A-8

Graduates' Employability Skills: Evidence from Literature Review

Susima Samudrika Weligamage

Lecturer, Department of Accountancy, University of Kelaniya, Sri Lanka.. susima@kln.ac.lk

Abstract

Enhancing Graduate Employability skills is considered as an important task within the Sri Lankan university community. This study was conducted with the objectives of identifying the employer skills needs in different countries, various definitions related to employability skills, previous research done in different countries related to the employability skills requirement and their recommendation. The study is based on a literature survey of educational reports, empirical and theoretical research papers. Studies done in Sri Lanka and in other countries as well as those comparing the inter-country situation are also summarized in this paper. Review findings reveled that skills definitions, employer expectation and requirement differ according to different countries. Employers' needs and also the learners' skill enhancement capabilities should be taken into account in formulating future skills assessments. This study concludes that universities should identify skill sets that will best serve the future labor market and align programmes to meet those needs.

Keywords: Employability, Indicators, Learner Aspirations, Competitive Advantages

Introduction

Enhancing Graduate Employability skills is considered as an important task within the Sri Lankan university community. The labor market needs and the employers' requirements for skills from graduates vary by employer and also from one country to another country. The current changing business environment emphasizes the importance of education for employability, focusing on the development of not only skills but also practical experience. Then, in order to enhance competitive advantage for graduate employment, students need to develop employability skills in addition to the acquisition of subject-specific knowledge. Higher Education Institutes (HEIs) need to identify ways of incorporate this requirement.

This paper will review the existing research findings, studies and practices of employability skills and present the review on eight aspects: Definitions of employability, employability skills and employer needs, expectations of employers and university students, matching employer needs, the nature of employability, and, international perspective on employability and employability as key performance Indicator.

Definitions of Employability

Yorke and Knight (2003) define employability as a "A set of achievements – skills, understandings and personal attributes – that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy".

University of Exeter defined employability as;" The establishment of clear mechanisms by which students can develop their abilities to use and deploy a wide range of skills and opportunities to enhance their own academic learning and enable them to become more employable".(Lee,2000). Employment and employability is not the same thing and should be differentiated. (Lee, 2002). "Being employed means having a job, being employable means having the qualities needed to maintain employment and progress in the workplace. Employability from the perspective of HEIs is therefore about producing graduates who are

capable and able, and this impact upon all areas of university life, in terms of the delivery of academic programmes and extra curricula activities. Fundamentally then, employability is about learning – learning how to learn – and employability is not a product, but a process" (LTSN - cited Lee, 2002).

Harvey (2001) mentioned in his report titled Employability and Diversity; "Employability has many definitions but they break down into two broad groups. The first relate to the ability of the student to get (and retain and develop in) a job after graduation. The other set are concerned with enhancing the students' attributes (skills, knowledge, attitudes and abilities) and ultimately with empowering the student as a critical life-long learner (Hillage and Pollard, 1998; Harvey, 2001)".

Employability Skills

Enhancing employability skills of the graduates' is not a new topic and policy makers are still making plans to increase graduates' skills to meet the need of the current workforce. Higher education Institutions are one of key player in enhancing employability and their responsibility to identify how they can enhance skills of their "future employees". Generic skills are the key term used as employability skills in most of the countries, but what is meant by this term varies in different countries (Table 01).

Table 01: Terms used in various countries to describe generic skills
--

Country	Terms used
United Kingdom	Core skills, key skills, common skills
New Zealand	Essential skills
Australia	Key competencies, employability skills, generic skills
Canada	Employability skills
United States	Basic skills, necessary skills, workplace know-how
Singapore	Critical enabling skills
France	Transferable skills
Germany	Key qualifications
Switzerland	Trans-disciplinary goals
Denmark	Process independent qualifications

Source: National Centre for Vocational Education Research (2003), defining generic skills report

University of Sydney believes that graduates should be more employable, more able to cope with change and more developed as people. In specific terms, graduates of any faculty, board of study or college of the university should have knowledge skills, thinking skills, personal skills, personal attributes and practical skills. They have mentioned a specific list of requirements needed to fulfill above skills as stated in Table 02.

