EMPLOYABILITY MANAGEMENT: IS HIGHER EDUCATION IN CRISIS?

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Abstract:
The basic objective of higher education throughout the civilization was to be employable. Graduates are in competition to perform a good figure in the job market while they are there. Higher education and employment is intertwined though for few, it may be different. Higher Education Institutions (HEIs) are also busy to develop ways to make their graduates employable. The performance of HEIs at the end of the day will depend on the success of its graduates to the race of employment. A careful observation of this game will reveal that some are performing this job smartly over others. While some others argue that to win an unhealthy game, HEIs are adopting some short-cut and derailed themselves from the right path. This debate becomes a regular issue. In such a situation, it is felt to conduct a study on employability, activities of HEIs in this regard, and integration among different stakeholders in the market. The paper presents some real life example of developing employability skills within the graduates undertaken by some benchmarking HEIs. The discussion is very much helpful for HEIs, educators, academia and market regulators for managing employability for the betterment of the society. The issue of employability becomes strategic thrust for educators and prioritized issue for regulators. A good management of HEIs will bring inconceivable success is the conclusion drawn in the paper.

Keywords: Higher Education, Higher Education Institutions, Employability, and Employability Management.

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INTRODUCTION

Higher Education Institutions (HEIs) must recognize that for many students the transition from education into employment is not a straightforward matter and in the past many students have been ill equipped for this transition. During 90s, this issue has been exacerbated because of the considerable expansion in graduate numbers within a relatively short period of time. Furthermore, the nature of graduate employment is changing; today it is only a minority of students who can hold any realistic expectation of employment in a position directly related to the discipline studied; this is particularly the case for those students whose focus remains within traditional academic disciplines. Whilst it is essential that the academic standards of particular disciplines or broader fields of study are not undermined, it is also important to be realistic and to note that the academic knowledge gained will (for most students) never be utilized directly in any employment context. More and more, the academic qualification of the degree is merely a statement that the graduate has demonstrated the ability to perform to a particular level of academic competence and, perhaps more importantly, possesses the **ability to learn**.

It is against this background that national debate has arisen about with what should universities and other institutions offer to their students. Since 1997, this debate has been fuelled by the report from the National Committee of Inquiry into Higher Education (Dearing Committee), which has recommended that:

".... institutions of higher education [should] begin immediately to develop, for each program they offer a 'program specification' which .... gives the intended outcomes of the program in terms of:

1. the knowledge and understanding that a student will be expected to have on completion;
2. key skills: communication, numerically, the use of information technology and learning how to learn;
3. cognitive skills, such as an understanding of methodologies or ability in critical analysis;
4. subject specific skills, such as laboratory skills."

At the end of the 20th century, the connections between higher education and the world of work are again among the key issues of debate whenever **challenges for innovation** in higher education are at stake. Issues in this domain played a substantial role, for example, in UNESCO's "Policy Paper for Change and Development in Higher Education" (UNESCO, 1995) and were more frequently addressed than any other topic in the series of preparatory conferences held in 1997 for the UNESCO World Conference on Higher Education (see UNESCO, 1997a, 1997b; Teichler, 1997). In its 1995 report entitled "Higher Education: Lessons of Experience", the World Bank cited the tensions between higher education and employment as one of the key elements of "higher education in crisis". In 1997, the ILO pointed to major challenges for all areas of education and training due to the globalization of the economy. The OECD addressed the transition from higher education to employment in one of its largest projects in the early 1990s (OECD, 1992, 1993), and continued to point to salient issues of higher education and employment in the OECD Job Study (1994) and its thematic review of "The First Years of Tertiary Education" (OECD, 1997). Or, to take an example from developing countries: when setting up a training program for higher education researchers, the Association of African Universities noted that, in addition to the cost and financing of higher education, the connections between higher education and the world of work have elicited very keen interest within African universities. Even if overview publications on higher education in various regions of the world suggest that higher education has been concerned primarily with issues of policy and management in recent years (Yee, 1995; Kent, 1996), there is a definite tendency to devote more and more attention to issues concerning the social relevance of higher education, including the links between higher education and the world of work.

Table no. 1. Unemployment rates in 8 countries

Periods	US	Canada	Australia	Japan	France	Germany	Sweden	UK
2006	4.6	5.5	4.8	4.2	9.5	10.4	7.0	5.5
I	4.7	5.7	5.0	4.2	9.9	11.1	7.3	5.3
II	4.7	5.4	4.9	4.2	9.5	10.6	7.3	5.5
III	4.7	5.6	4.7	4.2	9.5	10.1	6.7	5.5
IV	4.4	5.4	4.5	4.1	9.2	9.6	6.5	5.5
2007	4.6	5.3	4.4	3.9	8.6	8.7	6.1	5.4
I	4.5	5.4	4.5	4.0	9.1	9.3	6.4	5.5
II	4.5	5.3	4.3	3.8	8.7	8.9	6.1	5.4
III	4.7	5.2	4.3	3.8	8.5	8.5	5.8	5.3
IV	4.8	5.2	4.3	3.9	8.2	8.1	5.9	5.2
2008								
I	4.9	5.2	4.1	3.9	8.0	7.8	5.8	5.3
II	5.3	5.3	4.3	4.0	8.0	7.6	5.8	5.4
III	6.0	5.3	4.2	4.1	8.3	7.5	5.9	5.9
Oct	6.5	5.4	4.3	3.7	8.5	7.3	6.2	6.0
Nov	6.7	5.7	4.4	4.0		7.3	6.9	

