuss the impact of the various ideological perspectives on the content of school texts. In this respect, the presentation by Moulay-Driss Chabou about textbook development in Algeria at various times since 1962 and the one by Jerzy Rosenbaum about changes in the Ukrainian curriculum since the end of the Cold War are informative cases in point.

There are two articles that address basic curriculum issues. The article by Rivka Glaubman of Israel provides a critical analysis of the content and use of the school textbook and suggests guidelines for the development of more effective materials that will support the teacher and, at the same time, enable her/him to adapt to the needs, the background and the experiences of the individual class. Anna Chronaki, in her article, elaborates further on the importance of allowing for flexibility on the teacher's part.

The presentation by Haddiya El Mostafa from Morocco argues convincingly about the importance of adapting the development and use of school texts to the cultural background, the economic and social environment and the availability of teacher support in different communities within a single country. This is at odds with the multinational effort in Rumania (Cézar Birzea and Paula Braga) to develop supporting texts for *"European children"* to be used in parallel with school textbooks, and with the dream of a *"global curriculum"* suggested by Nakhle Wehbe, the presenter from Bahrain, and shared by at least one of the editors (Marianna Kondyli). This issue could possibly have been better illuminated if the discussion that ensued after each presentation could have been included from the same recording that enabled the transcription of some of the presentations.

The papers that relate to language textbooks span the range from the early childhood years to the junior secondary level. Gella Varnava-Skouras presents some of the problems that children face when they first come in contact with written prose and discusses the importance of the availability of a multitude of books on children's literature. The presentation by Marianna Kondyli also addresses early reading experiences and argues for a curriculum that aims at a functional use of language as a medium of communication. The absence of any reference to individual or special needs in either presentation is noteworthy at this stage in child development. The papers by Ichemchou Ould Eleyou of Mauritania and Mohamed Miled of Tunisia present a linguistic analysis of language textbooks in their respective countries and discuss the wider influence of Applied Linguistics and the Didactics of Foreign Languages on language curriculum and teaching. Finally, the presentation by Ahmed Chabchoub of Tunisia is one of the few that includes research data. It examines the influence on the teaching of language of the Tunisia 1991 Education Act,

which encompasses the values of equality, equity and democracy. It finds that the educational system (and, through it, the content of school texts) has largely adhered to traditional values, and language, as a school subject, continues to function more like a reflection of society rather than a catalyst for its reformation. The article concludes with a discussion of the significance of practical mechanisms of implementation of reform efforts.

The presentations concerning mathematics and science textbooks concentrate mainly on the upper elementary and junior years. The opening paper by Vassilis Koulaides and Anna Tsatsaroni of Greece, discusses the various epistemological approaches to analysing science textbooks and recognizes some limitations in the socio-epistemic approach when applied to the case of Greek school texts. The presentation by Dimitris Psillos and Alexandros Barbas discusses their effort within a teacher training course to develop the students' pedagogical content knowledge through analysis of science texts. The paper makes an interesting link between teacher knowledge and frameworks for analysing school textbooks. Finally, the presentations by Vassiliki Zogza, Dimitris Koliopoulos, George Bagakis and Yannis Papamichael of Greece and Sasha Panayotova of Bulgaria address the text treatment of concepts such as velocity, energy and photosynthesis. None of the papers addresses the issue of scientific processes or the development of skills.

From our experience and from presentations included in the book, many countries do not distinguish between curriculum and textbooks and, more importantly, in many educational systems, the curriculum textbook is perceived as a course to be followed or, even worse, to be presented. This bond between curriculum and prescription has remained with us for a good number of years and will not go away without careful study and development of alternative frameworks. It would also seem that, in many cases, the curriculum and the textbooks that help to implement it, comprise a series of concepts with only implied reference made to skills, thought processes and attitudes. The need for more balanced representation in both a learner-centred curriculum design and in our educational priorities, of practical and thinking skills as well as attitudes and conceptual understanding, has been recognised for years. However, there is still a lot of work to be done before this can be achieved in practice. Unfortunately, this volume (and presumably the meeting that preceded it) have not been able to address these fundamental curriculum issues that are of current interest.

The numerous publications that Unesco funds every year attest to its contribution and commitment to the development of educational systems, especially in the Third World. Where the theme is well enough defined to require focused research prior to the presentation of the paper(s), the debate that ensues

is kept more accountable and the final publication tends to be of higher academic standard and generally more useful to the educational reform process. Sadly, *School Textbooks: Research and Evaluation* will not be providing any of the educational systems concerned with the necessary rigorously obtained data that are required for curriculum design, textbook development and effective policy making in education.

References

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Kelly, A.V. (1989) *The Curriculum. Theory and Practice,* London, Paul Chapman Publishing.

Murray Print (1993), *Curriculum Development and Design*, Sydney, Allen & Unwin Publ.

