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Key Factors that Inhibit and Facilitate the Integration of Transferable Skills into Higher Education

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KEY FACTORS THAT INHIBIT AND FACILITATE THE INTEGRATION OF TRANSFERABLE SKILLS INTO HIGHER EDUCATION

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Abstract

The scope of this paper is to review some of the literature which addresses the distinct concept of 'Transferable skills' (TS) and specifically their *'integration'* into Degree programmes in Higher Education (HE). The review will address the three influences on such an integration approach namely: influence at an *institutional* level, the influence of *academics* and finally the *student* influences. In addressing these three factors, each one will be approached from a dyadic perspective dealing principally with how they can inhibit or facilitate integration**.** The practical perspective of how this occurs in an Irish Higher Education Institution (HEI) will also be examined. The institution in question is Dublin Institute of Technology (DIT).

Context & Rationale: The need for Transferable Skills

Recent years have seen a growing recognition and a general acceptance across a plethora of stakeholders including industry bodies, state bodies and in the sphere of academia that skills other than the specific 'technical' or 'course-specific' competencies are required among the graduate cohort, Drew (1999) [1], Forfas,(2010) [2], Dearing, (1997) [3], Kenny et al (2007), [4]. Notwithstanding this recognition, there are still many barriers within the academic sphere that act to inhibit the integration of such TS's into HE.

To date a lot of the demands for TS's have derived from external factors, be they industry or governmental. Indeed Fallows and Steven (2000) [5] refer to such an external context and proffer the view that the transition from higher education to employment is not always straightforward with graduates increasingly expected to 'hit the ground running'. In their view, the proportion of new graduates who will be given the chance to spend perhaps months 'learning the ropes' as trainees is already much reduced and this proportion will decline further. Some UK writers (Drew, 1998) [1] suggest that HE must be accountable and justify its value to the country from a purely economic perspective. Part of this must relate to its ability to prove that it is indeed developing the individuals "transferable skills" i.e. ones needed to underpin the economy. This depiction is supported by many other writers like Chada (2006) [6] who also posit that HE institutions are currently under tremendous pressure to develop abilities in their students that are in some way transferable to contexts outside their field of study. The same writer dwells deeper on how best to achieve these skills in an educational context and suggests "*if the provision of skills development is to incorporate knowledge and understanding, analysis, creativity and evaluation, then integration of skills is the only viable option".* (Chada, 2006, p.21) [6]

Addressing the three factors referred to, and whether the bolt-on or integration approach is the most practicable in an Irish HE academic context is the essence of this paper. This working paper signposts a research process presently being utilised to explore the influences of the aforementioned three key pillars in the learning of TS's in an Irish HEI. The reader is therefore invited to contribute to my emergent work at this initial stage of my research exercise.

Keywords: Transferable skills, Key skills, Employability, Higher Education, DIT, Ireland.

Transferable skills: Definitions

Before exploring the issues in greater depth, it is important to define 'transferable skills'. While no universally accepted definition of same exists, various notable researchers have contributed to its understanding and diffusion as a concept. Such prominent contributors have defined them variously as:*"those skills that are central to occupational competence in all sectors and at all levels and include project management, leadership, communication, working in teams and problem solving"* (Chada, 2006, p.19) [6]. Fallows and Steven (2000) [5] also mention the interchangeable nature of the definition, suggesting that such skills can also go under the moniker of 'key skills', 'common skills', and 'core skills'. They refer to TS's as being a term in common parlance in education suggesting that the implication in the term is that skills developed within one situation (education) are also useful when transferred into another situation (employment). One of the seminal contributions in the UK to this topic has been the Dearing Report (1997) [3]. It speaks of the need to raise national standards in the key skills of communications, the application of ICT and also discusses the value attached by employers to personal and interpersonal skills. Significantly the report refers to the need for the continual training of the teaching profession towards helping students in achieving their potential. In Ireland, the key skills identified by the Expert Group on Future Skills Needs (EGFSN) of Forfas (2010) [2], the National governmental advisory group, were threefold. They ranged from "Basic Fundamental Skills" such as literacy and numeracy, through to "People-related skills", such as communication, interpersonal and team-working skills and finally "Conceptual/thinking skills" which included collecting and organizing information, as well as the need for innovation and creative skills. According to the authors of this report, "*The need to improve soft and generic skills has emerged consistently throughout the EGFSN reports."* (Forfas, 2010) [2].