Table 02: Description of Skills required by the University of Sydney

1.Knowledge skills :(a) Have a body of knowledge in the field(s) studied; (b) Be able to apply theory to practice in familiar and unfamiliar situations; (c) Be able to identify, access, organize and communicate knowledge in both written and oral English; (d) Have an appreciation of the requirements and characteristics of scholarship and research; and (e) Have the ability to use appropriate technologies in furthering all of the above

2. Thinking skills : (a) Be able to exercise critical judgment; (b) Be capable of rigorous and independent thinking; (c) Be able to account for their decisions; (d) Be realistic self evaluators; (e) Adopt a problem solving approach; and (f) Be creative and imaginative thinkers

3.Personal skills: (a) The capacity for and a commitment to life-long learning; (b) The ability to plan and achieve goals in both personal and the professional spheres; (c) The ability to work with others.

4.Personal attributes: (a) Strive for tolerance and integrity; and (b) Acknowledge their personal responsibility for: their own value judgments; and (c) Their ethical behavior towards others.

5. Practical skills: (a) Be able to use information technology for professional and personal development.

Other than higher education institutions, student and employers can also be considered as important parties to get involved in this process Students and Employers can be taken as real customers in higher education. Expectation of both customers should be considered by the HEIs as service providers in this industry. Jerzy (2000) discussed student and employer expectations from higher education. The author pointed out that young people would like to position themselves in the society and most of them think of their university studies as a good way to offer them good job opportunities. Sometimes they look for "modern" fields of studies without analyzing job (employment) market prospect. On the other hand, universities are responsible in finding out answers for some key questions regarding the mission and the future strategy as well as the present status of their alumni. Following Questions are considered as important by the author.

- 1. What is the university mission?
- 2. Do they have the strategy for next 10, 20, 50 years?
- 3. What is the position of the university graduates?
- 4. Does the university possess the promotional strategies of their own graduates?
- 5. In which way the university graduates are perceived in the employment market?
- 6. Are graduates attractive employees for the potential employers?
- 7. What kind of activities do both students and employers expect?

Employer Needs

An employer's perspective defines employability skills as "skills required not only to gain employment, but also to progress within an enterprise so as to achieve one's potential and contribute successfully to enterprise strategic directions". (Australian Chamber of Commerce and Industry & Business Council of Australia, 2002)

Enhancing graduate employability skills is considered as an important task within the university community in any country. In order to identify employer requirement most of the universities in the world regularly conduct employers' needs surveys. Employers normally give their comments on the skills they are looking for in new employees. Table 03 presents some of the most common skills and their definitions expected from their new employees according to Employers' Needs Survey conducted by University of Guelph, Canada

Table 03: Employers' expectations from employees

1.Time Management : The ability to manage several tasks at once, to set priorities and allocate time effectively in order to meet multiple deadlines

2.Self-Understanding : The ability to know about strengths and personal characteristics

3.Learning Skills : The ability to learn effectively from a wide range of sources including competencies such as learning what matters, organizing information and critical thinking

4.Teamwork Skills : The ability to work effectively as a member of a team and to understand the dynamics that make teams successful

5.Leadership Skills : The ability to lead, influence and motivate others

6.Problem Solving : The ability to identify, prioritize and solve problems. The ability to ask the right questions, sort out the many facets of the problem and determine possible solutions

7.Working with Diversity : The ability to respect and tolerate different points of view, values and philosophies of life and deal constructively with people who differ from yourself

8.Career Planning : The ability to manage your career in a constantly changing world of work

9.Understanding Workplace : The ability to grasp the underlying values of the workplace, its dynamics and expectations

10.Risk Assessment Management : The ability to assess alternative courses of action in terms of their consequences and associated risks and to identify alternative ways to reduce inherent risk.

Source: Generic Attributes of Graduates of the University of Sydney (1997)

Universities should conduct employers' skills requirement surveys to identify real needs, in order to strengthening their graduates' skills. In most of the countries government organizations give attention on identifying this skills requirement. The Australian Chamber of Commerce and Industry and the Business Council of Australia (2002) had taken pioneer attempt to discover what employers really looking from their workers. According to the Employability Skills Framework presented by the organization, employers have mainly given attention on personal attributes which will mainly contribute to overall employability. Personal attributes maintained in this framework are loyalty, commitment, honesty and integrity, enthusiasm, reliability, personal presentation, common sense, positive self esteem, a sense of humour, a balanced attitude to work and home life, an ability to deal with pressure, and, motivation and adaptability. Main skills requirement mentioned in this framework are communication, teamwork, problem solving, planning and organizing, technology, learning, self management, initiative and enterprise skills. Many of the businesses had suggested that educators should review and redevelop their curriculum and change delivery methodology to support the development of these skills and attributes.