[Source: U.S. Department of Labor, Bureau of Labor Statistics, Division of Foreign Labor Statistics, January 9, 2009]

Table no. 1 gives a statistical insight regarding the status of unemployment from economically advanced countries' point of view. It indicates that the rate is increasing day-by-day giving crisis a severe shape. The crisis is even more critical in developing and least developed countries. So, it is high time for HEIs to take these issues into consideration to make their graduates fit for fighting the crisis. In this situation, HEIs in developed countries can play a role model for

best practices benchmarking. This paper, thus, discusses the situation in some greater details with few best practice examples so that the HEIs in countries like us can be benefited, at least in a sense that brainstorming starts. Because, it seems that we are not still ready for the fighting. The paper is organized as: section 2 defines the concept of employability and its scope followed by a discussion on employability requirements in section 3. In section 4, matching theory is presented to make a convergence between employers and HEIs. Section 5 boils the motivation of learning for earning. Section 6 presents the global scenario with some benchmarking practices to shape up the discussion with some policy requirements. Finally, the paper ends with a brief conclusion.

2.0 EMPLOYABILITY: AS AN EMBRACING CONCEPT

The term employability 'can lack clarity and precision as an operational concept' (Hillage and Pollard, 1998) and is 'a word in need of a meaning' (Knight, 2001). In practical terms, different stakeholders view employability differently. Most notably, employer representatives tend to envisage employability strictly in terms of meeting the short-term skill needs of employers or the economy. Academic researchers and, crucially from the point of view of the learner, not employers, define employability more widely as the propensity for the individual student to get employment (Harvey and Morey, 2003). In a study aimed at defining employability and developing a framework for policy analysis, Hillage and Pollard (1998) concurred that employability 'is about being capable of getting and keeping fulfilling work…the capability to move self-sufficiently within the labor market to realize potential through sustainable employment'. Keep (2000) noted an 'increasing emphasis upon the role of the individual in assuming responsibility for their own upskilling' in Scotland.

Hillage and Pollard (1998) also commented that government policy had tended to be aimed more at the individual and the supply side than on employers and the demand side. They have usefully subdivided employability into three abilities: 'having the capability to gain initial employment, maintain employment and obtain new employment if required. For the individual, employability depends on: the knowledge, skills and attitudes they possess; the way they use and deploy those assets and present them to employers; and the context (e.g. personal circumstances and labor market environment) within which they seek work.' They have summarized these as: assets, deployment, presentation, and context (Table no. 2).

Table no. 2. Factors affecting Employability

Assets	**Deployment**	**Presentation**	**Context**
Knowledge (i.e. what they know)	Career management skills	Presentation of CVs	Gender, age and type of degree obtained
Skills (what they do with what they know) and includes: - Traditional academic skills; - Personal development skills; and - Enterprise or business skills.	Job search skills	Qualifications possessed, references and testimonials	Labor market demand for the individual's skills and knowledge, labor market regulation and employer recruitment and selection behavior.
Attitudes (how they do it)	Strategic approach	Interview technique, work experience or track record.	Individual's responsibilities and household status

From the perspective of employers, the term 'employability' refers to readiness for work, that is, possession of the required skills, knowledge, attitudes and commercial understanding that will enable new graduates to make productive contributions to organizational objectives soon after commencing employment.

However, in an extended discussion of the employability concept, Hillage and Pollard (1998) put more emphasis on individuals possessing the capability 'to move self-sufficiently within the labor market to realize potential through sustainable employment'. Similarly, Harvey and Morey (2003) highlight the skills which graduates need in order to manage their own careers and those which will enable them to continue learning throughout their working lives.
These broader conceptions of employability partly reflect the influence of the 1997 Dearing Report which identified a set of key skills which were 'relevant throughout life, not simply in employment' (NCIHE, 1997). Dearing defined these skills as Communication, numeracy, IT and Learning how to learn at a higher level and recommended that provision of such skills should become a central aim for higher education.

Above definitions give us a common reference of defining employability, that is, skill. Research findings till date listed a handful of skills required for graduate employability. The Employability Skills Framework, developed by the Australian Chamber of Commerce and Industry and the Business Council of Australia and published in Employability skills for the future (DEST, 2002), provides an excellent starting point for any discussion of employability skills in higher education. The eight employability skills – communication, teamwork, problem solving, self-management, planning and organizing, technology, life-long learning, and initiative and enterprise – and associated attributes were first published in that report.

> 'Employability skills are defined 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' (DEST 2002).