Constantinos Constantinou, Helen Phtiaka and Michele Kefala,
University of Cyprus.

CONFERENCE ANNOUNCEMENTS

'The Teaching and Learning of Punctuation'

International Conference at the Didsbury School of Education, The Manchester Metropolitan University, from 6-7 June 1997. Information from the Didsbury Scool of Education, Manchester Metropolitan University, 799 Wilmslow Road, Didsbury, Manchester M20 2RR, UK. Tel. (161)247.6425; Fax.: (161)247.6367.

'The University and Partnership for Development'

June 23-25, 1997, at the University College of Dublin, Dublin, Republic of Ireland, organised by the Universities Association for Continuing Education Annual Conference. Contact person: Yvonne McKenna, Email address: <yvonne.mckenna@riarthoir.ucd.ie>

'Multiculturalism and Minority Groups: From Theory to Practice'

June 24-26, 1997, at the Hebrew University of Jerusalem. For additional information contact Elite Olashtain, The NCJW Research Institute for Innovation in Education, School of Education, the Hebrew University of Jerusalem, Jerusalem, 91905 Israel. Tel. 02-882015/881295; Fax.: 02-882174/ 881286. E-mail: <mselito@pluto.mscc.huji.il>

'Dancing on the Edge: A Century of Psychology'

5th European Congress of Psychology, July 6th-11th, 1997, in Dublin, Ireland. Further information from: The Congress Secretariat, 5th European Congress of Psychology, 96 Haddington Road, Dublin 4, Ireland. Tel.: +353-1-6685442; Fax.: +351-1-6685226.

'Pupils for Tomorrow: Learning from Diversity'

International Conference at the Manchester Metropolitan University, from 13-17 July 1997. Information from the Manchester Metropolitan University, 799 Wilmslow Road, Didsbury, Manchester M20 2RR, UK. Tel. (161)247.6425; Fax.: (161)247.6367.

'Adult Learning: the Key to the 21st Century'

The Fifth International UNESCO Conference on Adult Education, to be held in Hamburg from July 14 -18, 1997. For information about the conference, contact: UNESCO, ED/BAS/LIT, 7 place de Fontenoy, 75352, Paris, 07-SP-France. Tel. (+33 1) 45681139; Fax. (+33 1) 40659405; E-mail

<e.taylor@unesco.org; Home page: http://www.education.unesco.org/edunews/confintea>

'Inclusive Schooling and Communities'

An international conference organised by the Institute of Child Development of the University of Malta together with the University of Padova, Italy, to be held at the New Dolmen Hotel, Malta, July 23-27 1997. Official languages will be English, French and Arabic. Further information from Institute of Child Development, University of Malta, Msida MSD06, Malta. Email address: <child1@cis.um.edu.mt>

'The 7th EARLI Conference'

The 7th European Association for Research on Learning & Instruction Conference will be held at the Hilton Hotel in Athens, from 26-30 August 1997. The major domains of the conference will be: Learning & cognition; development; motivational social & affective processes; learning and technology; teaching knowledge acquisition in specific domains; adult learning; higher education and methodology of assessment. Queries regarding the conference organisation should be directed to: Erasmus Horizon Ltd., 34 Vass. Georgiou B'Str., 116 35 Athens, Greece. Tel.+30.725.7531; Fax.+30.1.725.7532; Email:<erasmhov@athena.compulink.gr> Inquiries regarding the conference programme should be directed to the Chair of the Scientific Programme, Professor Dr Stella Vosniadou, University of Athens, Department of Philosophy & History of Science, 44 Ippokratus Str., GR-10680, Athens, Greece. Tel.+30.1.3639.780; Fax.+30.1.7257.686. Email:<svosnaid@atlas.uoa.gr>

'The implications of Migration Flows on Educational Practices and the Training of Educators'

22nd Annual ATEE (Association for Teacher Education in Europe) Conference, Macerata, Italy, September 1st-5th 1997. Further information from: Dr Barbara Pojaghi, ATEE 1997 Conference, Dipartimento di Filosofia e Scienze Umane, Università degli Studi, Via Garibaldi 30, I-62100, Macerata, Italy. Tel. +39.733.258310; Fax.: +39.733.235339.

'Faiths and Education: Historical and Comparative Perspectives'

International standing conference for the History of Education, to be held at the National University of Ireland, Maynooth, Ireland, 3-6 September 1996. Further information from Mrs Lily Fahy, Education Department, National University Maynooth, Co. Kildare, Ireland. Phone and Fax: +353.1.6289498.

