Human resource development through vocational education in the United Arab Emirates: the case of Dubai Polytechnic

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Abstract
This article examines the provision of post-secondary vocational education in the United Arab Emirates (UAE). It aims to explore the role of vocational education in supporting the national human resource development strategy and to identify the economic, social, cultural and political factors that impact upon the implementation of vocational education in the UAE. As a case study, Dubai Polytechnic is considered as an example of a private sector provider of vocational higher education. It is concluded that vocational education has played a significant role in supporting the government's policy of emiratisation, which aims to increase the proportion of nationals participating in the labour force by replacing expatriate workers. It is recognised that all educational institutions have been influenced by a unique set of social and cultural factors, and in addition, private sector institutions have been considerably hindered by a number of political and economic constraints.

Key themes: Higher education
United Arab Emirates (UAE) / Dubai / Gulf States
Quasi private sector institution (sponsored by Dubai Chamber of Commerce & Industry)
First institution in the UAE to offer teaching to mixed gender classes
Collaboration with UK universities / franchised programmes
Learning style of students / national culture
Student ability in English language
Quality management/improvement

Introduction
The governments of many developing countries believe that a large and successful vocational education sector is an important and necessary element in their development strategies as it equips citizens with the skills needed by industry and at the same time helps reduce unemployment. The United Arab Emirates (UAE), like most of the countries in the Arabian Gulf region, relies heavily on expatriate labour (nearly 90 per cent of the UAE’s labour force are expatriates; Abed et al, 1996) while youth unemployment is increasing at an alarming rate (Weston, 1998). The participation of UAE nationals in the labour force is only just over 50 per cent (Abed et al, 1996).

Education, both general and vocational, has always been one of the highest priorities of the UAE government. When the UAE was established in 1971 after the withdrawal of the British from what was previously known as the Trucial States, Article 17 of the UAE constitution was created
which states, "Education is an essential element in achieving the progress of society. It is mandatory in the elementary stage and free for all stages." It was only since the mid-1980s, however, that particular attention was paid to vocational education with the establishment of technical education schools at the secondary level and in 1988 the establishment of the Higher Colleges of Technology.

It is often believed or assumed that the advantages of vocational education include its ability to accelerate economic growth, provide industry with labour possessing the skills that are in short supply, reduce youth unemployment, instil technical knowledge, provide an option for less academically able students, reduce poverty among low income groups and benefit from economic globalisation. In a convincingly argued paper Psacharopoulos (1997) challenges each of these commonly believed benefits of vocational education. It seems unlikely, however, that many countries will be changing their vocational education and training strategies in the near future as few viable and proven alternatives have been suggested.

Very little research has been done in the Arabian Gulf region about the implementation and benefits of vocational education and it is particularly non-existent in the United Arab Emirates. This paper intends to fill the gap in the literature by providing some basic facts about the UAE and details of its vocational education strategy. The UAE has a large private sector at all levels in the education system. Article 9 of the 1972 Federal Law allows the development of private schools to provide a wider choice to parents, to cater for the needs of different groups in society and to increase competition. Private schools now account for over a third of the total schools in the UAE. The UAE also has over thirty private universities and colleges. This study is concerned mainly with vocational education in the post-secondary sector. It focuses on the development, role and operation of Dubai Polytechnic, a private (quasi-government) higher education institution established in 1997.

The aims of this study are to:
- Examine the extent to which the UAE has developed a vocational education sector.
- Assess the extent to which vocational education has supported the national human resource development strategy.
- Identify the main economic, social, cultural and political factors that impact upon the implementation of vocational education in the UAE.
- Examine the role of private sector institutions in the provision of post-secondary vocational education, with particular reference to Dubai Polytechnic.

Method

The data for this paper were obtained from a longitudinal research project undertaken over a three-year period (1998-2001). Data relating to Dubai Polytechnic were collected from course monitoring reports, the minutes of staff meetings, registry statistics, student feedback reports, a questionnaire completed by 79 HND (Higher National Diploma) students and some structured interviews with key staff members. A questionnaire was also completed by HRD/HRM professionals in 22 large business organisations in the Emirate of Dubai. Most of the secondary data came from government sources.

Background on the UAE

It is often claimed that Arabs have a strong tradition of literacy, rooted partly in the obligations of a Muslim to daily prayers and recitation of the Holy Qur'an, but even in 1980 over a half of Emirati men aged over 45 were illiterate, and over three-quarters of women. The first formal,
systematic education provided in purpose built schools did not appear until the 1950s. Inland, a number of nomadic tribes maintained simple lives on a diet of dates and camel milk while in the coastal regions fishing and pearling were traditionally the major occupations. It was the discovery of oil, and its production from 1962, that acted as the catalyst for the country's rapid development into one of the world's wealthiest countries. Per capita GDP was US$17,810 in 1997 (Business Monitor International, 1998). In pace with the UAE’s rapid economic development, its workforce increased from 288,414 in 1975 to 1,378,390 in 1998 with expatriate labour accounting for the majority of this increase.

The preference of UAE nationals is to work in the public sector where salaries are generally higher and working hours shorter. The participation of nationals in the private sector was estimated to be as low as one per cent in 1995 (Al Roumi, 1999). The greatest challenge facing the UAE government is encouraging nationals to take up manual and technical jobs and jobs in the private sector. When nationals are willing to take employment in the private sector, they are usually only willing to consider managerial positions. All too often, however, such applicants lack the experience, skills, qualifications and motivation required by employers while expatriate workers have more experience, are better qualified and are willing to work longer hours for lower salaries.