The report contains a discussion of different terms being used in different environments to describe generic skills for all employees. It refers to the higher education sector and notes the work on generic skills and graduate attributes being undertaken at that time. Other publications (Allen Consulting Group, 2006 and DEST, 2006) link the term employability skills with other terms such as key skills, core skills, life skills, generic skills, essential skills, key competencies, necessary skills and transferable skills. Subsequent to the development of the Employability Skills Framework the vocational education and training sector (VET) has taken a system-wide approach and applied these eight employability skills to all nationally recognized qualifications.

ATTRIBUTES

Sometimes, skills are confused with attributes that need further clarification. Graduate attributes are defined as the qualities, skills and understandings a university community expects its students to develop during their stay at the institution and, consequently, shape the contribution they are able to make to their profession and as a citizen (ATN, 2000). Similarly, it may be also defined as: '…the qualities, skills and understandings a university community agrees its students should develop during their time with the university' (Bowden et al., 2002). Since 1998, there has been much work done by universities to define these attributes and to integrate them in a variety of ways. Graduate attributes, as they are conceptualized in Australia, had their synthesis in the West Review in 1998, which provided a framework of generic attributes that ideally every graduate should have:

- The capacity for critical, conceptual and reflective thinking in all aspects of intellectual and practical activity;
- Technical competence and an understanding of the broad conceptual and theoretical elements of his or her fields of specialisation;
- Intellectual openness and curiosity, and an appreciation of the interconnectedness, and areas of uncertainty, in current human knowledge;
- Effective communication skills in all domains (reading, writing, speaking and listening);
- Research, discovery, and information retrieval skills and a general capacity to use information;
- Multifaceted problem solving skills and the capacity for team work;

- High ethical standards in personal and professional life, underpinned by a capacity for self-directed activity. (DEETYA, 1998)

Since that time, all Australian universities have been required to develop policy statements which specify their generic graduate attributes as part of funding and reporting arrangements with the Department of Education, Science and Training. However, it should be acknowledged that many universities' graduate attributes would include additional skills with broader social or other commitments, such as:

1. Social justice (Murdoch University)
2. Global perspective (University of New England)
3. Respect for ethical practice and social responsibility (Monash University)
4. An appreciation and valuing of cultural and intellectual diversity and the ability to function in a multicultural or global environment (University of Wollongong)
5. Academic excellence (University of Melbourne)

2.2 GRADUATE OCCUPATION

The destination of employability is being absorbed in specific occupation. Again, occupation may have different streams and categories. To define graduate occupation, Smith et al. includes both 'traditional graduate' and 'graduate track' occupations as defined by McKnight (1999) through the following categorization:

'Traditional graduate' occupations, e. g., doctors, lawyers, qualified engineers, teachers, high-level managerial and technical occupations

'Graduate track' occupations, e. g., low level management jobs, technician jobs, skilled caring jobs, high level sales jobs – that is, jobs which require high levels of education, are increasingly filled by graduates and which often constitute entry routes to higher level positions

'Non-graduate' occupations (those which clearly do not require high level qualifications and which are unlikely to make use of graduate-level skills and knowledge)

STAKEHOLDERS

Graduates who are ready to fight should know different active groups in the market with their specific needs and requirements. There are clearly a number of different groups with an interest in employability issues in higher education. These are illustrated in Table no. 3. They has different relationships to the issues in terms of the immediacy of impact and has been divided into three groups:

Table no. 3. Stakeholder Groups in Employability

Primary	Secondary	Tertiary
Students Graduates	Employers Higher education institutions	Government Government agencies such as the Scottish Higher Education Funding Council

Students or graduates belong to primary category as employability will be effected through them and from the HEIs' consideration; they are the products available for sale. Employers and HEIs fall in secondary category and have some sort of conflicting relationship until their requirements are not matched. As a producer of graduates, HEIs are always in a pressure to prove that their products possess potentials and required qualities as demanded by the consumers (employers). Thus, when employers and HEIs requirements are overlapped and fulfilled, employability reaches to a match. Finally, government and other regulators in the market do watchdog function so that the tug of war between primary and secondary stakeholder groups results fair competition in the market. HEIs should always give emphasis on the convergence of students'

needs and employers' needs that will ultimately make the graduates more salable. An idea of convergence between graduate and employers needs is depicted in Figure no. 1 below. And government should patronize such functions through strategic policies and interventions as the responsibility of ensuring employment to the graduates ultimately goes onto the shoulder of the government.