'Education and Geopolitical Change'

The fifth biennial Oxford International Conference on Education and Development, 11-15 September 1997, New College, Oxford, U.K. Enquiries to be directed to Philippa Orme, Elseiver Science Ltd, The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, U.K. Tel. +44(0) 1865 843691; Fax. +44(0) 1865 843958; E-mail: <p.orme@elseiver.co.uk>

'Boundaries and Bridges in International Education'

50th International Conference on Educational Exchange, to be held in Barcelona, Spain, from 18-20 November, 1997. Requests for information about the EAIE conference should be addressed to: The Council on International Educational Exchange, Annual Conference, 205 East 42nd Street, New York, NY 10017, USA. Fax.(212) 822-2699; Email: <Conference@ciee.org>

'Education, Equity and Transformation'

Xth World Congress of the World Council of Comparative Education Societies, hosted by the South African Comparative and History of Education Society, at the University of Cape Town and University of the Western Cape in Cape Town, South Africa, from 13-17 July, 1998. Conference chairperson: Dr Crain A. Soudien. Please address all correspondence to: The WCCES 1998 Congress Co-ordinator, School of Education, University of Cape Town, Private Bag, Rondebosch 7700, Cape Town, South Africa. Email:<cs@education.uct.ac.za> Tel. +27.21.650.2768. Fax.+27.21.650.3489.

RESEARCH AND ADVISORY CENTRE
FOR INTERNATIONAL EDUCATION:
AN APPROACH FOR SENDING COUNTRIES

ABDURAZAK GRADY
MICHAEL LOCKE

Un manque de connaissances directoriales et technologiques peut ralentir l'industrialisation dans les pays en voie de développement. Celles-ci ne peuvent être acquises que par un long processus d'éducation et de formation. Pour subvenir à la demande, un grand nombre de ces pays – y compris beaucoup des vingt pays donnant sur la Méditerranée – ont investi dans l'éducation internationale en envoyant leurs étudiants dans les institutions déjà établies des pays industrialisés pour améliorer leurs connaissances et compétences technologiques. Dans les thèses et rapports écrits sur le sujet de l'éducation internationale, des recommandations sont proposées pour améliorer les pratiques de l'éducation dans les institutions hôtes. Cependant, peu de ces recommandations ont été adressées vers les pays qui envoient les étudiants, pour qu'ils prennent les dispositions nécessaires. Cet article cherche à montrer comment les pays en voie de développement peuvent participer à l'activité éducative internationale. Il propose l'établissement dans les pays qui envoient les étudiants d'un centre de recherche consultatif pour l'éducation internationale afin de bénéficier de leur investissment.

مركز بحوث وإرشاد للتعليم الخارجي: مقترح للدول الموفدة

د. عبدالرزاق القريدي والأستاذ مايكل لوك

الخلاصة

قد تتأخر برامج التصنيع بالدول النامية بسبب النقص في العلـوم الإداريـة والتكنولوجيـة والـتي لا يمكـن الحصـول عليها إلا من خلال العملية المستمرة للتعليم والتدريب. ومن أجل سـد هـذه الحاجـة، قامـت دول ناميـة كثيرة بالاستثمار في البعثات الدراسية لغرض تطوير قدراتها وذلك بنقـل المعرفـة والخـبرة التكنولوجيـة مـن المؤسسـات التعليمية بالدول الصناعية. لقد كتبت العديد مـن الأبحـاث والدراسـات في موضـوع التعليم الخارجي متضمنـة توصيات لتحسين خدمات المؤسسات التعليمية المضيفة مع قصور واضح بتوجيه توصيات للدول المرسلة من أجل أخذ الخطوات المناسبة من جانبها. وفي محاولة لمعالجة هذا القصور تستعرض هذه الورقة السـبل الـتي تمكـن الـدول النامية من مشاركة أكثر فعالية في العملية التعليمية الخارجية وذلك باقتراح مركز للبحوث والإرشـاد للتعليم الخارجي بالدول الموفدة حتى يتسنى لها الاستفادة من استثمارها.

RELIGIOUS DIVERSTITY AND THE FUTURE
OF EDUCATION IN LEBANON

HELEN TANNOUS

Un élément clé de la constitution et de l'identité nationale au Liban est la diversité religieuse. Cet article se propose d'examiner l'état d'une telle diversité et sa relation avec l'éducation. L'éducation a toujours été une priorité essentielle au Liban; et pourtant le système éducatif s'est lui-même prêté à des partis-pris sectaires de la rivalité. A fin de comprendre les dynamiques du développement éducatif au Liban, il est donc important de prendre en considération les forces qui constituent la mosaïqui libanaise, et d'être conscient de son système politique confessionnel. Les implications de dix-sept années de violence intermittente sur le sectarisme et l'éducation seront analysées avec une recherche sur l'avenir de l'éducation au Liban.