Over one quarter of the UAE population is aged under 15 years. In 1999, over 80 per cent of national students who graduated from secondary school entered higher education. Government reports estimate that the labour market must absorb 10,000 nationals annually (Al Roumi, 1999). While young nationals are better educated than ever before, youth unemployment is rapidly increasing. For these reasons the Ministry of Labour and Social Affairs has been aggressively implementing a range of strategies in support of its emiratisation policy. This policy aims to reduce the country's reliance on expatriate labour and increase the participation of nationals in the labour market. While the Ministry of Labour has claimed considerable success in sectors such as banking and telecommunications, the proportion of nationals employed in the private sector is likely to remain below 10 per cent by 2010.

Higher education in the UAE
The government is committed to free education for all citizens. Education accounts for 20 per cent of the federal budget and, with defence, was one of only two sectors to receive more money in 1999 than the year before (Allen, 1999). The responsibility for overseeing a complex and sophisticated educational system lies with the Ministry of Education and Youth and the Ministry of Higher Education and Scientific Research. The Ministry of Labour and Social Affairs is responsible for vocational training. In 1995 the UAE Minister of Education signed a Memorandum of Understanding with the United Nations Educational, Scientific and Cultural Organisation (UNESCO). Both sides agreed that UNESCO would help in implementing the recommendations of the report of the International Commission for Education in the twenty-first century. UNESCO further agreed to co-operate with the development of secondary, technical and higher education in the UAE. With regard to higher education, objectives were to include improving the quality and suitability of higher education, strengthening the links between higher education and the labour market and developing training and research activities. The Ministry of Education recently prepared a Strategic Plan for educational development in the UAE up to the year 2020.

The UAE University, which is located in Al Ain, was the first university to be established in the UAE. It had its first student intake in November 1977 and has since produced over 20,000 graduates. The language of instruction is mainly English with some courses taught in Arabic. The

University was established with four faculties and it now offers courses in a wide range of subjects including agricultural sciences, business administration, education, engineering, humanities, law and medicine. More than two thirds of the students are females and in 1998 72 per cent of those graduating from the UAE University held arts degrees.

By the mid 1980s it was clear that the UAE's institutions of higher education were not producing graduates with the types of skills and knowledge demanded by industry. Thus, in an effort to increase the provision of post-secondary vocational and technical education the federal government established the Higher Colleges of Technology (HCT) in 1988. The HCT currently have eleven colleges in six cities. Each city has a separate male and female campus except Fujairah, which has only a Woman's College at the present time. The HCT offer a diverse range of career-oriented courses in five broad programme areas: business, information technology, engineering, communication technology and health science. Courses are offered to UAE nationals aged over 17 at Certificate, Diploma, Higher Diploma and Degree levels. All programmes are delivered in English and great use is made of modern technologies in teaching.

In 1999/2000, 89 per cent of HCT graduates took up employment or further study, and of those gaining employment, 60 per cent were in the private sector (Al Musharrakh, 2000). A survey by Wilkins (2001a) found that 68 per cent of large employers in the Emirate of Dubai regularly recruit HCT graduates, compared to 50 per cent who take graduates from the UAE University.

In June 1996 the Minister of Higher Education established an Advisory Planning Committee (APC) to examine all aspects of higher education in the country, to assess its current status, identify problems, propose solutions and recommend policies and actions which would ensure that suitable and high quality post-secondary education would be available for UAE citizens well into the twenty-first century. The final report predicted that higher education enrolments were likely to increase by about 7 per cent each year during the next decade. The APC recommended that it was not practical to continue expanding the UAE University and instead argued for the creation of a new university. It stated that a new university should cater especially for females as by 2006 it estimated that females would account for 80 per cent of the total enrolments in federally supported HE institutions. This recommendation resulted in the decision of the federal cabinet to create a new university named in honour of the founder and president of the UAE, Sheikh Zayed bin Sultan Al Nahyan. Zayed University took its first students in 1998 and it currently operates two campuses, one in Abu Dhabi and one in Dubai, both for females only. Like the HCT, Zayed University delivers programmes in the English language and emphasises the use of the most current technologies for teaching and student learning. For example, students use notebook computers in classes and at home. Classrooms provide computer access for every student.

In 1996/7, over 75 percent of students in higher education attended the state-run UAE University or one of the Higher Colleges of Technology. Since 1997, however, a number of large private universities have been established. Four of these universities were established in 1997: the University of Sharjah, the American University of Sharjah, Al Bayan University (based in Abu Dhabi) and Dubai Polytechnic. Some private sector universities are, in fact, quasi-government institutions. For example, the University of Sharjah and the American University of Sharjah are both supported by Sheikh Sultan bin Mohammed Al-Qasimi, Ruler of the Emirate of Sharjah, while the Dubai Chamber of Commerce and Industry established Dubai Polytechnic.

The great majority of teaching in higher education, both in the public and private colleges and universities, is conducted in the English language. In 1998 only seven private higher education institutions were officially recognised by the Ministry of Higher Education. These were mainly

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smaller specialised colleges such as Dubai Medical College for Girls, Dubai Pharmacy College, Dubai Police College and Etisilat College of Engineering. By the end of 2000 an additional seven universities and colleges had received their licensure of higher education from the Ministry of Higher Education so that the UAE currently has fourteen accredited private sector institutions of higher education. In addition to the University of Sharjah and the American University of Sharjah which both gained their accredited status in 1999, another institution to also gain recognition in 1999 was the Dubai Campus of the Australian University of Wollongong which was established in 1993. Dubai Polytechnic and the American University in Dubai received their licensure of higher education in 2000. While each degree programme has to be separately accredited by the Ministry of Higher Education, at the start of 2001 five institutions still had not had any programmes accredited.

