

Labelling, Engendering and Generalising Transferable Skills

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This paper attempts to analyse and examine the imperative of transferable skills through an examination of the graduate student context in a world-wide setting. Beginning with the author's observations and experience with developments in Australia, the paper goes on to identify some general factors from sample schemes in the UK and USA, and demonstrates the need for the attainment of such skills to be both prioritised and made transparent in order to meet the global needs of education in the new millennium.

Introduction

If they want to maximise their opportunities to obtain paid employment or to generate their own income, students in the 21st century will have to adjust to a new mental outlook (Gow & McDonald, 2000). In particular, the small town/rural student has to be prepared either to move to more densely populated areas to find work, or to become entrepreneurial in seeking ways to raise money through running their own business, joining a co-operative, or participating in a family business/farm.

Many managers and professional graduates will have little choice but to adapt their portfolio of knowledge, skills and abilities (KSAs) to suit the culture in which they find themselves, wherever it is that the company or government directs them to work, whether it be in Asia, Europe, Africa, or elsewhere. Critical attributes that all graduates must have on entering work include preparedness, mobility, flexibility, and adaptability. These KSAs are essential competencies that graduates need to demonstrate in order to succeed. Our research consistently shows that there are certain foundation skills that employers want (Gow, 1999), along with a range of KSAs that have become known as transferable skills.

Competencies And Capability

In the 1990s, Australia witnessed a reform in Competency-Based Training (CBT) which acted like a cyclone in the corridors of power and the workplace, sweeping along industrial bodies and the professional associations, and in turn flooding the TAFE (Technical and Further Education) institutions throughout Australia with CBT and CBA (competency-based assessment). New education and training life forms were spawned in schools and colleges. Yet the force of this cyclone failed, in most part, to reach the university towers of learning. Indeed a decade later, the universities were still struggling to interpolate generic skills within the curriculum, let alone to assess general competencies.

In retrospect, in some ways, that may have been to the advantage of the students who graduated in the previous five years. They had been acquiring these skills anyway, but the skills had not been labelled as such, so they may not have known they already had them in their quiver of KSAs, ready to be paraded out at a later date when the necessity arose.

At the same time as Carmichael and others (1993) pushed the competency agenda, another group assisted by Stephenson (1994) from the UK were convinced that the concept of capability (especially in relation to competencies for managers and professional graduates, and equally important for the trade and technical business managers) had been forgotten. Thus not everyone was in agreement with the hectic momentum of identifying, training and assessing competencies per se. Holmes (1995) felt the need to clarify that:

“Competence is a key term in the development of National Vocational Qualifications; capability is the term adopted in 1980 by the RSA in its ‘capability manifesto’ for education in general and which was developed in 1988 to the Higher Education for Capability initiative.In 1984, the funding agencies for higher education issued a joint document asserting that ‘The abilities most valued in industrial, commercial and professional life as well as in public and social administration are the transferable intellectual and social skills’.”

Stephenson (1994) contended that capability is an all round human quality in which an individual has justified confidence in their ability to act effectively and appropriately, to communicate effectively, to collaborate with others and to continuously learn from experience (see also Gow & Gordon, 1998). “Capable people have confidence in their ability to (1) take effective and appropriate action, (2) explain what they are about, (3) live and work effectively with others and (4) continue to learn from their experiences, both

as individuals and in association with others, in a diverse and changing society” (Stephenson, 1992, p. 2). While the United Kingdom had been the source for the competencies movement, the United States of America was also a major source of support for the idea of capability.

The Big Promise: Portability of Skills and Recognition of Prior Learning

But our graduates remained ignorant of the tide of pedagogy that was changing their education and training, as they suffered great financial stress, as a result of economic rationalism and the advent of the user-pays mentality that came in with the Government of the Day.

But promises had been made, and it followed that if the consumer pays, then the provider must deliver. Thus the funding power of the local and international students led to demands from the students for more portability of skills between institutions, with the result that there were new Memorandums of Understanding signed between TAFEs and universities with double badging of certain degrees. Such partnerships from private colleges to universities had been in existence with credit/exemption policies for decades and the international student movement in the 1980s forged articulation pathways from private colleges to universities which had an economic need of that feed-through mechanism. This financial imperative was due to a Federal government relentlessly reducing its education funding, year by year, to tertiary providers, in blatant contempt for the OECD report that highlighted that Australian children had one of the worst participation rates in higher education in first world countries, and still does in 2001.