الخلاصة :

يعرض هذا المقال حالة التنوع الديني، الذي يمثل عنصرا رئيسيا في الدستور والهوية الوطنية اللبنانية، وعلاقته بالتعليم. لقد حضي التعليم دائما بأولوية عالية في لبنان، ومع ذلك استسلم النظام التعليمي نفسه للانحياز والتنافس الطائفي. ولفهم ديناميكية تطور التعليم في لبنان، يجب الأخذ في الاعتبار القوى التي تشكل الفسيفساء اللبنانية، والوعي بنظامه السياسي الطائفي. وسوف يتم تحليل تأثيرات سبع عشرة سنة من العنف المتقطع على الطائفية والتعليم مع استقصاء ما يمكن أن يترصد التعليم في لبنان.

LIVING TOGETHER: THE IMPACT OF THE *INTIFADA* AND THE PEACE NEGOTIATIONS ON ATTITUDES TOWARD COEXISTENCE OF ARAB AND JEWISH PUPILS IN ETHNICALLY SEGREGATED AND MIXED SCHOOLS IN JAFFA

RUTH ZUZOVSKY

Des changements concernants la volonté des juifs et des arabes de coexister ont constitué le thème de deux études conduites en 1989 et 1994 parmi les élèves agés de 12 ans dans des écoles de Jaffa. Jaffa est une ville dans laquelle une nombreuse population arabe coexiste avec une population juive. La révolte des palestiniens et le traité de paix avec la Jordanie ont marqué les attitudes des élèves juifs et arabes dans les écoles ségréguées et mixtes. L'étude a aussi exploré l'effet d'interaction entre le moment où les attitudes ont été mesurées et le type d'école. On a trouvé une croissance des attitudes séparatistes parmi les étudiants arabes des écoles arabes. On a trouvé aussi un déclin de la confiance dans la coexistence surtout parmi les élèves juifs. D'autre part on a trouvé que la réalité est de plus en plus perçue comme offrant des occasions égales pour les élèves arabes dans les écoles mixtes. Finalement, on a observé une confiance grandissante en la coexistence parmi les élèves arabes dans les écoles mixtes. Considérant le fait que les écoles mixtes amoindrissent les tendances isolationistes et accentuent la volonté de coexister parmi les élèves de ces écoles, on peut conclure que les données justifient ce type d'écoles.

השינוי ברצונם של תלמידים יהודים וערבים לחיות ביחד היה הנושא של שני מחקרים שנערכו ב-
1989 וב- 1994 בקרב תלמידים בני שנים עשר בבתי ספר ביפו - עיר ישראלית שבה אוכלוסייה
גדולה של תושבים ערבים גרים יחדיו עם אוכלוסייה יהודית. ההתקוממות הפלסטינאית, פתיחת
ההדברות הישירה בין הישראלים והפלסטינאים וחוזה השלום בין ישראל לירדן השפיעו על
עמדותיהם של תלמידים יהודים וערבים בבתי ספר חד אתניים ובבתי ספר שיש בהם אוכלוסייה
מעורבת במחקר נבדקה האינטראקציה שבין המועד שבו נערכו המדידות ובין סוג
ביה"ס על פי הרכבו האתני נמצאה עליה בנטיות בדלניות בעיקר בקרב תלמידים ערביים הלומדים
בבתי ספר ערביים. כמו כן נמצאה ירידה באמונה בחיים בצוותא בעיקר בקרב התלמידים
היהודיים. גם בקרב תלמידים יהודים וגם בקרב תלמידים ערבים הלומדים בבתי ספר מעורבים
גברה הנטיה לראות את המציאות בישראל כמספקת הזדמנויות תעסוקתיות שוות לבני שני
העמים. בנוסף לכך נמצאה עליה באמונה בקיום בצוותא של שני העמים בקרב תלמידים ערביים
הלומדים בבתי ספר מעורבים. מאחר והלימ̂ד בבתי ספר מעורבים מקטין נטיות בדלניות ומגביר
את הנטיה לחיים בצוותא תומכים ממצאי המחקר הנוכחי בסוג כזה של בתי ספר.