Employability and Expectations of University Students

Vidanapathirana (2000) studied employability and job expectations of university students using a sample of 68 undergraduates to ascertain the extent employability and expectations affect job opportunities of educated youth. The findings confirmed the view that there is a mismatch. The author claims "the more person has been educated, the greater the likelihood that her or she may be unemployed" This situation arises out of high rate of entry to the labor-force on one hand and the relatively sluggish expansion of the economy.

Public services is experiencing resource constrains to generate employment due to lack of funding and lack of organizational planning. Today, private sector is becoming the dominant player in the economy and expected to generate more employment opportunities. But, most of the students expected to select future employment in a government sector (Weligamage, 2005) after their graduation and employment expectations of students varies by study programme.

Burden & Mc-Avinia (1998) reports of projects at the University of Surrey Known as the skills project with the main objective to identify and articulate the skiils/attruibutes sought by employers and professional bodies, and to raise the skills of students to a threshold level which is acceptable to the employers of new graduates. The project aims to raise the key skills of new students to an acceptable generic threshold in the first semester of university education and thereafter to enhance the skills of students in a discipline specific environment to meet the requirements of employers and professional bodies. Then it was necessary to gather data from employers and professional bodies as to exactly what they expect of their graduate recruits.

Matching Employer Needs

Current business environment is dynamic. Graduates from universities should compete with professional qualification holders in a job market where employers prefer to recruit professional qualification holders which can be taken evidence from job advertisement. Therefore there is a need to match the skills of university graduates with the needs of the industry if they are to be successful in the job market. Hence, there is an urgent need of identifying the employers' perspective on the skills and attributes of potentially employable graduates and their opinion regarding comparability of graduates with professional qualification holders.

Employers reported work related experience as an important consideration in recruitment. Non-technical skills sought include, presenting technical findings to a diverse audience and teamwork, while personality, self-confidence and attitudes towards work are considered as preferred attributes (Weligamage, 2006). Employers consider graduates' problem solving and creative thinking skills are not always adequate to perform the tasks required on the job. According to the perceptions held by employers', graduates are more academically oriented while lacking awareness on latest developments and applicability skills when compared with the professional qualification holders. However, employers mentioned of the preference to employ persons with both degree and professional qualifications clearly indicating better career prospects for university students if supplemented with professional qualifications. It is recommended that undergraduate curricular in management should include more opportunities to integrate class-room instructions with actual working environment. While this will reduce the gap between theory and experience, potential employers should be made aware of the nature of opportunities available to the students as a part of their curriculum to enhance team work and presentation skills and other personal development activities.

Frye (2000) and his colleagues investigated the methods through which employers and learners' needs can be taken into account in formulating future skills assessments. This model helps existing systems to promote a framework for all learners to gain the skills they need important and to maintain purposeful employment. The group used a supply and demand model comprising three main components as employers demand for skills, providers' supply of education and training opportunities and learners demand for skills. This model identified following matches and mistakes; 1. Employer demand-provider supply: the mismatch between employers demand for particular skills and the flow of skilled people arising from provider supply, 2. Learner aspirations-employer demand: The mismatches between what learners aim to achieve through education and training and the skills need of employer and 3. Provider supply-Learner aspirations: the mismatch between courses offered by providers and the expectations and needs of learners.