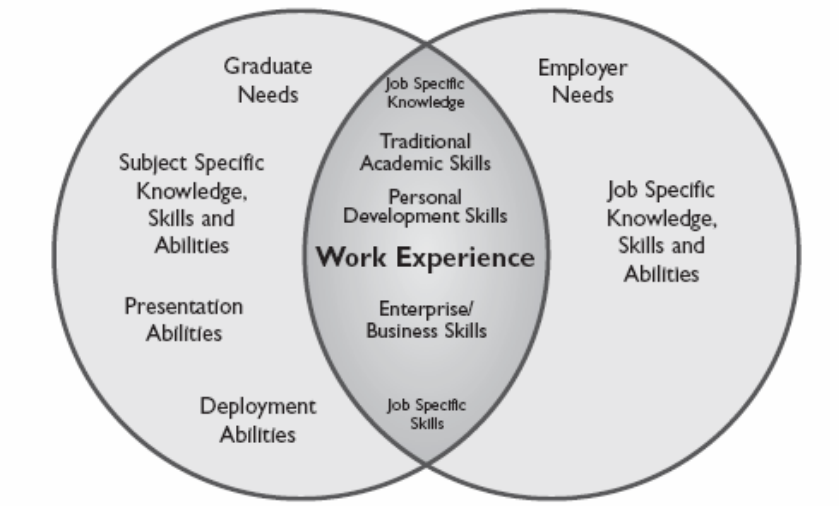

Figure no. 1. Convergence of Graduate and Employer Needs

3.0 EMPLOYABILITY REQUIREMENTS

To ensure employability for all, provided that there is no demand side problem, graduates should complete the homework long before reaching to the employer. The requirements as demanded in the market are presented below from different stakeholders' point of view.

FROM EMPLOYERS' PERSPECTIVE

Studies of employer demand for graduates in engineering and science disciplines have found that appropriate work experience and evidence of commercial understanding rank highly as selection criteria because of commercial pressures to seek graduates who will not require long 'learning curves' when they start employment (Mason, 1998, 1999). A number of reports issued by employers' associations and HE organizations urged universities to make more explicit efforts to develop the 'key', 'core', 'transferable' and/or 'generic' skills needed in many types of high-level employment (AGR 1993, 1995; CBI 1989, 1994, 1999; CVCP, 1998; CIHE, 1996).

Within HE the generic skills needed to enhance graduate employability are now typically seen as including the skills emphasized by Dearing and also Literacy, Problem-solving skills and Team-working skills. In addition, the employability skills agenda is commonly defined to include 'Understanding of the world of work' which typically refers to knowledge about the ways in which organizations work, what their objectives are and how people in those organizations do their jobs (Coopers and Lybrand, 1998).

Sometimes, the rate of employability depends on some demographic profile of the graduates and employers give sufficient importance on these factors. For example, in a study of 1993 leavers from pre-1992 Universities, Smith, McKnight and Naylor (2000) find that the probability of student leavers being employed six months after graduation is positively related to the class of degree and is also strongly influenced by the subject studied, measures of prior educational attainment, age at graduation and social class background. Most of these factors are also found to strongly affect the probability of student leavers in employment being in a 'graduate occupation' although age at graduation has only a weakly significant effect for female graduates and no significant effect for males.

3.2 FROM UNIVERSITIES' PERSPECTIVE

University plays an important role for accelerating employability. University responses to this agenda typically include modifications to existing course content (sometimes in response to employer suggestions), the introduction of new courses and teaching methods and expanded provision of opportunities for work experience – all intended to enhance the development of employability skills and/or ensure that the acquisition of such skills is made more explicit. In some cases university departments have sought to 'embed' the desired skills within courses; in other departments, students are offered 'stand-alone' skills courses which are effectively 'bolted on' to traditional academic programs. In fact many university departments now use a mix of embedded and stand-alone teaching methods in their efforts to develop employability skills.

FROM REGULATORS PERSPECTIVE

As further evidence of the growing importance attached to graduate employability, the Higher Education Funding Council for England (HEFCE) has developed measures of university performance which include indicators of graduate labor market outcomes, for example, the probability of new graduates finding employment after a specified time interval (HEFCE, 2001, 2002, 2003). Regulators are primarily concerned with the matching of demand and supply side of the employability. Creating opportunities for employment and, at the same time, producing qualified and skilled manpower need an equitable balance to ensure smooth running of the system.

MATCHING THEORY

From the above discussion, a discussion of matching theory becomes pervasive and relevant to the current area of interest. In matching theory, labor market 'failure' on the part of individual graduates – unemployment or underutilization of graduate-level skills in employment – reflects mismatches between graduates and employers which may come about for a number of reasons. For example, Coles and Smith (1998) emphasize that in a random matching model mismatches between job-seekers and employers may arise because of imperfect information, resulting in time and search costs for prospective partners to obtain information about better matches. They also propose an alternative 'stock-flow matching' model in which, after an initial round of match-making, agents may simply wait for appropriate partners to enter the market in a later time period. Other strands of matching theory emphasize the role of institutional and labor market rigidities in contributing to mismatches between job-seekers and employers, for example, the higher incidence of underutilization of skills among female graduates who combine part-time employment with care of young children (Green, McIntosh and Vignoles, 2002).

In a recent investigation of labor market mismatches in the Netherlands, Allen and van der Velden (2001) find that 'education-job mismatches' (individuals holding jobs for which their formal qualifications are higher or lower than required) do not correspond closely with 'skill-job mismatches' (individuals holding jobs for which their skills are above or below those required). One possible explanation for this is that, within given educational qualification categories such as degree-holders, there may be unmeasured differences in skills between individuals, and individuals deemed by employers to be relatively low-skilled may be less likely than others in their qualification group to be offered jobs which require their level of formal qualification.