**The rationale for establishing Dubai Polytechnic**

Dubai is one of the seven emirates that make up the UAE and it is the second richest after Abu Dhabi. Dubai has one of the most diversified economies in the Arabian Gulf region and has developed itself into a centre for manufacturing, re-export, banking, financial services, tourism, retailing and distribution. While Abu Dhabi holds the world’s third largest oil reserves, which should last to the end of this century, Dubai’s reserves are expected to become depleted to the extent that its oil sector will no longer be significant by 2020. The government of Dubai recognises that in order to maintain its continued rates of growth and prosperity well into this century it needs to further diversify its economy to replace the contribution currently made by the oil sector. It is estimated that tourism will account for 20 per cent of Dubai’s GDP by the year 2010. Dubai has concentrated on developing market clusters as a way of enhancing economic growth. It concentrates on developing industries where it can gain a competitive advantage. Other countries have adopted this strategy for many years and Silicon Valley in California is probably the most famous example. In 1985, Dubai developed a free trade zone, which has been very successful in attracting manufacturing, warehousing, distribution and high-tech industries to the emirate, and has since established an Internet City, Media City and Textile City. Foreign companies are attracted to the emirate by the offer of tax-free trading, minimal regulation, well-developed infrastructure and the availability of reasonably priced skilled labour.

Most of the Gulf countries formally plan their economic development through the creation of economic plans. While economic planning is undertaken at the federal level in the UAE, the Department of Economic Development in Dubai is responsible for identifying specific development goals for the Emirate of Dubai and the strategies by which they will be achieved.

The Dubai Strategic Development Plan for 1996-2000 identified five priority areas for development of the emirate, which concentrated on target industrial sectors but which also included expanding and upgrading the technical workforce and increasing the participation of nationals in the labour market. Human resource development was identified as one feature of the supporting framework that was necessary to achieve the plan’s objectives. The plan recognised the need to further expand and upgrade the educational network and training services in the emirate. It suggested the establishment of new technical and vocational training institutions in both the public and private sectors and at both the secondary school and higher education levels, with specialisations in business and hospitality management in the latter.

The Dubai Chamber of Commerce and Industry (DCCI) undertook a study to identify the needs of the commercial and industrial sectors for trained and qualified labour. Another study carried out later involved interviews with company owners and heads of public departments and educational institutions in order to identify the volume and sort of specialisation needed. In
response to the extensive market surveys and the Dubai Strategic Development Plan 1996-2000, the DCCI established Dubai Polytechnic in early 1997. The first students enrolled in September 1997 mainly on Edexcel BTEC Higher National Diploma (HND) programmes. An MBA programme started in February 1998. By February 1998 the Polytechnic had over 300 students on full and part-time academic courses or courses in English Language. During 1997 over 160 people had attended a series of short professional courses which covered subjects such as quality management, project management, international tourism, software systems analysis and design methods and a range of management topics some specific to particular industries e.g. hospitality management.

The DCCI decided, through its governing board, to adopt the "polytechnic" model for its new higher education institution (Al Roumi, 1997). Dubai Polytechnic is, in fact, modelled on the system of vocational higher education, which was represented in the UK by the former polytechnics prior to 1992 when they were all made universities. The main purpose of the polytechnics was to provide higher education that met the needs of industry and commerce. Their courses were designed to give students the skills and competencies necessary to operate effectively in the modern workplace. Dubai Polytechnic was, therefore, committed to the British system of higher education and all courses were to be accredited, at least for a few years, by UK universities and awarding bodies.

While the DCCI established Dubai Polytechnic and agreed to fund it during its early years of development, it was expected that it would operate with minimal supervision and that it would eventually become an independent entity gaining full university status. The DCCI hoped that the polytechnic would be operating in a break-even situation after its third year of operation. While education is free to UAE citizens at the federal-supported universities and colleges, all students at Dubai Polytechnic must pay tuition fees. For UAE nationals, in 2000/1 these were Dhs. 40,000 (US$10,900) for a HND and Dhs. 53,000 (US$14,440) for an MBA, with expatriates paying about 15-20 per cent more for most courses.

The polytechnic's programmes are available to students of any nationality who can satisfy the relevant academic requirements, but academic staff have been informed that the polytechnic's Board of Governors (at the DCCI) "expect" the proportion of nationals enrolled across all programmes to always exceed 60 per cent. This created a dilemma for some departments. While the Dubai Strategic Plan specifies the need to expand Dubai's tourism sector and the DCCI has emphasised its desire to see tourism on the polytechnic's curriculum, nationals are not keen on working in the tourism sector, or indeed in most parts of the private sector, apart from a few exceptions such as banking and financial services. It is a fact that organisations in the tourism sector do expect employees to work long hours including evenings and weekends and that they pay relatively low salaries. As a result, the full-time HND in Tourism & Hospitality Management has attracted mainly expatriate students, with nationals never making up more than about 15 per cent of any cohort. Nationals that do join the tourism courses still normally intend to work in the public sector, for organisations such as the Dubai Department of Tourism and Commerce Marketing or the state-controlled Emirates airline. At the start of 2000, the proportion of nationals enrolled across all courses at the polytechnic was just over 65 per cent. It should be noted, however, that a large proportion of these nationals were on English Language courses or other sub-degree foundation programmes.