The Nature of Employability

Vidanapathirana (2001) building on his past research further suggested that " people are unemployed because of unemployment mismatch". Author identified four main parties in his model who are involving in this process as employers, candidates (graduates), state (government) and Institutions (university) Author presented this four parties situation as graduates do not have the required competencies, knowledge, skills and experience. Employers are the second party in this model and on there view, graduates failed to fill requirement and core potencies. The third party is the educational institute and this system is criticized for not accommodating the volume and variety of students demand, high unit cost arising from unproductive overheads, inflexible curricula and teaching methods, and, lack of research output, The fourth party is the government that also should involve finding solution to the problem. The author found that the employability concept currently considers factors such as achievements, competencies, attitudes and social-economic backgrounds, which most of the private sector use in making selection decisions. An achievement includes results, graduate rank, winning university colors, and the age of candidate. Competencies include communication, decision making, leadership and team work. Attitudes cover values, orientations and out look of candidates. Socio economic statues deal with affiliations, family status

There are several alternative models created by researchers for understanding the parties and their role in implementing employability skills into higher educational institutes. All stakeholders: the government, the university system administrators, employers and graduates themselves must be involved into this process to find out skills requirement, the way of improving these skills and solutions to skill gap. Harvey (2002) presented the simplistic model of employability called "the magic bullet model". According to his model shown in Figure 01, magic bullet " is that students are somehow given employability as a result of their having been a student, which leads them to being employed".



Figure 01: Magic Bullet Model of Employability Source: Harvey (2002), employability and diversity

Harvey (2002) presented another model after considering all the parties involving in this process and all important employability factors. Author pointed out the important of linking all factors together with all parties involving this process to develop graduate attributes. Three main parties involved in this process are graduates (students), HEIs and employers. Graduates having responsibility to choose and engage with the employability development opportunities provided by HEIs and they also can use their extracurricular experiences to enhance these skills. Author identified employability development activities as the development of employability attributes, work experience, the development of selfpromotional and career management skills and a willingness to learn and reflect on learning. This model is presented as Figure 02. The model presented three core processes having an impact on employability as, a) pedagogic process that encourages development, b) selfreflection by the student and c) the articulation of experiences and abilities. Author also pointed out that employability development opportunities, to some extent, are affected by the

University of Kelaniya, Sri Lanka

subject discipline of the graduate and some programme areas tend to be more active in promoting employability.



Figure 02: A model of graduate employability development Source: Harvey (2002), employability and diversity

International Perspective on Employability

Little (2003), with advice from (?) ESECT and (?) LTSN Generic Center colleagues, presented employability in an international perspective. The purpose aimed to learn lessons in the context of current 'employability' developments in the UK. It is based on information and data from a number of different countries.

The concept of employability can also be understood in terms of previous discussions that have become separated from contemporary thinking. For example, Barnett (1994, 2003) implied the employability and the promotion of 'key' or 'core' skills are similar a set of achievements, understanding and personal attributes that make individuals more likely to gain employment and be successful in their chosen occupations.

Commenting on current issues of graduate employment and work in France, Paul and Murdoch (2000) noted that recent studies have tended to concentrate on the latter focus. In the Netherlands, these same shifts in emphasis have become apparent in research findings in the last decade (Allen, Boezerooy, de Weert, van der Velden, 2000). It is revealed in the Euro-Japan Study that in mainland Europe the close linkages between field of study and subsequent specific occupation existed traditionally. However, there are now some signs that the emphasis may be shifting towards the role of more general knowledge, attitudes and

social skills. Table 04 lists the ten most highly rated possessed competencies by the UK, European and Japanese graduates at the time of graduation.

Order	UK	Europe	Japan
1	Learning abilities	Learning abilities	Loyalty, integrity
2	Working independently	Power of concentration	Power of concentration
3	Written communication skills	Working independently	Adaptability
4	Working in a team	Written communication skills	Getting personally involved
5	Working under pressure	Loyalty, integrity	Learning abilities
6	Accuracy, attention to detail	Field-specific theoretical knowledge	Field-specific theoretical knowledge
7	Power of concentration	Getting personally involved	Fitness for work
8	Oral communication skills	Critical thinking	Initiative
9	Problem-solving ability	Adaptability	Tolerance
10	Initiative, Adaptability	Tolerance	Working in a team

Table 04: Top Ten Competences as Listed by UK, European and Japanese Graduates

Source: Brenda Little et al," The international perspectives on employability" A briefing paper. (2003) P.6

A study by Blasko (2002) looked at the pattern of possession of five key skills among graduates from seven countries. Skills considered in the study are, oral and written communication skills, computer skills, ability to work in a team, problem solving, learning abilities/reflective thinking, and assessing one's own work. The average ratings by each country for these skills are shown in Table 05 (These ratings are graduates' own average ratings, where '5' indicates 'to a great extent' and '1' indicates 'not at all') Computing skills are generally perceived as the least important skill to be acquired in the UK and in six other European countries. Communication skills and improving own performances were considered as the most important by respondents in all the countries.