But still the universities held out on portability, keeping strict credit rules (this varied depending on the university) for partial courses undertaken by graduates from other universities. In the main, international students who had undertaken partial degrees (and in some cases full degrees) in other

countries had their previous work disregarded. This put a further shadow over the National Office of Overseas Skills Recognition’s dream of using Recognition of Prior Learning (RPL) for overseas professionals.

RPL had been used on an ad hoc basis in many university programs, and was to occur in TAFEs as a matter of course. Perhaps that proved to be too much trouble for some administrators and teachers, and now frustrated students who found themselves financially stretched and needing to relocate or to change the direction of their study, bounced from institution to institution, with bits and pieces of certificates, diplomas and degrees.

So the issue of transferable skills is a key one for tertiary learning environments, as well as for workplaces. Moreover, the recognition of KSAs learned during secondary school is important for those students who complete grades 11 and 12, because students from other countries gain entry to universities now through other bridging mechanisms, and in certain institutions also gain credit towards their degrees for doing those same subjects prior to entering the degree.

The Essential Nature of Transferable Skills in the Portability Agenda

Krechowiecka (Table 1) talks about the big six transferable skills that are essential for success in the most high-powered jobs, but are often learned and perfected in ordinary situations. These skills are essential foundation skills for any graduate to have in the 21st century. Similar lists of transferable skills can be found in documents from many UK universities. Cambridge University’s eight transferable skills are also listed in Table 1, along with the five key basic skills acknowledged by the National Council for Vocational Qualifications, and listed by the University of East London Careers Advisory Service. In the USA, the Career Centre at Washington University in St. Louis also gives a list

Table 1		
Krechowiecka’s ‘big six’ transferable skills	Cambridge University’s 8 skills	NCVQ list
<ul style="list-style-type: none"> · Communicating effectively · Working well in a team · Problem solving · Using initiative · Being well organised · Being adaptable 	<ul style="list-style-type: none"> · Intellectual skills · Communication skills · Organisational skills · Inter-personal skills · Research skills · Numeracy · Computer literacy · Foreign languages 	<ul style="list-style-type: none"> · Communication · Application of Numbers · Information Technology · Improving own Learning · Working with Others

of transferable skills on their web page and a 1- 4 scale to assess oneself against. At the University of Minnesota Duluth, a 4-point scale is used for students to rate themselves against for 4 major categories of skills. Likewise, in Missouri, the Ultimate Job Search outlines pages of competencies and gives a rating scale for the applicant to rate himself or herself against.

In Australia, the Queensland Government recognised that an academic senior certificate was not a record of transferable skills with respect to grade 12 graduates who wished to gain employment after leaving school. So the Queensland Core Skills (QCS) Test (a 49-item instrument that measures KSAs) was implemented in secondary schools. This procedure enables future employers to assess what additional skills (rated on a five point scale from A to E – higher to lower) the secondary school graduate has in addition to their academic score Overall Positions (OP's), regardless of individual differences in subject patterns.

Of the 49 Common Curriculum Elements in the QCS, 21 of the more obvious work-relevant skills are listed in table 2.

Table 2
Work related elements in the Queensland Core Skills test

- Interpreting the meaning of tables or diagrams, maps or graphs
- Using correct spelling, punctuation, grammar
- Using vocabulary appropriate to a context
- Compiling lists/statistics
- Recording/noting data
- Calculating with or without calculator
- Setting out/presenting/arranging /displaying
- Explaining to others
- Expounding a view-point
- Empathising
- Classifying
- Reaching a conclusion which is necessarily true provided a given set of assumptions is true
- Extrapolating
- Applying strategies to trial and test ideas and procedures
- Applying a progression of steps to achieve the required answer
- Creating/ Composing/devising
- Justifying
- Perceiving patterns
- Searching and locating items/information
- Observing systematically
- Manipulating/operating/using equipment

Engendering Transferable Skills

An individual may already have certain of these skills, yet not have the “knack” to know how to apply them in a different setting, or in a different way; or to know when to use them and when not to use them (capability by any other name).