The first intake of full-time students at the polytechnic enrolled on a range of HND programmes, some off-the-shelf BTEC programmes such as those in Business, and some developed by the polytechnic and accredited by BTEC through its licencing agreement system, such as the HNDs in Tourism & Hospitality Management and Marketing & Media. BTEC
HNDs are offered at several centres in the Gulf region and BTEC maintains a regional office in Muscat, the capital of the Sultanate of Oman, a neighbouring country of the UAE. The subjects offered at the polytechnic initially were Business, Business Information Technology, Computing, Marketing & Media and Tourism & Hospitality Management. Later, HND programmes were introduced in Software Engineering, Electronic & Electrical Engineering and Graphic Design. The HND is delivered over two years, or three years in part-time (evenings) mode. The language of instruction for all programmes in the polytechnic is English, which is the main language used in the UAE for business and trade.

It was intended that the majority of HNDs would lead to one-year (two years in part-time mode) top-up bachelor's degrees (also known as conversion or bridging degrees) that would be accredited by UK universities. The polytechnic-developed HNDs were each designed in association with a selected UK university to ensure this progression. For example, it was agreed with Bournemouth University that the polytechnic's HND in Tourism & Hospitality Management could give students with a good grade profile admission to the Bournemouth Top-Up BA in International Hospitality & Tourism Management which would be delivered at the polytechnic.

By September 1998 Dubai Polytechnic had three schools: the Dubai Business School with departments of Business Management & Finance and Tourism & Hospitality Management, the School of Information Technology and the School of Media & Corporate Communication with departments of Media, Marketing & Advertising and Modern Languages & Corporate Communication. Until September 1998, the polytechnic undertook all of its activities at the DCCI's centrally located office block where two entire floors of its building were converted into classrooms, IT laboratories and staff offices. The polytechnic also had use of the DCCI's lecture and conference theatres, which could seat 200 and 700 respectively. However, due to the rapid increase in student numbers, from September 1998 only the School of Information Technology stayed at the DCCI site while the other schools moved to the Al Masaood building, an office block about one kilometre away from the DCCI building, in which the polytechnic occupied about half of the total space available (about five floors). It was originally intended that the polytechnic would occupy the Al Masaood building for no longer than two years as it was planned to build a purpose-built campus elsewhere in the city. Most postgraduate and professional courses from all schools continued to be delivered at the DCCI building mainly because students preferred it for reasons of prestige and comfort and because of its convenient location. The DCCI occupies an impressive, distinctively designed building located by Dubai's creek, a busy and picturesque waterway. Most of the polytechnic's classrooms and offices in the DCCI building offer panoramic views of Dubai. During office hours the building is bustling with businessmen and other important people. For these reasons students have always enjoyed undertaking their education and learning in the DCCI building.

Most of the polytechnic's facilities, such as its library, its refectory and student common room, its student counsellors and the polytechnic shop are, however, located in the Al Masaood building. Though this building has been satisfactorily converted for teaching and learning, it suffers from poor access, as it is located in an area where considerable building work is still in progress. For two years, before the road network in the area was completed, access to the Al Masaood building was via a bumpy, sandy track. Outside, there was an extreme shortage of space for parking cars. Polytechnic students and staff had to compete for the limited parking spaces with staff from the other offices nearby and with the residents from a few apartment blocks.
Accreditation

The management of the polytechnic agreed with the DCCI that academic programmes would initially be accredited by UK universities and awarding bodies, and possibly the Maastricht School of Management (Netherlands), rather than by the UAE Ministry of Higher Education, as the process to achieve Ministry accreditation takes considerable time and it is not possible anyway until the first cohort of students have graduated. It was intended, therefore, that the polytechnic would begin the process of applying for local accreditation some time after June 1999, which was when the first HND intake was expected to graduate. The initial cohorts of students were not concerned about the lack of local accreditation as their awards were accredited by UK universities and awarding bodies, which many perceived to be of higher status than local accreditation anyway.

The polytechnic developed collaborative links with a number of universities including the University of Hull, Leeds Metropolitan University, Bournemouth University, Middlesex University, the University of Central Lancashire and the Maastricht School of Management to enable its future academic development and develop activities such as joint conferences, workshops and research collaborations.

The polytechnic's Business School planned its first MBA intake for February 1998 and an intake for a BA Top-Up in International Business Administration (BAIBA) in September 1998. The polytechnic's Director, Associate Director, Head of Finance, Registrar and a number of academic staff had all previously been employed at Bournemouth University, so it seemed logical to them to seek accreditation with Bournemouth University as it was believed that their connections and experience with Bournemouth programmes and systems would quicken the accreditation process.

The MBA was offered in part-time evening mode only, over 2½ years. Despite a big marketing campaign the MBA recruited only twelve candidates for the cohort that began in February 1998. This was disappointing as it was known that competitors had cohorts as large as 50. None of the federal universities or colleges offered an MBA in 1998. Two years later, in 2000, neither students nor polytechnic staff were happy with the MBA programme. Analysis of student feedback documentation, the minutes of staff meetings and course monitoring documentation revealed a number of problems and issues. Students found some of the course content inappropriate for themselves and for the UAE, they found the programme inflexible in structure and content (as it offered no options or specialisms) and they complained of insufficient learning materials and resources, especially with regard to UAE contextualisation. The MBA suffered high student drop-out and low pass rates and for a variety of reasons the majority of students that had been accepted onto the programme were struggling to meet the required standards. Some students found it difficult to attend regularly in the evenings, others struggled in learning and writing in English in an academic context while others simply underestimated the demands of the programme and failed to meet the ongoing assessment requirements. By the summer of 2000, Dubai Polytechnic informally agreed with Bournemouth University to run down the MBA programme and to stop recruiting new students to it.