Recent UK evidence in support of this hypothesis of 'heterogeneous skills within qualification levels' has been presented by Green and McIntosh (2002) who find that less than half of people identified in the 2001 Skills Survey as over-qualified (in terms of formal certification) for their jobs were also over-skilled (that is, in their own evaluation, not making much use of their skills and abilities in their present jobs).

Another proposition advanced by Allen and van der Velden is that the selection criteria used by employers when screening job applicants may include factors such as work experience, gender

and social background which are distributed unevenly within educational qualification categories. This is another potential line of explanation why individuals with similar levels of formal certification may encounter varying degrees of success in securing employment in jobs which make use of their graduate-level skills and knowledge.

Thus matching theory, together with the literature on over education and underutilization of skills, points to several reasons why the teaching, learning and assessment of employability skills might be expected (all else being equal) to contribute to superior labor market outcomes for graduates in possession of those skills.

5.0 LEARNING AND EARNING

A recent study by the US Census Bureau for the US confirms the connection between a person's level of education and his or her employability and earnings. The study shows that US college graduates earned far more over their lifetimes than people who only graduated from high school. Data from the 1980 Census of Population and Housing, the 1998 Pre-Census Survey and, most recently, the 2002 Household Income and Expenditure Survey (HIES) suggest that indeed a strong positive correlation exists between a person's level of education and his or her employability and wage earnings.

An analysis of the adults (25 years of age and older) covered by the 1980 census, the 1998 survey and the 2002 HIES reveals, firstly, that those with higher levels of education enjoyed higher rates of employment. Adults who had never attended school had the lowest rates of employment across the board. In the HIES; only 10% of those who had never gone to school were employed and in the 1998 survey the rate for this same group was 11%. On the other hand, data from all three periods show that with higher education come higher wages, especially for those with college degrees.

Among those employed adults surveyed in the HIES, the average person who had never attended school earned around $4,000 annually, while the average master degree holder earned over six times that amount, at just over $26,000. In all three periods, the marginal increase in mean wages between those with associate degrees and those with bachelor degrees was significant. In the HIES, for instance, bachelor holders earned around $9,000 more than associate holders. In both 1980 and 1998, the difference is around $4,000.

Table no. 4. Employment Rates and Wages of Adults by Educational Attainment: 1980, 1998, 2002

Educational Attainment	Employment Rates (%)			Mean Wages		
	1980	1998	2002	1980	1998	2002
Never attended school	43	11	10	1,767	2,580	4,272
1st grade	45	13		1,736	1,920	
5th grade	51	24		1,536	5,885	
Elementary graduate	55	33	40	1,741	5,518	5,932
10th grade	55	44		2,682	5,790	
11th grade	54	47		2,794	7,603	
HS graduate	69	64	62	4,093	8,046	9,728
Associate degree	84	86	84	5,358	12,675	13,694
Bachelor degree	86	95	91	9,668	16,535	22,788
Master degree	85	86	83	11,284	32,495	26,100

Source: *Insular Areas Statistical Enhancement Program (Associate, Bachelor and Master degree equivalent to 2, 4 and 6 years of college, respectively)*

6.0 GLOBAL SCENARIO

In the wake of rapid growth in higher education participation in the UK, and the increase in global market competition experienced by many employers, UK universities came under intense

pressure to equip graduates with more than just the academic skills traditionally represented by a subject discipline and a class of degree. This becomes true for every higher education institutions. However, some important points are highlighted separately due to their perceived importance. Some benchmarking examples (Table no. 6) are also presented to give the discussion a practical look.

6.1 EMPLOYABILITY AND DIVERSITY

Students and graduates from non-traditional backgrounds can face additional hurdles in accessing higher education (Archer *et al.,* 2003), succeeding within it (Yorke, 1999) and making the transition into the labor market (Blundell *et al*., 2005 and Blasko *et al.,* 2003) and postgraduate education (Hoad, 2001). In relation to progression into the labor market, a recent review of literature (Thomas, 2005, incorporated into Gorard *et al.,* 2006) demonstrated that graduates from all non-traditional backgrounds experience disadvantage in the labor market. The findings, drawn from 44 research studies, are summarized in the Table below.