If a student has never had to locate information, or to find their own way in any task facing the normal adult citizen, they will not be able to demonstrate opportunity finding to their employers. If their families and parents have not engaged in networking, or modelled social skills, or if the students themselves have not been involved in extra curricula activities or school-community work based activities, then it is unlikely that they will have the confidence to network for themselves or their employers.

Ironically, some of them, who are inept at performing such a skill face-to-face, seem nonetheless to be excellent in accomplishing the same aims through the Internet in discussion groups, chat groups, bulletin boards and LAN games weekends.

If a student never has the opportunity to take risks, to try new things and fail within a safe environment, then they are unlikely to develop entrepreneurial skills that they will need in order to generate their own income, or to assist their employers in finding new markets, new products or services.

Generalising Transferable skills

The Myers Briggs typology (MBTI) and neuro-linguistic programming (NLP) technology have given us two frameworks in which to understand how skills become transferable and are transferred, and also what happens cognitively with the transfer of skills.

Using the NLP terminology, if we “chunk up” to the larger picture of competencies (instead of just thinking about them as lists of elements), and use the “intuitor” (in Myers Briggs terms), the terms *models*, *frameworks*, *schemas* and *maps* come to mind, because students need to be able to take any set of KSAs and fit them within existing schemas, which are then generalisable to other contexts such as are set out in Figure 1.

All the skills in the smaller circles are framed around the major task of solving a problem at work, and these same skills are needed in a variety of different contexts in the workplace, at home and in social activities. While we may take it for granted that this happens automatically, if we can show the students, while they are still at school, how these skills cluster around a given task goal or task, then we are helping them to harness those skills when they need them at work.

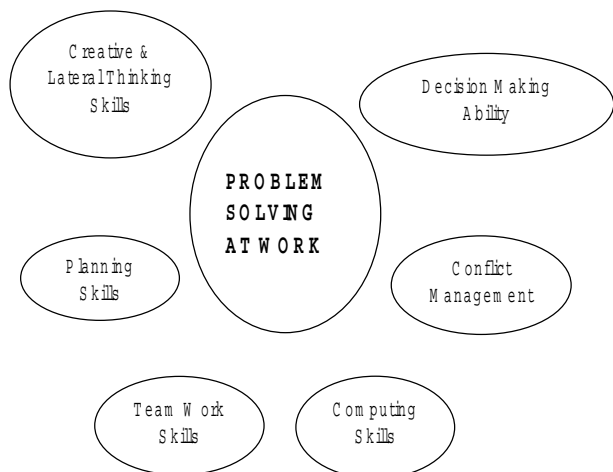


Figure 1: Conceptualising contexts for generalisable skills

If, as teachers, we take the task of an Information Technology worker specialising in web design, then we need to ask ourselves what are the generic KSAs that our Information Technology graduates need to know before they go into the workplace. The mind map may look something like figure 2 (obviously all the KSAs are not contained in the diagram).

The items in the smaller circles are not specific competencies and could conceivably read as clockwise from 1 o'clock:

- being able to liaise with the community
- being able to solve problems
- possessing knowledge of IT
- having basic computer skills
- demonstrating opportunity finding skills
- having the capacity to network
- having a creative ability in design and colour
- being able to plan effectively

In the transfer of skills, the individual student has to have a schema in which to place the surrounding KSAs, in such a way that those skills can be readily utilised in a range of contexts. For example, it is essential for an IT person to know how to network, if they are to keep up with the latest in technology and to work across the net. A young person may achieve this relatively easily through participation in LANS and WANS, or by networking through computer systems and the Intranet, within an organisation.

However, it may not occur to the young person that he or she can use that skill to network themselves socially in a face-to-face environment, in order to

capitalise on networking contacts for work or business purposes.

Indeed, unless that skill is labelled as “networking” by teachers or parents, then he/she may not even be aware of having this skill. Further, unless he/she is shown how networking with the IT culture has very similar components as networking for social and business purposes (see Figure 3), he/she may not register that there is a link, and that it is not, after all, a difficult undertaking. Clearly, those links must be made obvious to the young person.

It is almost as if we have to teach the student to disembed the KSA from the single background in which it is learned and reembed it in a different backdrop.