Dubai Polytechnic had no MBA intake in September 2000 and it was acutely aware that without an MBA it had a great gap in its course portfolio that could damage the image and reputation of its Business School. The polytechnic already had a good relationship with the University of Hull as it was already running their Master of Research programme and a specialised MBA in Banking & Finance. The University of Hull agreed that from February 2001 the polytechnic could also offer and deliver its MBA with specialisms in General Management, Financial Management or...
Strategic Marketing. This programme attracted 21 candidates to its first cohort and the initial feedback from both students and staff has been positive.

The BAIBA programme, first offered in September 1998, proved to be no more successful than the initial MBA for much the same reasons. In hindsight, the polytechnic made an error of judgement when it remained determined to start the BAIBA programme when none of its own HND students had yet graduated. The first cohorts of full-time HND students were only due to complete their programmes in June 1999. The initial applicants for BAIBA were all UAE nationals holding Advanced Diplomas from the HCT. There was initially some confusion and disagreement between polytechnic and Bournemouth staff about how to treat these applicants and it was eventually decided to put them through a one-year bridging programme. Most of the HCT graduates failed to make satisfactory progress on either the bridging programme or on the BAIBA mainly due to their unsatisfactory study skills and ability in written English.

In September 1999 the BAIBA programme recruited only thirteen students. The number of students who had successfully completed their HND and wanted to progress to the top-up degree had been significantly over-estimated. During the spring of 2000, Dubai Polytechnic decided to stop recruiting onto the BAIBA programme. It was arranged to replace it with a range of BA top-up programmes in Business, offered with specialisms in Finance, Marketing and Human Resource Management, and accredited by Leeds Metropolitan University. The first cohort began in October 2000, and like with the Hull MBA, the initial response to it from both students and polytechnic staff has been overwhelmingly favourable.

Prior to September 2000, the majority of students enrolled on an academic course (excluding English Language courses) at Dubai Polytechnic, were taking an Edexcel BTEC Higher National Diploma (HND) programme. In early 2000, over 350 students were registered on a range of HND programmes in Business, Information Technology, Graphic Design, Marketing & Media and Tourism & Hospitality Management. In September 1997 and September 1998 over 100 candidates were recruited in each cohort to the Business programme alone. In addition, smaller cohorts started in each February from 1998.

Sutton and Tse (1997) argue that educational managers must give urgent consideration to quality during times of rapid expansion because all too often quantity is achieved at the expense of quality. Most of the early HND cohorts at Dubai Polytechnic suffered at least 50 per cent drop-out and failure rates. Students who were used to didactic, teacher-centred secondary education found it difficult to adjust to the student-centred and self-learning expected by the HND. In addition, a large proportion of students were found to have unsatisfactory ability in writing in the English language. They were, however, able to communicate fluently when talking rather than writing. When the students were interviewed for enrolment, the majority was not requested to take a written test as they had satisfactory grades in English from their secondary school and it was assumed that if they could communicate orally, almost perfectly, then their writing ability must be satisfactory. Once this assumption was proved wrong, the polytechnic quickly introduced compulsory reading and writing tests for applicants seeking admission onto any academic programme. These tests had to be taken and passed by applicants before admissions tutors could grant admission onto any academic programme, unless the applicant had previously taken a recognised test such as TOEFL or IELTS and passed it with a satisfactory score. During recruitment and course induction more emphasis was placed on the required style of learning expected by western higher education and all students were offered supplementary courses in study skills. All HND students were also offered additional courses to improve their English and drop-in workshops to help with specific problems or issues such as particular assignments or projects. By 1999/2000, the pass rates on the polytechnic's HND were as high as any UK college.

and the BTEC external verifiers constantly commented on the high standard of work produced by the polytechnic's students.

The HND is offered by a number of higher educational institutions in the Arabian Gulf region. A survey of 104 graduating HND students by Wilkins (2001b) in the UAE and Sultanate of Oman found that the vast majority were satisfied with their programme: 8 per cent rated it "excellent", 36 per cent "very good", 50 per cent "good", 4 per cent "poor" and 2 per cent "very poor". It was observed that those rating their programme "poor" or "very poor" had the tendency to have grievances about their institution or their lecturers rather than about the HND programme itself. Student feedback about course content and the style of learning and assessment was largely positive.

At the present time, the UAE Ministry of Higher Education has not accredited any foreign HE qualification. It was not until the polytechnic's first HND students graduated in June 1999 that the full implications of this were understood. Organisations in the public sector only recognise locally accredited qualifications when making decisions about appointments and salaries. Almost half of the polytechnic's HND graduates were nationals and the majority wanted to gain employment in the public sector. The public sector refused to recognise their HNDs, however, and those that were offered employment were only offered salaries that were little higher than those given to secondary school graduates and well below what was paid to graduates of the federal-funded HCT even though the HCT Advanced Diploma equates only to the first half of an HND. Applicants with a HCT Advanced Diploma who want to obtain a UK top-up bachelor's degree are normally required to first take the second year of a full-time HND over one academic year, or over three semesters (1½ years) if studying in part-time mode. Curiously, degrees and diplomas gained from abroad, rather than from institutions in the UAE, are recognised.