FACTORS IMPACTING THE 'INTEGRATION' OR 'BOLT-ON' APPROACH

The factors that impact either approach are threefold. First is the broad role of management at an institutional level, secondly the role of academic lecturing staff merits particular analysis and finally the part played by students themselves will be dealt with. Under the three headings, the enabling and inhibiting issues that pertain to each will be addressed. Insofar as such initiatives are taking place in Dublin Institute of Technology (DIT), the author will discuss their development as a work-in-progress and how they have been rolled out to date.

1. **The role of management at an institutional level**

This mindset of 'integrating' TS and accommodating them into learning environments as distinct from the old (and still practiced) 'bolt-on' approach is best facilitated by the management *culture* within the relevant institution. Allied to this notion of culture in a successful change management initiative is *leadership* at the institutional level. Wycoff, (2004) [7] contends that among the reasons for failure at this level are *inter alia*: not creating a culture that supports innovation, not getting buy-in and ownership from staff and management not allocating resources to training and coaching staff. It is argued that in the first instance, senior management must make explicit compelling internal and external reasons for the integration of TS's. These should come from those who have the *authority* to effect change. Drummond (1998), [8] in referring to the barriers to change at institutional level suggested that the normal problems of 'institutional inertia' are extenuated in the HE sector which is heterogeneous and typified by non-executive management systems. Interestingly they suggested that "*the systematic prioritisation of research, which in most cases is linked to funding and promotional systems, devalues the contribution of teaching in an institution"* (Drummond et al, 1998, p23) [8]

According to Cottrell (2001) [9], institutions can set the tone of the staff and students' experience by taking a positive learning approach to integrating TS's. An accross the board solution such as compulsory units, is not necessarily the best route to take "*skills development, devoid of context, can seem very irrelevant and dull".* (Cottrell, 2001, p. 47) [9]. The same author also refers to the overall

institutional developmental approach where such skills should not be regarded as discrete or generic entities like modules, which could be formed in the abstract. Rather, they should be part of an overall set of programme outcomes which can be achieved when embedded in interactive and supportive HE learning environments. These aims can best be achieved if endorsed by senior management. Getting such support at Academic Council level in DIT was absolutely key.

Implementation Approach at an Institutional level in DIT

A key stakeholder subgroup from the DIT Learning, Teaching and Assessment strategy (LTAS) committee submitted a policy document to DIT's Academic Council in 2007 entitled "*Key skills for Employability*" (DIT, 2007) [10] Their overall advice in terms of three key recommendations is outlined.

Producing a DIT Institutional model for key skills for employability development:

In order that all graduates leave with an agreed set of key skills for employability, it will be necessary for the DIT to:

1. Identify a set of desired generic skills which are:

Defined as key, cognitive and subject specific

Made explicit within programme documents

Measurable and assessable with strategies put in place in order that they are taught, practised or assessed.

Finally, a curriculum mapping exercise can help to highlight the opportunity to include these skills within individual modules, across whole programmes of study and ultimately across the entire Departmental, School and Faculty provision.

2. Provide appropriate and timely support to assist programme designers, managers and learners through for example:

Exemplars of key skills for employability at different programme levels,

Different activities that might be used to help students to develop key employability skills,

Assessment criteria that might be used to assess key skills for employability

A mapping tool that can be used to map skills across modules and programmes.

Consultancy support eg through LTC/LTT, etc

3. Build upon existing best practice through for example exemplar case studies where key skills have been effectively embedded within subject disciplines within DIT.It is envisaged that exemplars of existing initiatives be tracked and evaluated across the institute and that pilots will be designed, developed and subsequently implemented.

Implementing a key skills for employability development programme for all DIT students: For the widespread adoption of a key skills for employability development programme, there is a need for support at all levels within the institution.