تغييرات في رغبة اليهود والعرب للعيش سويّا كان موضوعًا هامًا لبحثين أُجرياً عام ١٩٨٩
وعام ١٩٩٤ لطلاب في سن الثانية عشرة في مدارس يافا، وهي مدينة اسرائيلية تسكن فيها
مجموعة سكانية عربية كبيرة بالإضافة الى مجموعة سكانية يهودية.
الإنتفاضة الفلسطينية، بده المحادثات المباشرة بين الإسرائيليين والفلسطينيين وإتفاقية
السلام بين اسرائيل والأردن أثروا على مواقف الطلاب اليهود والعرب في الصفوف
المتجانسة والصفوف المختلطة (عربًا ويهودًا).تم في البحث ايضًا فحص العلاقات المتبادلة
بين الموعد الذي فيه أُجريت المقاييس وبين نوعيةً المدرسة.
في المدارس المتّجانسة وجدت رغبة كبيرة في الميول الى الإنفراد وخاصةً عند الطلاب العرب
الذين يتعلمون في مدارس عربية كما وأنه لُوحظ نقص او تنازل في الثقة للعيش سويّا
خاصة عند الطلاب اليهود.
عند الطلاب اليهود وأيضًا العرب الذين يتعلمون في مدارس مختلطة زادت الميول لمشاهدة
الواقع والحقيقة في اسرائيل بأنها تزود فرص عمل متساوية لأبناء الشعبين. بالإضافة لذلك
وجد تزايد بالثقة للشعبين للعيش معًا عند الطلاب العرب الذين يتعلمون في مدارس
مختلطة. بما أن التعليم في مدارس مختلطة يقلل من الميول للإنفراد ويزيد من الميول
للعيش معًا فنتائج البحث الحالي تؤيد هذا النوع من المدارس.

INTRODUCTION OF SYSTEMIC QUALITY ASSURANCE
IN SLOVENIAN HIGHER EDUCATION

SONJA KUMP

L'article décrit certaines particularités du système universitaire slovène et les nouvelles tendances qui visent à l'établissement de sa qualité. A partir d'expériences étrangères, une ébauche de projet a été élaborée pour réintroduire progressivement un système garantissant une bonne qualité. Celui-ci sera adapté aux circonstances et particularités nationales. Le système universitaire slovène comprend deux universités. L'Université de Ljubljana et l'Université de Maribor, auxquelles s'ajoutent également un certain nombre d'établissements indépendants. Avec un système aussi réduit, il est nécessaire d'introduire des mécanismes flexibles et simples en matière de réalisation pour garantir une bonne qualité. Au début, le processus d'évaluation s'appuiera sur des travaux de recherche et développement qui comprendront également l'amélioration de la méthodologie et des procédés d'évaluation tout en supervisant l'efficacité des institutions garantes de la qualité.

POVZETEK Članek opisuje nekatere značilnosti slovenskega visokega šolstva in nova
prizadevanja za vzpostavitev kakovostnega visokošolskega sistema. Na osnovi tujih izkušenj
je bil oblikovan osnutek načrta za postopno uvajanje sistema za zagotavljanje kakovosti, ki
bo prilagojen nacionalnim okoliščinam in posebnostim. Slovenski visokošolski sistem
vključuje dve univerzi, Univerzo v Ljubljani in Univerzo v Mariboru ter nekaj samostojnih
visokošolskih zavodov. V tako majhen visokošolski sistem je nujno vpeljati prožne in
enostavno izvedljive mehanizme za zagotavljanja kakovosti. Evalvacijski proces bo od
samega začetka podprt z raziskovalnim in razvojnim delom, ki bo vključevalo nadaljnje
razvijanje metodologije in postopkov evalvacije ter spremljanje institucionalnih učinkov
zagotavljanja kakovosti.

ملخص:

يقوم المقال بوصف بعض الخصائص المميزه للتعليم العالي في سـلوفينيا وما
يبذل حديثا من جهود لوضع أسـس نظام دراسـه عاليه رفيع المستوى. لقد تم
وضع مسـودة خطه قائمه على التجارب الأجنبيه وذلك للبدء تدريجيا بإدخال
نظام يضمن المسـتوى العلمي العالي الذي يناسب الصفات الذاتيه والظروف
الوطنيه لسلوفينيا.

توجد حاليا في سـلوفينيا جامعتان، إحداهما في ليوبليانا والأخرى في ماريبور
وعديد من معاهد الدراسـات العليا الفرديه المستقله. من أجل ذلك وفي نظام تعليم
صغير كهذا، وجب إيجاد وإدخال اليات عمل مرنه بسيطه تضمن جودة الإداء
عالية المستوى. يجب إذا ومن البدايه دعم عملية التقييم وذلك بأعمال البحث
والتطوير التي تـشتمل على مناهج تطوير وعمليات تقدير مسـتمره، بالإضافة
الى متابعة الفعاليات والإنجازات المعهديه الخاصه بضمان الجوده والمسـتوى
الرفيع.

THE ROLE OF VARIOUS SOCIAL SUPPORT VARIABLES ON TURKISH CHILDREN'S *ANXIETY LEVEL*

FÜSUN AKKÖK
OYA GÜNERI
GÜNSELI ORAL
ZEYNEP (HATIPOĞLU) SÜMER

Dans ce travail, on a étudié le rôle des variables de différents supports sociaux sur le niveau de la situation et du trait d'anxiété des enfants de l'école primaire. Les 196 sujets sont des écoliers de la 4éme et 5éme année. Les données ont été recueillies par 'Social Support Form', 'State Anxiety Inventory', et 'Trait Anxiety Inventory'. Les résultats ont révélé que vivre ensemble avec les parents a un effet significatif sur le niveau de la situation et du trait d'anxiété. On a encore constaté une corrélation positive entre la situation d'anxiété et l'intérêt et l'affection de l'instituteur. Ce travail a prouvé qu'il n'y a pas de différence signifcative entre le niveau de la situation et du trait d'anxiété des écoliers. D'après ces variables, on a examiné les effets de la nature de l'environnement familial et scolaire sur le niveau d'anxiété des écoliers.