By the end of 1999, Dubai Polytechnic felt that it had fulfilled the criteria necessary to be accredited by the Ministry of Higher Education as a recognised institution of higher education. This was achieved in early 2000. Although Dubai Polytechnic was then a recognised institution of higher education, it didn't mean that its programmes were accredited or recognised. The next stage in the accreditation process is getting each degree programme separately accredited. In September 2000, Dubai Polytechnic introduced a range of bachelor's degrees (BA, BBA, BSc) which were developed internally but which reflect the content of their existing UK-accredited programmes. It is hoped that these bachelor degrees will gain accreditation from the Ministry of Higher Education by the end of 2001. They were offered in September 2000 with no foreign accreditation although the design of the programmes was such to allow possible dual UK/UAE accreditation, which remains an option for the future subject to approval of the Ministry of Higher Education. It is believed, however, that the ministry does not favour dual accreditation. The new bachelor degree programmes proved to be extremely popular. The Bachelor of Business Administration (BBA) alone attracted over 120 students while the HND in Business failed to attract sufficient candidates to run. 72 per cent of the first cohort of BBA students are UAE nationals. The polytechnic had previously been popular with expatriate students, especially Asians, but this market sector has been lost as both expatriate parents and students prefer internationally accredited programmes (especially from the UK or US) rather than locally accredited ones which may not be recognised in their home countries.

**Academic staff**

Dubai Polytechnic delivers the majority of its programmes with its own staff. It established during its first year of operation a strong core of full-time teaching faculty, which included a head

for each department and school. The UK accrediting universities also provide regular visiting scholars from their own staff and a few locally recruited part-time lecturers are used if they are experts in their field and if they can demonstrate in their teaching the ability to enhance contextualisation for the local environment. The polytechnic believed that full-time staff would be more committed to the successful development of the polytechnic and that only full-time staff could be relied upon for course development and to ensure that programmes gained accreditation with UK universities. It was also felt that they would develop a consistent pedagogical philosophy based on best practice in the UK, that they would provide strong tutorial support for students, undertake research and consultancy activities and deliver short courses tailored for the business community. In most respects, the full-time permanent academics (employed on renewable two or three year contracts) fulfilled the expectations of the polytechnic's management.

The initial teaching staff were recruited mainly in the UK, but also locally in the UAE. Although they had a range of nationalities, the majority were UK or US educated. The majority did not speak Arabic, but they were well-qualified and experienced academics who were particularly strong at course development. As the polytechnic developed, a greater attempt was made to employ Arab nationals who were bilingual. The UAE labour legislation requires all employers to give preference in employment first to UAE nationals and then to other Arabs before people of other nationalities are considered. The director, and most of the heads of schools and departments, are now Arab nationals from a range of countries including Egypt, Jordan, Lebanon, Algeria and Morocco. UAE nationals hold a number of the senior non-academic and administrative roles. All the Arab academic staff hold UK or US qualifications and have teaching experience at UK or US universities. Currently, one third of the teaching staff in the Business School are Arabs. The Arab staff sometimes explain difficult or misunderstood concepts to students in Arabic, something which the non-Arabic speakers clearly can not do, and the Arab lecturers themselves believe that they understand the local culture better and can therefore contextualise their teaching better. Interestingly, feedback from students does not generally show any preference for Arab speaking lecturers.

Like all organisations relying heavily on expatriate labour, turnover of staff at the polytechnic tends to be relatively high. It was particularly high during the first two years of its operation, but has now fallen to acceptable levels. The first cohorts of students found the high staff turnover very disturbing, perhaps because their preference for teacher-centred learning encouraged a loyalty to the lecturers that had previously taught them.

The polytechnic pays relatively high salaries; about US$36,000 for a lecturer and up to US$47,000 for a senior lecturer, and it also pays for accommodation, medical insurance, schooling for dependent children and annual air tickets for vacations, all for staff, their spouses and children. The polytechnic was able, therefore, to recruit well-qualified and experienced academic staff. Over half of the academic staff (ignoring those teaching English) have a PhD. Most of those without a PhD are currently working towards one, mainly with UK universities. All academic staff are encouraged to undertake research activities, both applied, perhaps for local business organisations, and academic leading to publication in refereed journals or papers for conferences.

**Language and culture**

While Arabic is the national language of the UAE, the common language of business is English. A greater proportion of the UAE labour force is more fluent in English than in Arabic. This is not surprising given that nearly 90 per cent of the workforce are foreigners. The UAE increasingly wants to play a greater role in international trade, and here again the common
language is English. English is also the common language of management theory, in communication and information technologies and in industrial sectors such as engineering. The UAE government realised more than twenty-five years ago the importance of nationals becoming fluent in both Arabic and English, and ever since the establishment of the UAE University, English has been the main language of instruction in higher education.

In most private sector organisations, internal communication is done in English. A survey by Wilkins (2001a) found that while 41 per cent of large organisations with a training centre in the Emirate of Dubai deliver training only in English, no companies used only the Arabic language. The survey further discovered that 52 per cent of the organisations sampled actually deliver training to improve employee language and communication skills in English.

Despite the widely recognised importance of nationals being competent in reading, speaking and writing in English, most higher education institutions and private sector organisations have found that a great proportion of nationals leave the school system with unsatisfactory ability in English, especially in writing. However, many of these individuals fail to recognise that they have insufficient ability in English and they still expect to be admitted onto programmes of higher education. Even when students have reasonable reading and writing ability, their comprehension can be drastically reduced once the language expected in HE academic study and subject-specific terminology is introduced.

