Prospective Industrial Linkage at Aqaba University College, Jordan

Al-Amyan, M. and Al-Azzam, F.

Abu-Hamatteh, Z. S. H.

Agaba University College, Al-Balga' Applied University

Al-Balqa' Applied University, Al-Salt-Jordan

1. Introduction

The backbone of any industry is always presented by the quality of the educational establishments outcomes, which therefore enhances the world economy. Matching of the outcomes with the present/future industrial and economical needs and demands, appears as an urgent unsolved problem, in the Jordan, particularly in Agaba. The minimum required skills of the graduates are usually defined by a committee consists of a number of academics, who, in general, lack the necessary practical experience and the actual industrial demands. Instead, they may be highly qualified and experienced in the educational field. Such committees are on limited scale, for instance, faculty, department and even section, reflecting the lack of communication between various educational establishments on the one hand and the labor sectors on the other hand. The developed countries; however, show a different trend in this aspect of communication as they intend to keep a strong and updated relationship between all the concerned educational establishments, industries, firms and research centers, in order to achieve their goal in the light of clear objectives (Abu-Hamatteh and Al-Jufout, 2003).

In the year 2000, the Jordanian Government established the Aqaba Special Economic Zone Authority (ASEZA) within the Agaba Governorate, which is intended to create an advanced investment environment to stimulate tourism, industry, trade, and services in the Zone (ASEZA, 2005). Operationally, ASEZA began in February 2001 (Reynolds, 2004). As the only port in Jordan, Agaba is slated to become a major growth center as part of Jordan's strategy to attract wide spectrum of business that can and will compete in the global economy. ASEZA was given the legal charge and the responsibility to accomplish that task. Its strategy, intended to benefit both Agaba and Jordan, was and is to create a low-tax, duty-free economic environment so as to stimulate economic activity, investment, and exports.

The nature and the operations of the labour markets can have a considerable impact on the climate for investment and because investment and new economic opportunities can be expected to have a discernable effect on the local labour market and the incomes of Jordanians, an understanding of local labour market conditions and institutions is vital to the successful implementation of ASEZA's mission. An effective and flexible labour market in Aqaba would contribute significantly to the development process and to firms seeking to take advantage of opportunities within the Zone. Alternatively, a segmented and rigid labour market would act to inhibit development and to deter further investment (Masri, 1999).

The need to build stronger connections between training systems and industry is given as a high priority for Aqaba University College (AUC) top management and policy makers. The theme of industrial linkages has been a central concern of AUC domestic policy since establishment. This paper aims to put business industrial linkage in a broader context, as a way of understanding linkages activities, and probably as a basis for further precise strategic approach to practice at AUC, and other colleges under the umbrella of Al-Balqa' Applied University (BAU).

For the purposes of this paper, AUC is defined as public institution offering work-oriented education and training mainly at the post-compulsory level. In an imaginary or ideal labour market, rational buyers and sellers (employers and workers) meet to exchange labour for wages. Quantities and prices fluctuate according to the laws of supply and demand, and temporary shortages or surpluses are remedied by the market. The theory of human capital (Schultz, 1961) explains how market forces can regulate not only the quantity, but also the quality of labour.

The term industry is used broadly to include all labour market sectors (Meredith, 2002), i.e., not just manufacturing or natural resources. Industrial linkage refers to any mechanism or strategy intended to promote interaction between the educational system and the world of work (Meredith, 2002; Brown, 1995; Robert, 1975).

International experience has shown that educational-industrial linkages can provide nu-

Abstract

The present study intends to examine the overall situation and the environment of Agaba University College (AUC) in relation to industrial-educational interaction, and to discuss existing and possible future industrial linkage strategies. This article presents observations from AUC, as well as suggestions for action on industrial linkage. The current study aims to refine and improve the various conclusions and observations by challenging and/or expanding any and all aspects of the study. The main functions of this investigation are (1) to increase job opportunities for Jordanians; (2) to coordinate with investing entities in the Aqaba Special Economic Zone Authority (ASEZA) and (3) to train Jordanians manpower to enhance the capacity buildings in accordance with the employment priority which will lead to local community development.