Table no. 5. Graduate progression by specific target groups

Target group	**Main conclusion**
Socioeconomic status or proxy	For people from lower socio-economic groups (SEGs) being a graduate offers labor market advantages compared to non-graduate peers, especially for males (Dearden *et al.,* 2004). But SEGs are disadvantaged compared to traditional graduates (Purcell and Hogarth, 1999, Smith *et al.,* 2000).
Disabled graduates	Disabled graduates have lower earnings than non-disabled graduates (Hogarth *et al.,* 1997), but they are more likely to progress to further study (Croucher *et al.,* 2005). The difference is less pronounced for graduates with unseen disabilities (Croucher *et al.,* 2005).
Ethnic minorities	Ethnic minorities experience more difficulty in securing employment after graduation than white graduates (Connor *et al.,* 2004 and Blasko *et al.,* 2003), and men in particular are more likely to be unemployed. Once they have secured employment there is evidence of parity or better with majority graduates (Connor *et al.,* 2004 and Blasko *et al.,* 2003). Different minorities have different trends, and there is some disagreement about these.
Mature graduates	Male and female mature graduates experience greater disadvantages in the labor market than younger graduates (Conlon, 2001). In part this is due to discrimination by employers, especially in some fields.
Women	Women graduates earn less than men (Hogarth et al., 1997 and Metcalf, 1997), and this difference is greater if they have a family and a career break. However, being a graduate is an effective way of redressing gender inequality in comparison to non-graduates.
Vocational sub-degree qualifiers	Vocational students progress to further study and employment, while unemployment appears to be very low. There are however distinct subject variations. Labor market returns are significantly lower than for first-degree graduates. (Little *et al.,* 2003)
Part-time graduates	Part-time students have different labor market expectations, as the majorities are in employment while they are studying, but many do report labor market gains. This is mediated by subject, gender, age and ethnicity. (Brennan *et al.,* 2000)
Nontraditional groups and multiple disadvantage	Some studies do not delineate specific under-represented groups, or look at multiple disadvantages. These studies show that non-traditional graduates experience disadvantage in the labor market compared with their traditional counterparts, and these are related to both personal characteristics and educational choices.

6.2 PEDAGOGICAL ISSUES

Developing a pedagogic approach that promotes employability is compatible with good learning as it is understood by many. The primary feature is ‘active learning’, which engages the

student in deep as opposed to surface learning (Ramsden, 1992). The Pedagogy for Employability Group (2004, reissued 2006) suggest that pedagogical approaches that promote student engagement and employability might include:

1. Requiring students to work on learning tasks, where possible, in authentic and/or richly-resourced contexts (e.g. problem-based learning, analyzing case study material, summarizing complex material into a short briefing paper for a specific audience and similar activities);
2. Involving collaborative work where appropriate (e.g. group projects, the establishment of learning communities, preparation of group reports and presentations etc);
3. Providing cognitive 'scaffolding' to help students towards achievements currently beyond their unaided capability and progressively removing it as their capability develops (e.g. role playing, working in progressively larger groups to produce a response to a particular challenge, the use of formative assessment and resubmission); and
4. Encouraging the development of meta-cognition (e.g. reflection and self-regulation via PDP, writing critical commentaries and reviews, presenting a case and being prepared to justify it).

These types of learning activities both address many of the difficulties new students face in making the transition into higher education and enable students to develop many employability skills. Teaching staffs however need to take the opportunity to make the link between academic tasks and employability explicit. Students can be encouraged to reflect upon the broader learning that has taken place and, for example, document them in their personal development planning (PDP) portfolios.

6.3 CURRICULUM DEVELOPMENT AND EMPLOYABILITY

There is a spectrum of ways in which the curriculum can be developed to support student employability. These include:

1. Employability through the whole curriculum
2. Employability in the core curriculum
3. Work-based or work-related learning incorporated as one or more components within the curriculum
4. Employability-related module(s) within the curriculum
5. Work-based or work-related learning in parallel with the curriculum

Following Warren (2002), curriculum development to support employability can take either or all of the 3 forms: separate, semi-integrated and integrated (Warren, 2002). A separate approach implies that the intervention of support is offered in addition to mainstream teaching, for example supplementary instruction or skills modules. A semi-integrated approach includes initiatives, which are closely aligned to course curriculum and are developmental rather than 'remedial'. Integrated approaches make the development central to the learning experience within the discipline context. Thus, in relation to employability, some institutions provide generic modules about employability and careers education (separate); others make use of subject specific employment modules or work experience (semi-integrated); while integrated approaches include work-based learning and the introduction of vocationally oriented programs. Warren suggests that semi-integrated and integrated approaches are more effective than separate interventions. However, before seeking to reform the curriculum it is useful to consider the extent to which the existing curriculum contents support employability goals. For example, Hughes' Employability Audit Tool (www.heacademy.ac.uk/2644.htm) offers a quick way to assess the curriculum content and its relationship to the world beyond higher education.

6.4 PERSONAL DEVELOPMENT PLANNING (PDP)

Knight and Yorke (2003) have described employability as a blend of understanding, skilful practices, efficacy beliefs (or legitimate self confidence) and reflective ness (or meta-cognition). In this 'USEM' model the 'E' – for efficacy beliefs, student self theories and personal qualities and the 'M' – for self awareness and the ability to reflect, are both highly pertinent to PDP practice, particularly given the emphasis in a recent consultation (Ward et al., 2005) placed by practitioners on PDP as a holistic and integrated set of processes. The introduction of PDP into undergraduate programs offers an opportunity to assist all students to develop their employability. For example, students are not always able to translate their qualities and skills to meet employers' recruitment criteria, and yet the ability to connect with recruitment criteria is highly valued by employers. The QAA (2002) states that PDP should help students to:

1. Become more effective, independent and confident self-directed learners;
2. Understand how they are learning and relate their learning to a wider context;
3. Improve their general skills for study and career management;
4. Articulate their personal goals and evaluate progress towards their achievement; and
5. Encourage a positive attitude to learning throughout life.