Since Dubai Polytechnic introduced mandatory reading and writing tests as part of the application process for all academic programmes and since it offered both voluntary and compulsory (for those students needing them) supplementary English courses for those already enrolled on sub-degree programmes and drop-in workshops to help with specific problems such as understanding a particular journal article or checking a draft assignment prior to its submission, student drop-out and failure due to insufficient ability in English has been virtually eliminated. Staff delivering programmes have been trained to be helpful and sympathetic to learners without lowering their expected academic standards. BTEC external verifiers have confirmed that a majority of the work produced by polytechnic students is of a comparable standard (if not higher) than that produced in the UK.

The UAE national culture complies with the Arab culture described by many writers (Dakhil, 1988; Terpstra and David, 1991; Abdalla and Al-Hamoud, 1995; Al Bahar et al, 1996; Agnaia, 1997). Arabs are very interested in a person's status, position in society, education and personal contacts. Religion (Islam) and family loyalty heavily influence the national culture. Children are taught to respect their parents, other elders in their family and people with authority. This includes school teachers, hence explaining the preference of students for didactic, teacher-centred learning. This encourages rote learning and a passive, unresponsive attitude in class whereby teachers are rarely questioned or challenged. Many Arab students in higher education still believe that it is the job of the lecturer to impart knowledge and that they themselves have a minimal role in the learning process. Hence, if they fail an examination, it is the lecturer that the student often blames and not themselves for not attending lessons or adequately preparing for the examination.

The polytechnic's management and academic staff are well aware that it is impossible to simply recruit national students and expect them to fit immediately into the British system of vocational higher education. Academic staff and advisors go to great length to explain the teaching methodologies used and learning styles expected during the application and pre-enrolment stages. The topics are covered again during course induction. Just as nationals entering their higher education have had to adapt to new teaching and learning styles, so too have the academic staff had to adapt. It is not sufficient for them to simply replicate the teaching styles they
adopted in the UK or US, or wherever, if they are to be successful with Emirati students. Lecturers at the polytechnic have had to be much more aware of their own teaching styles and they have had to develop new and innovative learning strategies that motivate and involve students so that they not only learn theory and concepts but that they also understand them and are able to apply them.

The eagerness of young nationals to get onto degree programmes (often with pressure from parents to do so) often results in them attempting to do so at any cost; if they don’t get admitted onto one programme, many will simply apply for another, even if the subject is not the one they initially wanted. Many students apply for entry onto the programmes they perceive as easiest regardless of the subject or course content. Some are scared of failure, especially if they have already had to do a preparatory foundation year, while others are simply lazy.

In September 1998, eight students were refused admission to the HND in Tourism & Hospitality Management because they had not passed the entry tests in English with sufficiently high scores. They were all offered a place on a one-year H.E. preparatory course that concentrated on improving ability in English, which they all accepted. By the end of the year, seven of the eight students had decided to take the HND in Graphic Design instead of the Tourism programme that they had originally applied for. When questioned by staff from the Department of Tourism, most of these students confessed that they had switched courses simply because they believed (or were told by other students) that Graphic Design would be a much easier programme. Though not necessarily the case in this example, once students gain admission onto courses in subjects in which they have no real interest, they easily become demotivated and poor performers.

UAE nationals do not, in general, possess a work ethic as recognised in the west. Many young nationals expect to receive jobs that have status, that are well paid and that do not require long working hours, or work during evenings or at weekends, regardless of their ability, experience or qualifications. Similarly, many expect to gain their degree or HE diploma regardless of their ability or the amount of effort and commitment they are willing to give to their study. Many do not care if they work or not. The wealth of many families and a generous welfare state have undoubtedly acted as a disincentive for many young people to either get an education or enter the labour market. The government has had to educate young people about their expected role in society and about the value of education, especially education which will be helpful to them in gaining employment of the type they desire. Many nationals in higher education remain lowly motivated, however, and they attend lessons irregularly, often do not submit coursework and ignore any topic not in the examination syllabus. Federal institutions such as the HCT implement strict disciplinary rules so that students with poor attendance or those that fail a pre-determined number of courses are withdrawn from their programme. While Dubai Polytechnic has similar requirements of students, being in the private sector and needing student numbers and tuition fee income to break-even, it is sometimes more difficult to enforce such rules. Many of the nationals studying at the polytechnic were rejected by the federal institutions (where they would not have had to pay tuition fees) either because they had not satisfied the academic requirements or because they had not fulfilled behavioural requirements.

In accordance with the cultural and religious beliefs of Emiratis, the UAE is a male dominated society. Though in law the status of women is equal to that of men with women having the right to work and own property, women tend to take a subservient role in both the family and the workplace. Many females do not work because their husbands or parents prefer them not to, or because they cannot secure a suitable position, and hence, female participation in the labour force was recently estimated as 19 per cent (Abed et al, 1996).
In most schools, males and females are taught separately. Even in all of the federal universities and colleges males and females are taught on separate campuses. Dubai Polytechnic was one of the first institutions of higher education to offer teaching to mixed gender classes. The polytechnic argues that as women must work with men in the workplace, it is useful for them to gain experience of interacting with non-family males in an academic setting. The polytechnic's academic staff have not noticed or reported any significant problems with the policy of mixed gender classes. Both males and females seem to find it an enjoyable and enriching experience, and they interact and work well together in the classroom. Although a few females may initially be reluctant to take part in class discussions or in mixed gender group work due to their cultural upbringing, such reluctance is soon overcome and the vast majority of females are successful in their education, and because they tend to perform better than the males academically, they do not take a subservient role in the classroom. Females are encouraged to develop their self-confidence, team role and leadership skills, analytical and questioning ability and communication skills so that they can enter the labour force as equals to men. Female graduates of the polytechnic have been well regarded by industry and the majority has been successful in either gaining suitable employment or admission to study for a higher qualification either in the UAE or overseas. Although formal statistics have not been collected across all the polytechnic's programmes with regard to the destinations of graduates, it is known that for courses such as the HND in Marketing & Media and the HND in Tourism & Hospitality Management 100 per cent of graduates either took up immediate employment or continued with their higher or professional education.