Keywords: industrial-educational interaction; linkage strategies; BAU; AUC; ASEZA; tight vs. loose linkages.

merous benefits for employers, students, workers, and the economy and society (Wolf, 2002). Industrial linkages are especially important for effective applied or work-related education such as, align graduate skills with industry demand, improve educational planning and efficiency, improve graduate employment and labour market function, improve student learning and motivation and promote sharing of resources between educational institutions and workplaces.

Like educational institutions themselves, educational-industrial linkage practices serve diverse and multiple purposes. Linkage strategies must be thoughtfully designed to address specific objectives and circumstances. Unsuitable linkage strategies may underdetermine the morale of students and instructors, alienate employers, and tarnish the reputation of the institution (Abu-Hamatteh and Al-Jufout, 2003; Abu-Hamatteh et al., 2003; Brown et al., 2001).

Tight linkage strategies aim to ensure that graduates skills meet requirements and/or specifications of the labour market or individual employers (Meredith, 2002). For example, apprenticeship programs normally aim to produce workers for well-defined occupations that require specific skill sets. Similarly, a special-purposetraining course may be designed to produce skills for a particular industrial process or technology. In many professional fields, programs of advanced education prepare graduates to apply very specific skills that are required for specialized professional practice. Skill requirements may be specified by law and/or professional accreditation regulations. Tight linkage strategies are appropriate where industry indicates demand for specific skills. In designing mechanisms for tight linkage, the main concern is to demonstrate that graduate skills match industrial specifications. The emphasis is on the design of curriculum and student evaluation processes. Common strategies include the use of Program Advisory Committees (PACs), competency-based curriculum design, and comprehensive student evaluation (Abu-Hamatteh and Al-Jufout, 2003).

Loose linkages strategies will be more appropriate where the educational program is not intended to satisfy specific skill demands, but rather to help graduates find and keep employment. Rapid growth of the services sector and rapid expansion of participation in post-secondary education have led to a situation where young people have difficulty gaining entry to the labour market, particularly in positions where they can fully utilize specialized skills.

In an increasingly flexible youth labour market, the priority should be to equip students to find employment and begin building progressive careers, mainly by drawing on a range of skills applicable to various employment situations (Bengtsson, 1993). Essential employability skills include solid literacy and numeracy, along with the social and communications skills that enable students to make network contacts. For most service-sector occupations in Jordan, other key skills are computer literacy and English or other second language ability.

Strategies for loose linkage will emphasize program design and instructional methodology. Programs for loose linkage will aim to produce solid foundation skills and transferable skills. Instructional processes will aim to build student confidence, creativity and flexibility, and promote a realistic understanding of the labour market and the world of work. Linkage strategies can be built through day-to-day instructional process by means of field trips, employer presentations, real-world research and problem-solving exercises, workplace simulations, etc. Direct contact with employers and industry experts can help students develop confidence and personal contacts that can be crucially important to their employment success. Therefore, loose linkage strategies are appropriate in conditions where the concern is not to meet labour market demand for specific skills, but rather to meet student demand for access to jobs and opportunity, particularly in a situation of labour oversupply.

Effective linkage strategies within AUC should involve a combination of loose and tight links as appropriate. Core programs should equip learners with the basic literacy, numeracy, interpersonal, computer, and foreign language skills that are essential to career success in a flexible labour market. Specialized skills to meet specific industry demand can be developed through specialized streams in the upper levels of diploma and degree programs, and through short courses (credit and non-credit).

2. Aqaba University College (AUC)

Aqaba University College was established and enrolled its first cohort of Hotel Management students in 2001. It currently operates from temporary facilities. AUC has been chosen to become a centre of excellence for hospitality and tourism training. To date, the AUC's strategy for excellence has focused on the quality of inputs: practical labs; work experience; frequent interaction with industry; and plans for a new state-of-the-art facility to be constructed. Aqaba is undergoing rapid transformation since being designated a Special Economic Zone.

The major industry is the hotel and tourism sector with significant expansion of the transportation and shipping industry, centred on the Port of Aqaba and the road and rail links into Jordan and Iraq. Foreign investment is spurring growth in textiles manufacturing in the QIZ. Rapid expansion of the tourism industry in Aqaba is creating demand for appropriately skilled workers.