Bu çalışmanın amacı çeşitli sosyal destek değişkenleri ile durumluk ve sürekli kaygı arasındaki ilişkiyi araştırmaktır. Çalışmanın örneklemini rastgele seçilen 196 ilkokul 4. ve 5. sınıf öğrencisi oluşturmuştur. Veri toplama aracı olarak Sosyal Destek Formu ile, Durumluk ve Sürekli Kaygı Envanterleri kullanılmıştır. Bulgular aile ile birlikte yaşamanın durumluk ve sürekli kaygı düzeyi üzerine etkisi olduğunu göstermiştir. Bunun yanısıra durumluk kaygı ile öğretmene duyulan sevgi ve yakınlık arasında da positif yönde anlamlı bir ilişki bulunmuştur.Öğrencilerin durumluk ve sürekli kaygı puanlaır arasında ise anlamlı bir farka rastlanmamıştır.

الخلاصة :

تقصت هذه الدراسة دور متغيرات الدعم الاجتماعي المختلفة على مستويات حالة وسمة القلق لأطفال المدرسة الابتدائية. وقد تم جمع البيانات عن 196 تلميذا من تلاميذ الصفين الرابع والخامس باستخدام " استمارة الدعم الاجتماعي " و " قائمة حالة القلق " و " قائمة سمة القلق -. أظهرت النتائج أن للعيش مع الوالدين تأثيرا هاما على مستويات حالة وسمة القلق، وان هناك ارتباطا موجبا بين حالة القلق والحب والود للمعلم، بينما لم تظهر نتائج الدراسة فرق معنوي بين مستويات حالة وسمة القلق لدى الاطفال. كما نوقشت تأثيرات طبيعة البيئة المنزلية والمدرسية واستمراريتها على مستويات القلق لدى التلاميذ فيما يتعلق بهذه المتغيرات.

MOTIVATION AND LEARNING PREFERENCES OF HIGH SCHOOL STUDENTS LEARNING ENGLISH AS A FOREIGN LANGUAGE IN MOROCCO

CHRIS KYRIACOU
NAIMA BENMANSOUR

Cette étude explore la motivation et les préférences d'apprentissage des lycéens marocains concernant l'apprentissage de l'anglais comme langue étrangère. L'étude vise à identifier les préférences des élèves relatives à un nombre de pratiques d'enseignement et à identifier la nature et l'intensité de leur motivation vis-à-vis de l'apprentissage de l'anglais. L'avis des professeurs en ce qui concerne l'utilité de différentes pratiques d'enseignement a été aussi examiné. Une analyse des facteurs des sources de motivation intrinsèque, motivation instrumentale à court terme, motivation instrumentale à long terme, motivation pour l'intégration sociale et motivation pour l'intégration culturelle. Les élèves avaient des préférences d'apprentissage bien définies et cohérentes. Ils étaient fortement visuels et kinesthétiques mais faiblement auditifs. Ils attachaient plus de valeur aux activités cognitives qui impliquaient une prise de conscience de la grammaire. Les préférences des élèves ne semblaient pas être en concordance avec l'avis des professeurs. De tels résultats suggèrent qu'il faut un rapprochement plus étroit entre les professeurs et les élèves pour un enseignement plus ciblé sur les élèves.

تنطوي هذه الدراسة على استكشاف التفضيلات في التعلم وفي التحفيز عند تلاميذ المدارس الثانوية بالمغرب فيما يخص تعلم اللغة الإنجليزية كلغة أجنبية . وتتوخى هذه الدراسة تشخيص تفضيلات التلاميذ بالنسبة لعدد من الممارسات التعليمية وكذا تشخيص طبيعة ومدى حوافزهم لتعلم اللغة الإنجلِيْزية.

تم التطرق كذلك إلى آراء الأساتذة فيما يخص فائدة مختلف الممارسات التعليمية. ونتج عن تحليل عاملي حول مصادر التحفيز عند التلاميذ خمسة عوامل تم التعبير عنها بالتحفيز الذاتي والتحفيز المفيد القصير المدى والتحفيز المفيد الطويل المدى والتحفيز الإدماجي المجتمعي والتحفيز الإدماجي الثقافي. وكان للتلاميذ تفضيلات واضحة ومتماسكة في التعلم.