**Vision, strategy and change**

The polytechnic's mission and vision statements indicate that the polytechnic has a clear set of strategic aims and objectives. Certainly, the polytechnic's first director, Professor Sa'ad Medhat had a clear vision for the institution: to develop a world-class university that provides the highest quality education and learning and which satisfies the needs of both the country and its business community. It has been suggested by both staff and students that the polytechnic grew too quickly as the necessary academic and support systems were often not developed in time, there has sometimes been a shortage of suitable accommodation for teaching, students, especially those on master's programmes, claim that the library is under-resourced, and the systems needed to ensure the quality of its programmes and student learning were not in place until recently. In 1999/2000 and 2000/2001 the polytechnic's financial deficit far exceeded the DCCI's budgets. This has caused conflict within the DCCI's management.

Although the polytechnic has a Centre for Research and well-qualified academic staff, as with other universities in the UAE, research output has been minimal. Academic staff and students have access to excellent resources for teaching, learning and research. All academic staff have their own desk-top computer and, despite criticisms, the library is well resourced, and access to hundreds of journals is available on-line. However, academic staff have had relatively high teaching loads, averaging 14-16 hours a week, and with all the time spent on course development and accreditation they have had little time or energy left to pursue research activities. The Ministry of Higher Education, with the support and encouragement of UNESCO, is encouraging universities in the UAE to engage in more research activities and this is regarded as one necessary element in the development of the nation's universities.

UNESCO is also influencing the Ministry of Higher Education in other areas of HE policy and implementation. The degree programmes that the Ministry of Higher Education accredits are required to follow the US model. This meant that Dubai Polytechnic had to abandon the UK system of higher education and adopt the US system when it designed its new bachelor's degrees.
intended for local accreditation. This was a difficult process for the academic staff with only experience of the UK system of higher education. Furthermore, the Ministry of Higher Education has recommended that the polytechnic abandons its lecturer and senior lecturer grades for faculty positions and adopts the US structure of instructor, assistant professor, associate professor and professor. The polytechnic plans to do this by the summer of 2001. Experienced British staff holding senior lecturer positions, but not possessing a PhD, are currently concerned that under proposed guidelines they would become "instructors". Thus, the shift to the US system has created uncertainty and anxiety among certain members of staff, especially those from the UK and those not holding PhDs. Many of the British staff originally decided to take up positions at the polytechnic because it offered British qualifications and adopted and implemented policies and systems with which they were familiar. The US system of higher education is not widely understood in the UK and many staff feel that the polytechnic's switch to the US system could be damaging to their careers.

Dubai Polytechnic is still operating on two sites: at the DCCI's building and at the Al Masaood building. Although the DCCI has maintained its commitment to constructing a purpose-built campus for the polytechnic, it has still not secured suitable land on which to build it. The popularity in the UAE of clustering industries has extended to education also. The Emirate of Sharjah has a University City several kilometres from the city centre. The site is occupied by the University of Sharjah, the American University of Sharjah and the Sharjah HCTs. The Emirate of Dubai plans to develop a "university city" in the near future, and until the site is confirmed, the DCCI is unwilling to commit itself to development of a campus for the polytechnic as it intends that the polytechnic will be located at the university city.

Conclusions

Since the establishment of the HCT in 1988, the UAE has developed a large and strong vocational education sector. With over thirty private universities and colleges in existence, the private sector plays a significant role in the provision of post-secondary education. Furthermore, the majority of private universities and colleges specialise in vocational disciplines such as business, information technology, law, medicine and health sciences, agricultural sciences, education and engineering. With the support of UNESCO, the Ministry of Higher Education is improving the quality and suitability of higher education in the UAE. The UAE's institutions of higher education are currently generating over 10,000 graduates annually, and most of these are absorbed into the labour force. Vocational programmes in banking and finance and telecommunications engineering have successfully contributed to the achievement of the government's emiratisation targets for the banking and telecommunications industries. It is believed that the proportion of nationals employed in the private sector could now be increasing by almost one per cent a year.

The demand for, and implementation of vocational education in the higher education sector is greatly influenced by economic, social, cultural and political factors. The UAE is a wealthy country that has invested heavily in its educational infrastructure. Many of its citizens are also wealthy, however, and this has acted as a disincentive for many of the young to take up work or education. This fact, in addition to certain social and cultural influences, has determined the types of employment or education that nationals are willing to undertake.

While the government has encouraged the establishment of private universities and colleges in the higher education sector, in many respects they have not been able to compete with the federal institutions on level terms. Private institutions that have not received their licensure of higher education are not permitted to advertise to the general public. Institutions offering
programmes not accredited by the Ministry of Higher Education will not now attract nationals, as the majority of nationals still prefer to work in the public sector, which only recognises locally accredited qualifications.

In a very short period of time, Dubai Polytechnic has made a tremendous contribution to the provision of vocational higher education in the Emirate of Dubai. It has produced several cohorts of graduates that have been very successful in the labour market. The polytechnic is now ready to embark upon the next stage in its development: the achievement of university status.

The views and opinions expressed in this article are those of the author and do not necessarily represent the views or opinions of Dubai Polytechnic or the Dubai Chamber of Commerce and Industry.

References