PDP is now a core curriculum requirement in the UK, and thus enables employability to be semi-integrated into undergraduate programs.

6.5 WORK-EXPERIENCE, VOLUNTEERING AND PART-TIME EMPLOYMENT

Many of the recommendations and interventions in the literature relating to improving the employability of students from under-represented groups focus on building suitable curriculum vitae. Emphases often fall on participation in work placements (Blackwell *et al*., 2001, Mason *et al.,* 2003), volunteering, extra-curricular activities (Blasko *et al.,* 2003 and Brown and Hesketh, 2003) and overseas study (Blasko *et al.,* 2003). All are held to be advantageous to graduates in the labor market, while participation in part-time employment - unless related to field of study – tends to be regarded as detrimental to both fruitful study (Bamber and Tett, 2000) and success in the graduate labor market (Blasko *et al.,* 2003).

However, for the majority of students from non-traditional backgrounds, particularly those from lower socio-economic groups and mature students, participation in part-time employment is essential (Susan and Williams, 2002). Research in Scotland found that 68% of students were working part-time in 1999-2000, compared with 43% three years earlier in 1996/7 (Sinclair and Dale, 2000). Furthermore, the study showed that almost a quarter of first year students in 1999/2000 were working more than 16 hours per week. Noble (2004) found that generally students who were in paid employment worked more than the maximum 12 hours recommended by the Select Committee on Education and Employment. This led to difficulties in meeting the academic demands of their courses. Likewise, by the end of Walker's (1998) longitudinal project, two thirds of participants were engaged in part time employment, many working for more than 20 hours a week. Only one was in a job relevant to their course. Nevertheless, some institutions have recognized that part-time employment is now the reality for many students, and have developed modules to enable them to extract and reflect on skills developed there, and to relate them to their field of study and career aspirations.

By contrast, course-relevant work experience has a far more positive impact on graduates' experience in the labor market. Blackwell *et al.* (2001) do not specifically focus on students from under-represented groups, but they provide data about the potential impact of work experience on employment in the graduate labor market. Of particular interest is a study reported by Blackwell *et al* that draws on HESA data for 74,922 graduates in 33 subject areas. This shows that sandwich courses have a positive impact on labor market employment: graduates from sandwich courses have higher post-graduation employment rates (69%) than students on equivalent non-sandwich courses

(55%). In particular, graduates of thick-sandwich courses usually outperform those on equivalent thin sandwich courses. There are, however, differences across disciplines.
Students from lower socio-economic groups and mature students in particular are less able to participate in relevant work experience and extra-curricular activities due to personal and financial constraints, such as caring for family members, and the need to retain paid employment throughout participation in HE. This exacerbates the labor market disadvantages they face (Brennan and Shah, 2003).

Purcell *et al.* (2002) suggest that HEIs and employers need to develop work experience opportunities within undergraduate degree programs – which offer students relevant work experience and enable them to develop demonstrable skills and competencies. A number of institutions therefore offer or encourage all students - irrespective of discipline - to participate in course-related work placements (Thomas *et al.,* 2005).

6.6 IMPROVING EMPLOYERS' PRACTICES

Higher education institutions tend to focus on improving the employability of graduates. However, employers' practices can discriminate against graduates from under-represented groups. There may therefore be a role for HEIs to promote good practice amongst employers. Purcell *et al.* (2002) conclude from their research that good practice adopted by employers encompasses the following characteristics:

1. Recruitment is intertwined with marketing – in other words employers have a business case for diversity and use new approaches to reach students from different institutions, backgrounds and ages.
2. They are very clear about the skills and competencies sought, and therefore avoid requirements that indirectly exclude some graduates (e.g. flexibility of working hours and/or place).
3. They develop effective networks with professional associations and HEIs to help ensure they reach the type of graduate they need, and that these potential employees are encouraged to apply.
4. They offer flexible work patterns.
5. They align practice with policy and manage human resources strategically, even when aspects of the recruitment process are outsourced. This involves staff training to help eradicate bias from the recruitment process, and ensuring commitment at all levels of the organization, e.g. via a 'senior champion'.