The demand for skilled labour is offset by rapid growth in the skills supply. Educational institutions and donor projects are rushing in to capitalize on opportunities to offer training and attach their graduates to local job opportunities. ASEZA as the responsible for economic and social development in Aqaba region (Reynolds, 2004), was able to develop regulations and enter agreements with public institutions that may depart from national regulations. It has an excellent access to national decision makers and donor agencies.

ASEZA has established a regional HRD body. Firms in Aqaba are governed by the local body rather than national organizations (e.g., the Jordan Hotel & Tourism Association). A subcommittee of the HRD body has been formed to deal with HR issues in the tourism and hospitality sector.

AUC enjoys an excellent reputation within the local hotel industry, based on its practical training and orientation to industry needs. An initial challenge was to distinguish itself from the Vocational Training Center (VTC), which has a poor reputation with employers for several reasons out of the scope of the current study. Major hotels are keen to participate in HRD initiatives, and to co-operate on HR with AUC and ASEZA.

A critical issue identified by employers is to change Jordanian attitudes regarding the respectability of hospitality occupations. The most critical attribute of workers in the hospitality industry is pride in service. However, this runs contrary to traditional Jordanian values that attach stigma to service positions. There is unmet demand for female hotel workers and potential for good career paths for women. The hotel industry itself is undergoing transformation. Hoteliers recognize that they must improve their operating standards in order to be internationally competitive. Current quality standards are uneven. Most operations have relatively informal or undeveloped HR management systems. Some hoteliers complained that ASEZA regulations are unrealistic (e.g., a minimum green space requirement that cannot be met by hotels in the city centre).

3. Labour Market Demand

The ASEZA market is characterized by high wages and strong working conditions, indicating high market demand for skills. The situation is worsening as the demands expand fast while the education system remains static or declines with no significant addition to the skills supplied.

Privatization and foreign investment in the area may bring new industrial practices and a greater employer interest in specific skills. It is possible that within the next few years, industry restructuring may create new, demand-driven linkage opportunities for AUC. On the other hand, industry reorganization may also lead to job shedding.

AUC emphases on consultations and training services beside to the regular degree leading programs had to struggle to gain the attention and serious engagement of industry. In cases where industry has shown interest, opportunities were fully employed for instance, hotel, tourism and finance and banking sectors.

4. Discussion

The HRD strategy for the tourism sector in Aqaba needs to work on two levels. The tourism sector must improve the quality of its services to ensure the international competitiveness of Aqaba as a tourist destination. Education and training for the hospitality sector must produce skills to meet the future rather than the present levels of service in the industry. Firms, industry associations, and education providers in the tourism sector need to cooperate and coordinate their efforts to improve HR practices in the industry.

ASEZA presents an opportunity for hotels in the Aqaba area to develop leading-edge HR practices. While taking advantage of ASEZA's independent authority, the Aqaba hospitality industry and AUC should ensure that their standards meet or exceed the national standards being developed by the Jordan Hotel and Tourism Association in Amman.

Both the industrial sector and the AUC should strive to adopt internationally-recognized quality standards as ASEZA regulations are sensible and support business development rather than creating bureaucratic burdens. AUC should aim to have its programs and courses accredited or formally recognized by leading international tourism bodies. ASEZA has authority to introduce regulations to improve quality in the hospitality sector. This could include mandatory

basic training – e.g. food safety and hygiene for food handler; basic diplomacy skills for workers who deal with tourists. Approved short training courses could be offered by AUC and/or other providers.

The sectoral HR committee may adopt a very clear emphasis on professionalizing the hospitality sector's labour force by focusing on skills. In turn, AUC can maintain its position as the preferred provider of training by developing excellence in skill formation. AUC should continue to model new values and principles: Focus on exit skills, not entrance qualifications. Commit to the principle that only the committed get in; only the best get through.

Develop and advertise a comprehensive admissions process that selects students on the basis of their commitment to a tourism career rather than their academic scores. For instance, to be selected, students might be required to attend an informational presentation on careers in the hospitality and tourism sector; submit a written statement describing their ambitions with respect to a hospitality career; and take an entrance interview involving College and industry representatives.