A skill becomes generalisable if it can be extrapolated from one context to another and if three or four different contexts are presented when the skill is being engendered/refreshed. Then the young person’s schema for that KSA is enriched and new neural pathways are added to the existing information network in their neurophysiology. From the teacher’s perspective, this should be relatively simple, but from the learner’s point of view, it may take some mentoring to prove to the young person that they “have it” or that they can “do it” successfully.

It is necessary to label the KSAs so that they can be acknowledged and categorised, but the ability to locate the KSA in the correct memory classification system is very important. Knowing which other classification systems that a particular skill can also be categorised in, is one of the keys to transferring that skill.

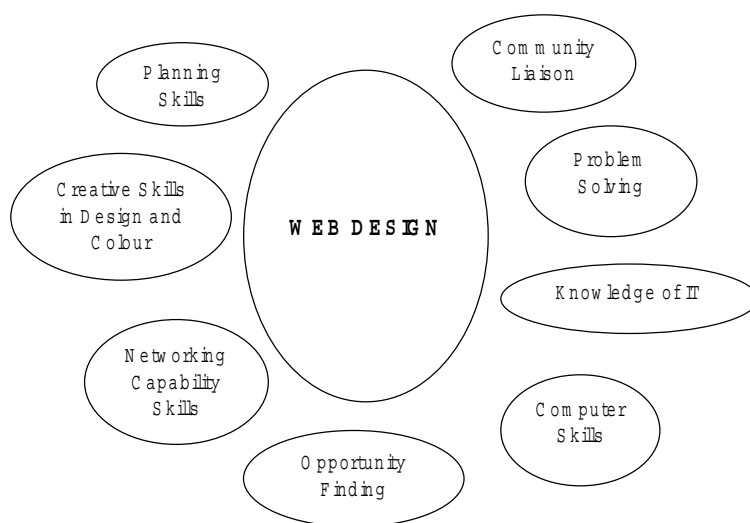


Figure 2: Delineating competencies for web design: as teachers

When a graduate can demonstrate a wider range of general competencies at school and then instinctively know (or studiously select) which of the contexts those KSAs can be applied in, then we begin to see more clearly the Capable Graduate in operation. Not only do they have a repertoire of transferable skills, but also the capability to correctly generalise to other environments when the requirements demand it.

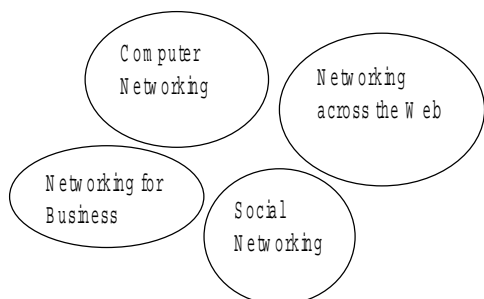


Figure 3: Making links to assist the transfer of skills

Having been checked off on the competencies certificate (whether it is a pass/fail scheme, a 1-5, or an A to E system), the student is *empowered* (see Erickson's stages of development) because his KSAs have been *acknowledged* (labelled) and *confirmed* (assessed). Thus labelling and assessing are important components of engendering transferable skills. Employers may want to sight that passport, in order to ascertain what the young person can do in, or contribute to, the workforce. Indeed a portfolio of KSAs, such as that, may be all that some graduates will have to show employers, other than their certificates, diplomas and/or degrees.

If teachers continuously work on helping students see opportunities for generalising the skills they have to other environments/situations, then they are already helping the student to embed these KSAs within possible future scenarios. In NLP, this is called *future pacing*; in psychology it is called *covert rehearsal*. The more contexts which can be elicited from the students themselves, and in turn from their peers and families, the better. According to Ayre (2001), those students who select what to learn and how to learn it can more easily apply their learning in unrehearsed and unfamiliar contexts.

The Way Ahead

There is no doubt that the education and training system is no longer able to cater to the real needs of a substantial cohort of young people who are progressing to the work force and self-activated avenues of income generation. Until governments and communities, across the world, are prepared to invest in viable, flexible alternatives to, and

adaptations of, the current education and training systems, we will not see the revolutionary changes that are required to prepare our future generation to take their place in the global society of the 21st century.

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