وهي حركية وشديدة البصرية ولكنها ضعيفة السمعية، وأعطى التلاميذ أهمية بالغة للأنشطة الموجهة نحو الإدراك والتي تتطلب وعيا نحويا. ويبدو أن تفضيلات التلاميذ تغاير آراء الأساتذة الذين يعتقدون أن أنشطة المواصلة هي الأفيد في التعلم. وأن هذه الإستنتاجات توحي بضرورة تقريب الأساتذة من التلاميذ والعكس بالعكس من أجل طريقة تعليمية تتمحور حول المتعلم.

KNOWLEDGE AND ATTITUDES OF FRENCH AND ISRAELI 12TH GRADERS IN AGRICULTURAL OR RURAL SECONDARY SCHOOLS ABOUT WATER AND IRRIGATION RELATED ISSUES

AMOS DREYFUS
DANIEL JACOBI
YOSSEF MAZOUZ
JEAN-LOUIS LACROIX

Dans les pays arides, l'utilisation de l'eau par l'agriculture pose d'importantes questions sociales, économiques et morales. Cette étude s'attache à comparer les connaissances et les attitudes d'élèves israéliens du 12ème degré de l'enseignement agricole (Israel est un pays méditerranéen essentiellement aride ou semi-aride) avec celles d'élèves analogues en France (en France, l'eau n'est pas un facteur limitant de premier ordre en agriculture). Elle a porté sur six aspects de la bonne ou de la mauvaise utilisation de l'eau par l'agriculture. Il était demandé aux élèves de se prononcer sur la désirabilité de situations réelles, sur la possibilité de modifier ces situations et sur l'influence potentielle de cinq facteurs de changement (les connaissances scientifiques, les autorités gouvernantes, les pratiques sociales, les lois de l'économie et l'individu-citoyen). Systématiquement, les élèves israéliens ont mis fortement en avant les 'connaissances' et les 'autorités'. Les réactions des élèves français ont été moins prononcées. Ceux-ci, en outre, ont considéré qu'il n'y avait que deux aspects pour *lesquels certain facteurs proposés pouvaient avoir une influence significative. Enfin, l'individu-citoyen, et non les connaissances scientifiques ou les autorités, était considéré par les élèves français comme le facteur potentiellement le plus influent – actuellement le seul.*

ידע ועמדות של תלמידי כתות י"ב בבתי ספר חקלאיים או התיישבותיים
לגבי בעיות הקשורות למים ולהשקיהת

קציר

בארצות צחיחות, השימוש במים על ידי החקלאות מעורר בעיות
חברתיות, כלכליות ומוסריות. מטרת מחקר זה היתה להשוות את הידע
והעמדות של תלמידי י"ב בבתי ספר חקלאיים בישראל (שהיא בעיקרה
ארץ ים תיכונית צחיחה או צחיחה למחצה), לאלה של עמיתיהם
הלומדים בצרפת, ארץ בה המים אינם מהווים גורם מגביל מרכזי
בחקלאות. ההשוואה נערכה ביחס לשישה היבטים של השימוש במים על
ידי החקלאות. התלמידים נתבקשו להעריך את הרציות של מצבים
קיימים, את הסיכוי לשנות אותם, ואת ההשפעה הפוטנציאלית של
חמישה גורמי שינוי (ידע מדעי, רשויות השלטון, מנהגי החברה, חוקי
הכלכלה, והאזרח הפרטי). התלמידים הישראלים שמו באופן שיטתי דגש
על "הידע המדעי" ועל "רשויות השלטון". עוצמת תגובות עמיתיהם
הצרפתיים היתה חלשה יותר. הצרפתים ייחסו השפעה משמעותית
כלשהי לשני גורמים בלבד. בניגוד לישראלים, הצרפתים הבליטו באופן
שיטתי את ההשפעה הפוטנציאלית של-"האזרח הפרטי", ושל גורם זה
בלבד.

في البلاد الجافه المقحله,إستعمال الماء من قبل المزارعين يوقـظ مشـاكل
إجتماعيه/إقتصاديه وأخلاقيه.
هدف هذا البحث المقارنه بين المعرفه ومواقف طلاب صفوف الثواني عشر في
المدارس الزراعيه في إسرائيل (إسرائيل تعتبر من بلاد حوض البحر الأبيض
المتوسط,مقحله جافه أو نصف جافه),وبين مواقف طلاب آخرون مثلهم يتعلمون
في فرنسا والتي لا يعتبر الماء فيها العامل المحدالمركزي في الزراعه.
المقارنه أجريت لستة وجهات نظر في إستعمال المـاء فـي الزراعـه.طلب مـن
الطلاب تقييم الوضع القائم وإحتمال التغيير والتأثر الفعلي لخمس عوامل تغيير.
(المعرفه العلميه,السلطه المحليه,عادات إجتماعيه,القوانين الإقتصاديه,والمواطن
الفرد).
شدد الطلاب الإسرائيليون على"المعرفه العلميه"وعلى"السلطه المحليه"..بينمـا
كـانت ردود فعل الطلاب الفرنسيين المشابهين لهـم ضعيفـه جـدا حيـث كـان
إهتمامهم لعاملين فقط ,وذلك بعكس الطـلاب اللإسـرائيليون ,الطـلاب الفرنسيون
أبرزوا بشكل كبير تـأثير المواطن الفرد حيـث أظهروه كعامـل رئيسـي وليـس
المعرفه العلميه أو السلطه..