Table 05: Average Ratings for Key Skills Considered as Important by Graduates by Country

Country		Average Rating based on a scale (1-5)				
	Communication	Computing skills	Team work	Improving own performance	Problem solving	
UK	4.0	3.2	3.8	4.0	3.8	
Austria	3.9	3.0	3.4	4.0	3.6	
France	3.5	2.7	3.5	3.7	3.5	
Germany	3.7	3.0	3.4	3.8	3.6	
Netherlands	3.7	3.2	3.8	3.7	3.7	
Norway	3.8	2.9	4.0	4.1	3.8	
Sweden	4.0	2.9	4.3	4.0	4.0	
Mean overall	3.8	3.0	3.7	3.9	3.7	

Source: Little B et al," The international perspectives on employability" A briefing paper. (2003) P.9

Employability as Key Performance Indicators

The current changing business environment emphasize the importance of education for employability, focusing on the development of key skills and work experience. Development of undergraduates from theoretical background to the practice is a contemporary need, because the practice will enhance the employability of graduates. Participation of undergraduates in the training process and obtaining the feedback from the stakeholders are more important for understanding the trainee undergraduates' future skills development areas (Weligamage and Munasingha , 2006). This study was conducted with the objectives of identifying stakeholders' satisfaction on competencies and identified skills of their trainee undergraduates. Findings reveal that the trainers were highly satisfied with the punctuality, responsibility, commitment and attitudes towards work of their trainees. Also they were fairly satisfied with oral and written communication skills and decision making abilities. However, they have emphasized on several areas that need improvement, such as advanced writing skills, ability to use of e-mail and internet facilities, decision making and analytical skills.

In recent years, there has been a strong emphasis on providing on work related training for undergraduates as a part of their degree program. Completion of industrial training of a specific duration by undergraduates is an important expectation of employers. During the training, undergraduates get their first experience of real working environment and, an understanding on working patterns within an organization. Training satisfaction is a measure of the attitude that individuals develop about the training undergone and is based on individuals' perceptions. This is an indicator of the outcome of training on individual trainees. Understanding of the factors affecting on trainees' satisfaction helps trainers to improve the quality of training.

Employability or employment of graduates are taken as key performance indicators in many countries to measure the university or programme performance. These indicators are called employment indicators. Performance measures of graduate labor market outcomes are likely to feature as an important element in the prospective Student's information set (Smith, McKnight and Naylor, 2000). In United Kingdom first destination survey to measure the employment performance was conducted (HEFCE, 2003). They calculated two type of indicators using the survey information as percentage of graduates who are employed or in further study, among all those who are employed, unemployed, or studying; and the second showing the percentage employed among those who are employed or unemployed. The Graduate Careers Council of Australia in association with Australian higher education institutions administers the Graduate Destination Survey and the Course Experience Questionnaire (CEQ) to gather information from graduates. Performance indicators used as Graduate full-time employment, Graduate full-time study, graduate salary, overall satisfaction, Good Teaching and Generic skills (Report of AEPL, 2003).

Conclusion

This Paper discussed existing research findings on studies and practices of employability skills on eight aspects as, definitions of employability, employability skills and employer needs, expectations of employers and university students, matching employer needs, the nature of employability, international perspective on employability and employability as key performance Indicator. The current changing business environment emphasize the importance of education for employability, focusing on the development of not only skills but also practical experience. Then, in order to enhance competitive advantage for graduate employment, students need to develop employability skills in addition to the acquisition of subject-specific knowledge and study programmes need to identifying the way of improving that requirement. Personal attributes mostly required by the employers are loyalty, commitment, honesty and integrity, enthusiasm, reliability, personal presentation, common sense, positive self esteem, A sense of humour, a balanced attitude to work and home life, an ability to deal with pressure, motivation and adaptability. How can these attributes teach within the teaching process? Can they? Specially can we teach loyalty, commitment, honesty and enthusiasm? Main skills requirement mentioned in studies are communication, teamwork, problem solving, planning and organizing, technology, self management and initiative and enterprise skills. Many of the businesses suggested that educators should review and redevelop their curriculum and change delivery methodology to support the development of these skills and attributes.