With assistance from ASEZA, AUC should develop a high-quality orientation to the hospitality industry (print materials, multi-media, live presentations, etc.). Develop marketing materials and events to portray tourism careers as respectable and rewarding and encourage participation by women. The Aqaba HRD committee and AUC should be careful to ensure that industrial-educational collaboration is driven by a common interest in skill development. Artificial incentives such as training allowances and trainee wage subsidies should be discouraged. Finally, AUC should have clear and complementary roles within the industry.

In order to keep the high-quality inputs, AUC should maintain reputation for intensive practical instruction in hospitality. However, maintaining close working relationships between AUC and local industry needs to adopt strong industry participation into AUC instruction wherever possible.

Developing an orientation to outputs through identifying performance requirements expected by leading firms reflecting the industry standards in curriculum and student evaluation and forming ad hoc or permanent industry advisory committees for Hospitality programs is an essential act to be considered by AUC.

5. Conclusion and Remarks

The dominant feature of the labour market in Aqaba region emphasis upon specific skills requirements. However, there is strong social demand for academic qualifications as a precondition of social security/mobility and status. Consequences of the above are the academic drift (a trend toward ever higher qualifications). Despite the general condition of skills oversupply, existing industry linkage practices at the college level are generally suited to a skills-shortage situation.

There is excellent capacity of various kinds within AUC. At this college there are committed and creative staffs with the ability and motivation to move ahead with best practices. AUC lacks a clear sense of educational mission at the ground level and divergent visions co-exist side by side.

Existing industrial linkage mechanisms tend to be employed blindly without a sense of purpose. Reasons seem to be a mixture of tradition, centralized policy, lack of coherent vision, lack of local authority for change, and lack of awareness of alternatives.

In most program areas and for most AUC students, linkages should be tight and should be designed to promote student learning and networking. In cases of demand for specific skills, develop tight linkages that emphasize skills, not qualifications. Where possible, combine loose and tight linkages, for examples, two years diploma programs with general first year and specialized options for second year. However, short/non-credit courses for special occupational skills are highly in demand by the industrial sector. The long-term demand is likely, form tight linkages by working closely with industry. When developing permanent programs, seek accreditation from international industrial bodies therefore, focus on skills and industrial approval, rather than academic ranks.

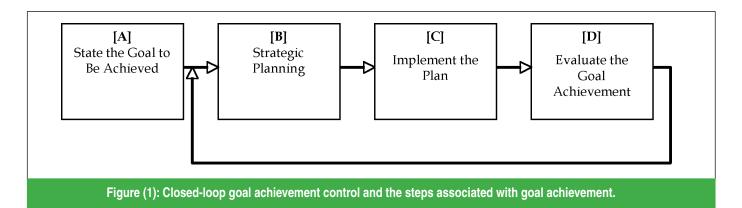
Applying industrial linkages creatively to enhance learning and student motivation shall distinguish AUC as excellence in skills development and learning. Abandon rigid linkage mechanisms where results are poor (e.g., look but don't touch), instead, build employment-related activities into day-to-day instruction, and grade students on their performance.

In order to build a system-wide capacity, AUC should take the followings activities into consideration: (1) support best practices in applied learning; (2) provide faculty development for applied learning skills (instructional design, teaching skills); (3) build capacity for open

learning; (4) build capacity to provide industry services and applied research and (5) allocate resources to support student learning.

To strengthen the relationship between the educational and industrial sectors and to match the educational outcomes with the world new industrial demands, it is necessary to precisely state the goals and how to achieve them through strategic planning (Al-Jufout, 1999; Al-Saywan, 1998). Goal analysis should be implemented to clarify goals and methodology of achievement (Fig. 1). This can be done by adapting the following steps (Robert, 1997a): goal statement, strategic planning, implementation and evaluation. Strategic planning including environmental scan and analyses, goals, polices, objectives and implementation which is worth nothing without serious follow-up program to recognize the degree of achievement (Robert, 1997b). Such a program should include: (1) an analyses of the Industrial sector; (2) a determination of the main skills for different destinations in the industrial sector; (3) updating the curriculum of the practical courses and students' compulsory training program in the educational sector and (4) a continuous control of the matching efficiency between the educational sector outcomes and the industrial sector needs.