DIETARY FATS AND OILS: KNOWLEDGE AND PREFERENCES OF SCHOOL-AGED CHILDREN IN GREECE

ELENI ZINVRAKAKI
GEORGE MAKRIS
KYRIKOS ATHANSIOU

L'étude qui est décrite dans cet article explore les connaissances et les préférences des 176 élèves Grecs, de neuf à dix ans, concernant l'emploi des graisses et des huiles. Conformément aux resultats, il semble que la majorité des élèves ne peut pas classer les huiles, le beurre et la margarine dans la catégorie juste des ingrédients nutritifs. La majorité écrasante considère l'huile d'olive comme plus saine que les huiles de graines dans les salades et les plats cuisinées. De toute façon, les huiles de graines sont considérées comme plus saines que l'huile d'olive pour les plats frits. L'analyse statistique désigne qu'il n'y a pas de différences entre les deux sexes, à l'exception de leurs préférences quant à l'emploi de l'huile d'olives dans les plats cuisiés et les salades. Par conséquent, les élèves Grecs ne possèdent pas encore l'information nécessaire pour procéder aux choix corrects pour leur alimentation. Enfin, la nécessité d'adoption et de réalisation des stratégies d'enseignement centrées sur des sujets concernant les graisses et leurs conséquences pour la santé est mise en évidence.

Περίληψη

Μελετήθηκαν οι γνώσεις και οι προτιμήσεις 176 Ελλήνων μαθητών, ηλικίας 9 έως 11 ετών, σχετικά με τα λίπη και το ελαιόλαδο.

Σύμφωνα με τα αποτελέσματα, η πλειοψηφία των μαθητών φαίνεται ότι δε μπορεί να κατατάξει τα έλαια, το βούτυρο και τη μαργαρίνη στη σωστή κατηγορία των θρεπτικών συστατικών. Η συντριπτική πλειοψηφία θεωρεί το ελαιόλαδο πιο υγιεινό από τα σπορέλαια στις σαλάτες και τα μαγειρεμένα φαγητά. Τα σπορέλαια πάντως θεωρούνται πιο υγιεινά από το ελαιόλαδο για τα τηγανιτά φαγητά.

Η στατιστική ανάλυση υποδεικνύει ότι, δεν υπάρχουν διαφορές μεταξύ των φύλων,

εκτός από τις προτιμήσεις τους ως προς τη χρήση του ελαιολάδου στα μαγειρεμένα φαγητά και τις σαλάτες.

Συνεπώς, τα Ελληνόπουλα δεν έχουν ακόμα την πληροφόρηση που απαιτείται για να προβαίνουν στις ορθές επιλογές για τη διατροφή τους. Τέλος, αναδεικνύεται η αναγκαιότητα υιοθέτησης και υλοποίησης διδακτικών στρατηγικών που θα επικεντρώνονται σε θέματα σχετικά με τα λίπη και τις επιπτώσεις τους στην υγεία.

الخلاصة :

تستقصي هذه الدراسة معرفة 176 طفلا يونانيا، تتراوح أعمارهم ما بين تسع واحدى عشر سنة، وتفضيلهم للدهون والزيوت. تبين النتائج أن غالبية الأطفال لا يستطيعون تصنيف الزيوت والزبد والمرغرين إلى الصنف الغذائي الصحيح. وبالرغم من أن الغالبية العظمى كانت تعتقد بان استخدام زيت الزيتون أفضل صحيا من زيوت البذور في السلطات والوجبات المطبوخة، إلا انهم أجابوا بأن زيوت البذور أفضل صحيا من زيت الزيتون للوجبات المقلية. ولم توجد فروق ذات دلالة إحصائية بين إجابات الجنسين، إلا فيما يتعلق بتفضيلهم لاستخدام زيت الزيتون في السلطات والوجبات المطبوخة. وتشير النتائج إلى افتقاد الأطفال اليونانيين للمعلومات اللازمة لقيامهم باختيار الغذاء الصحي، وإلى الحاجة لتطوير استراتيجيات التدريس التي تركز على الدهون وتأثيراتها على الصحة.

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