Employers reported that work related experience is an important consideration in recruitment. Sri Lankan Universities already taken action in this issue and most of the study progarmmes included internship component into their curricular. This programme is running very successfully and getting benefit by all stakeholders involving in this process. But still possessions of university graduates of key skills sought by employers are lacking in Sri Lanka. Most of the countries Universities, government organization and employers have given attention on identifying this skills requirement and Sri Lankan universities should conduct employers' skills requirement surveys to identify real needs, in order to strengthening their graduates themselves must be actively involved in this process should find the way to enhancing this skill.

This study concludes that many research studies have revealed a consistent core set of desirable attributes, such as communication skills, interpersonal skills and team working, problem solving, analytic, critical and reflective ability, willingness to learn and continue learning, flexibility and adaptability, risk-taking and self-skills and these attributes are often independent of the degree subject. Universities are incorporating extracurricular activities into their study programme and changing their subject to develop specific skills through specialist modules. We also need to identify the skill set that will best serve the future labor market.

References

Burden, P. & McAvinia, C.(1998). "Employers' need and graduate skills", Report. http// www.surrey.ac.uk/skills/reports/graduate

Employers' needs, Career services(2002), :http://www.careerservices. uoguelph. ca/ students

Generic Attributes of Graduates of the University of Sydney (1997), http://www.policy.rms. usyd.edu.au

Harvey, L., (2001), "Defining and measuring employability", Quality in Higher Education 7(2).

Harvey, L.(2002), "Employability and Diversity", <u>http://www2.wlv.ac.uk/</u> webteam/confs/socdiv/ sdd-harvey -0602.doc

Jerzy, (2000). "Students and Employer Expectation", http://www.ineer.org/events/ICEE2000 /proceedings/papers

Lees, D. (2002). "Information for Academic Staff on Employability", http://www.palatine.ac.uk/ files/emp/1233.pdf

Little, B. (2003), "The International Perspective on employability", A briefing paper. http/ www.istn.ac.uk

Michel,F.(2000). "Matching Employer Needs and Learner aspirations today and tomorrow: The Strategic Challenges for providers", Http//www.iscdata.gov.uk /document/ other councilpublications

National Centre for Vocational Education Research (2003). defining generic skills report, http://www.heacademy.ac.uk/ourwork/learning/employability

Smith, J. McKnight ,A and Naylor, R.(2000). "Graduate Employability: Policy and Performance in Higher Education in the UK", *The Economic Journal*. 110 (June), pp. 382-411

Vidanapathirana,U.(2000). "Employability and expectations of university students: A cross faculty comparison of the attributes of university students", Sri Lanka Association for the advancement of Science(SLAAS), Proceeding of the 56th Annual Session,27th Nov-1st Dec, Colombo, Sri Lanka,p.281

Vidanapathirana, U.(2001)." Unemployment Mismatch-Iceberg? Or Volcano?", Association for the advancement of Science(SLAAS), Proceeding of the 57th Annual Session,26th Nov-1st Dec, Colombo, Sri Lanka,p.131-143

Weligamage S (2005). "Graduates' Employability Skills: Final Year Undergraduates' Perspective ". 10th International Conference on Sri Lankan Studies, 16th-18th December 2005, Kelaniya, Sri Lanka

Weligamage, S.S. (2006). "Education and Employment: Challenges for Employability of Management Graduates". Second Thailand Education Congress: World Teachers Day International Conference, 5th-7th October 2006, Bangkok, Thailand.

Weligamage, S. S. and Munasinghe M.A.T.K. (2006). "Skills For the Future: Stakeholders' Satisfaction on Trainee Undergraduates", Paper presented at 5th Annual Research Symposium, 8th December 2006, University of Keleniya, Sri Lanka.

www.enhancingemployability.org.uk/

www.heacademy.ac.uk

www.universitiesuk.ac.uk/Publications/Documents/employers.pdf