The observations and recommendations made in this article reflect the view of the authors, who have been involved in managing the college for several years and have a direct contact with the various industrial sectors in the region. The observations are subject to further research and discussion. It is hoped that these comments will stimulate some thought and debate in order to improve industrial-linkage strategies and that where appropriate they will lead to specific action.



References

Abu-Hamatteh, Z.S.H. and Al-Jufout, S.A. (2003). Educational Outcomes Vs the World New Industrial and Economical Demands: Jordanian Electrical and Mining Sectors as a Case Study. Pakistan Journal of Information and Technology, 2 (1): 78-82.

Abu-Hamatteh, Z.S.H., Al-Jufout, S., Al-Nawafleh, M. and Omar, W. (2003). Industrial Linkage Unit: Strategic and Operational Plan, Tafila Applied University College (TAUC), Al-Balqa' Applied University, pp10.

Al-Jufout, S.A. (1999). Continuous Evaluation of Engineering Training. In: Proceedings of the Second Arabic Training Conference, AUPDE, 286-291, Sudan. Al-Saywan, H.A. (1998). Planning of Engineering Training Programs Updating in the Arab Educational Establishments in the Light of the Industrial Developments. Jordanian Engineer's Journal, JEA, No. 65, Amman, Jordan.

ASEZA, (2005). Employment, Visas & Residency Directorate, "Entry, Labor and Residency in the Aqaba Special Economic Zone," Pamphlet, Aqaba, Jordan. Bengtsson, J. (1993). Labour Markets of the Future: the challenge to education policy makers. European Journal of Education, 28 (2): 135-57.

Brown, P. (1995). Cultural Capital and Social Exclusion: Some observations on recent trends in education, employment and the labour market. Work, Employment and Society, 9 (1): 29-51.

- Brown, P., Green A. and Lauder, H. (2001). High Skills: Globalization, Competitiveness and Skill Formation. Oxford, OUP.
- Masri, M.W. (1999). Human Resources Development Strategy in Jordan, National Center for Human Resources Development, Amman, Jordan, Center Publication Series No. 73.
- **Meredith, J. (2002).** Towards a Framework for TVET-Industry Linkage. Department of Educational Studies, University of British Columbia, Unpublished.
- Reynolds S., (2004). Aqaba Community Profile, Issues and Recommendations (Project report submitted to USAID/ASEZA by Nathan Associates, Inc.: an Aqaba Zone Economic Mobilization project), Aqaba, Jordan.
- **Robert, F.M. (1997a)**. Measuring Instructional Results, 3rd Edition, CEP, USA.
- Robert, F.M. (1997b). Goal Analysis, 3rd Edition, CEP, USA.
- Robert F.M., (1975). Cyclical, Seasonal and Structural Factors in Area Unemployment Rates. Industrial and Labor Relations Review, 28(3): 424-31.
- **Schultz, T. (1961)**. Investment in Human Capital, American Economic Review, 51:1-17.
- William, G.B. and Finegan, T.A. (1969). The Economics of Labor Force Participation, Princeton, NJ, USA, Princeton University Press.
- Wolf, A. (2002). Does Education Matter? Myths About Education and Economic Growth. London, Penguin.

fibu-Hamatteh Ziad was born in 1966 in Amman, Jordan. He received his Ph.D. in Earth and Environmental Sciences in 1994. In the year 1998 he joined Al-Balqa' Applied University. Currently, he is an Associate Professor at Faculty of Agricultural Technology. His research interest includes geology, mineral processing, environment, education and management.



All-Amyan Mozfi was born in 1953 in Amman, Jordan. He received his Ph.D. in Public Administration in 2000. In the year 1997 he joined Al-Balqa' Applied University. Currently, he is an Assistant Professor at faculty of Planning and Management. His research interest includes education and management.



fil-fizzam Faroug was born in 1962 in Irbid, Jordan. He received his Ph.D. in Economic in 2000. In the year 2002 he joined Al-Balqa' Applied University. Currently, he is an Assistant Professor at Aqaba University College. His research interest includes, economic and management