Table no. 6. Best Practice Benchmarking – A Global Scenario

University	Events	Accelerating Employability
University of Manchester	HE Uncovered	A two day event with series of presentations and information sessions providing up to date information on graduate employability and higher education to teachers and advisers working with young people.
	Graduate Employability Roadshow	Provide up to date information and advice about higher education and employability to students from lower socio-economic groups through presentations on topics such as graduate employability, researching careers using the internet, subject specific sessions such as careers using math and employability skills.
University of Edinburgh	Pathways to the Professions	Encourage the progression of school pupils from under-represented social groups into Law, Medicine and Veterinary Medicine, and provide careers information through outreach activities.
Bournemouth University	Stepping Stones	Is a web-based resource providing activities and reading to be completed prior to induction (http://sim/steps/index.html) and an opportunity for the students to become involved and engaged

		with their course before induction.
University of Liverpool	Personal development planning	Two review meetings are offered to each student, one in each semester. Each meeting has specific agenda and the report of each meeting is send to the tutor through email.
University of Glamorgan	Community Radio Project	Aims to widen access to education to the local community running a community radio station (in partnership with a local group). The local radio service is broadcast from the University to the town, reinforcing the University's role in the community and breaking down perceived notions of 'town versus gown'.
North Devon College	Foundation Degree in Music Technology	The Foundation Degree in Music Technology was set up to provide a vocational training with state of the art industry standard equipment, which gives graduates the opportunity to end up in a range of possible careers.
Canterbury Christchurch University	BA/BSc in Professional Development	The program is designed for people with experience and responsibility in the workplace who wish to integrate study of an academic or vocational subject with academic study that focuses on the workplace.
Universities of Huddersfield, Bradford, Leeds and Leeds Metropolitan	The Impact Project	Designed to enhance the employment skills and opportunities for ethnic minority students and offers intensive information, guidance and job-search support to UK ethnic minority students through one-to-one discussions, workshops on CVs and application forms, and training for interviews and employer assessment procedures.

6.7 TALENT HUNT

Mozilla's Firefox browser is impervious to most viruses though mainstream America has yet to embrace it. Mozilla's business development team turned to Stanford University. But instead of going to the business school, they headed for the doublewide trailer that housed Stanford's Hasso Plattner Institute of Design, dubbed the "D-school" on campus. The course was team-taught by Stanford professors and industry professionals. Each student worked in a team that included a B-schooler, a computer science major, and a product designer. And each team used design thinking to shape a business plan for Mozilla. The power of this new approach, called design thinking, to promote innovation and open up business opportunities is attracting the attention of corporations around the globe.

As business increasingly turns to India and China to provide low-cost, high-quality goods and services, companies have to focus on innovation to be competitive. That driving need makes design thinking the hottest trend in business culture today. If engineering, control, and technology were once the central tenets of business culture, then anthropology, creativity, and an obsession with consumers' unmet needs will inform the future.

This change in focus is leading to a huge corporate talent hunt. To make their business culture more innovative, managers are hiring thousands of new people who can think and act more creatively. More and more, recruiters ask if people with a degree in "administration" are up to the task. That's why such corporations such as Nike, General Electric, McDonald's, Intel, and many others are looking beyond traditional sources of leadership to a new set of schools and programs to find innovative managers (Table no. 7). And that's why Stanford's D-school has earned a place on the list of Top D-schools, the first-ever survey of design schools and design programs in the U.S., Europe, and Asia that are graduating the innovators companies hunger for. These are the schools that "move away from analyzing existing options and look to the creation of new options that have not yet been considered," explains Roger Martin, the dean of the Rotman School of Management at the University of Toronto, a leading school in design thinking.

Table no. 7. Individual Success Stories of Talent Hunt

Graduated From	Working for
Institute of Design, Illinois Institute of Technology, Chicago.	Senior director of innovation advanced concepts at McDonald's Corp
Carnegie Mellon University	Design researcher at the Mayo Clinic's SPARC Innovation Program
Art Center College of Design	Member of GE's Experienced Commercial Leadership Program
Zollverein School of Management & Design, Northwestern and Germany	Leading marketing teams at Johnson & Johnson and H.P. Pelzer Group
Massachusetts College of Art	Director of global design resources for the Gillette Co. worldwide

RECOMMENDATIONS AND CONCLUSION

Higher education confirms high employability if HEIs do their job accordingly. Higher education is not in crisis. As civilization is getting matured day by day, the requirements are getting complex. Today's employer needs graduate with all possible skills and qualities. Thus, the responsibility of HEIs has been increased to a greater extent. As a producer of graduates, HEIs should be more careful regarding the bundle of packages available for graduates like course curriculum, faculty base, infrastructure, and so many other things. HEIs should continue its research to deploy the best efforts on its graduate to make them fit for the employers. Otherwise, the onus will be on the shoulder of HEIs due to the evaluation made by the market at the end of the day. The overall observation reflects that most of the HEIs are not well prepared to face the current needs of the graduates.

HEIs should invest in research and development to find out possible weaknesses so that corrective measures can be initiated. Employers may be involved in the process of designing course curriculum, may also be invited for graduate induction and technical session. This will help HEIs to expose the graduates towards 'Employability before Employability'. Regulators should also come up with strategic objectives to neutralize the market forces so that fair practices can be established. Unemployment is a burden in every cases and the ultimate burden falls on economy. HEIs deserve thanks as they are producing graduates to ensure smooth running of economic wheels. They need active support from both employers and regulators that would result success to all. Employers will be benefited through recruiting qualified graduates, regulators will be benefited by ensuring maximum utilization of resources and HEIs will be benefited due to the recognition.

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