Figure 1: DIT Institutional Model for Key Skills for Employability   **Source: DIT, 2007 [10]**

Overall, approval was sought from Academic Council that an appropriate key skills for employability strategy be developed and then implemented in order that all DIT programmes provided students with a range of opportunities to develop, practice and be assessed on an agreed range of key employability skills. Critically, these were to be made consistently explicit as learning outcomes within the appropriate programme documentation. Also of critical importance was the fact that the sub-committee charged with developing the strategy at the time looked at best practice internationally and arrived at the firm view that *integration* as distinct from the '*bolt-on*' approach of a standalone module was the preferred option.

2. The role of subject-specific academics

The next set of key stakeholders are the subject-specific academics. Within the context of this paper, there has not to date been any substantive research carried out institute –wide with this stakeholder grouping. Tentative desk research on initiatives to date that the author is aware of are discussed. As indicated, this emergent piece of research being conducted by the author, will entail further qualitative research being carried out with academics in DIT. This is a representation of my work *ex-ante*, with this further important element of research, yet to be conducted. Secondary sources on this subject can however be quite instructive.

In the words of dela Harpe and Radloff (2000, pp 172-173) [11] *"Institutional issues can help or hinder the willingness of staff to start down the path of change. To help this process, staff in leadership positions must first themselves be committed to skills development and understand the need for change".* Drummond et al (1998, p24) [8] argue that many excellent subject-specific expert third-level academics, who have usually not been trained as teachers often lack the expertise, experience and confidence to adopt new approaches to teaching. Because of their high level of commitment to the academic discipline concerned, they believe that incorporating transferable skills *"necessarily involves at least an element of trade-off of purely academic goals and achievement*" Drummond et al (1998, p24) [8]

Chada (2006) [6] also echoes this view that academics themselves are often quite resistant to overtures in this direction and suggests that implementing TS's often leads to claims of 'disenfranchising' academics of their technical expertise related to their specific subject areas. Harding (2000) [12] agrees in this regard by suggesting that introducing such TS's change initiatives in an institution requires 'careful handling'. He posits that *"However well intentioned, such a decision may be perceived as a threat to the coherence of subject areas and to academic control of learning contexts".* (Harding, 2000, p77) [12]. Drew (1998) [1] also speaks about how there has been a shift from the focus on the discipline and knowledge towards a focus on the person. This view is also advanced by a notion proffered by Chada (2006) [6] that academic competence is being displaced in HE with a more operational competence geared towards the workplace. Jenkins (2001) posits that to some staff, this skills focus is an attack on much of what they value. They see such trends towards focussing on skills as *"an assault on valuing knowledge and learning for its own sake"* (Jenkins, 2001,p188) [13]. The same authors suggest such academics have a fear and perception of it as an attack on the value of disciplines and research, and of turning a HE institution into a 'low-level vocational institution'. At a wider level, many academics also ask questions about the notion of 'employability', Kenny et al (2007) [4] raise *inter alia* the following questions:

What is the main driving force behind the employability agenda?

Who are the main beneficiaries of 'employability' –the state, industry, the individual?

Who should fund the research needed to inform programme development?

Who should fund the learning and teaching provision?

Staff Initiatives within DIT

Securing staff 'buy-in' is often the hallmark of those initiatives that work. Apart from the recommendations made in Figure 1, there is an absence of a coordinated approach across all academic disciplines in DIT in the area of TS's. What does exist in adopting a consistent method is the HE standard 'Learning Outcomes' approach. They essentially alert lecturers to incorporate critical TS's into the learning outcomes of their subject-specific modules. The wording entails the phrase: "On completion of this module, the learner will be able to", followed by action verbs that demonstrate they can actually *do* something e.g. assemble, build, complete, express, write ect. Initiatives at College/School level are a lot less consistent. Some limited yet successful examples do emerge however in DIT's School of Civil & Building Services Engineering and in the School of Hospitality Management & Tourism. The latter School runs an initiative called "Get Smart",

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Objectives of Get Smart!

1. To improve levels of personal and professional development among first year students
2. To improve levels of information literacy so that students can perform at a high level in all modules, linking to Level 8 dissertation work.
3. Through active learning, to increase students' engagement with their programme, and improve levels of motivation, mindful of the challenges of student retention.
4. To support innovative assessment practices, employing online models/resources where possible.
5. To foster a more creative and fun work environment;
6. To realise enhanced employability and transferable skills.

Figure 2: Objectives of Get Smart!   **Source O'Rawe, 2010 [14]**
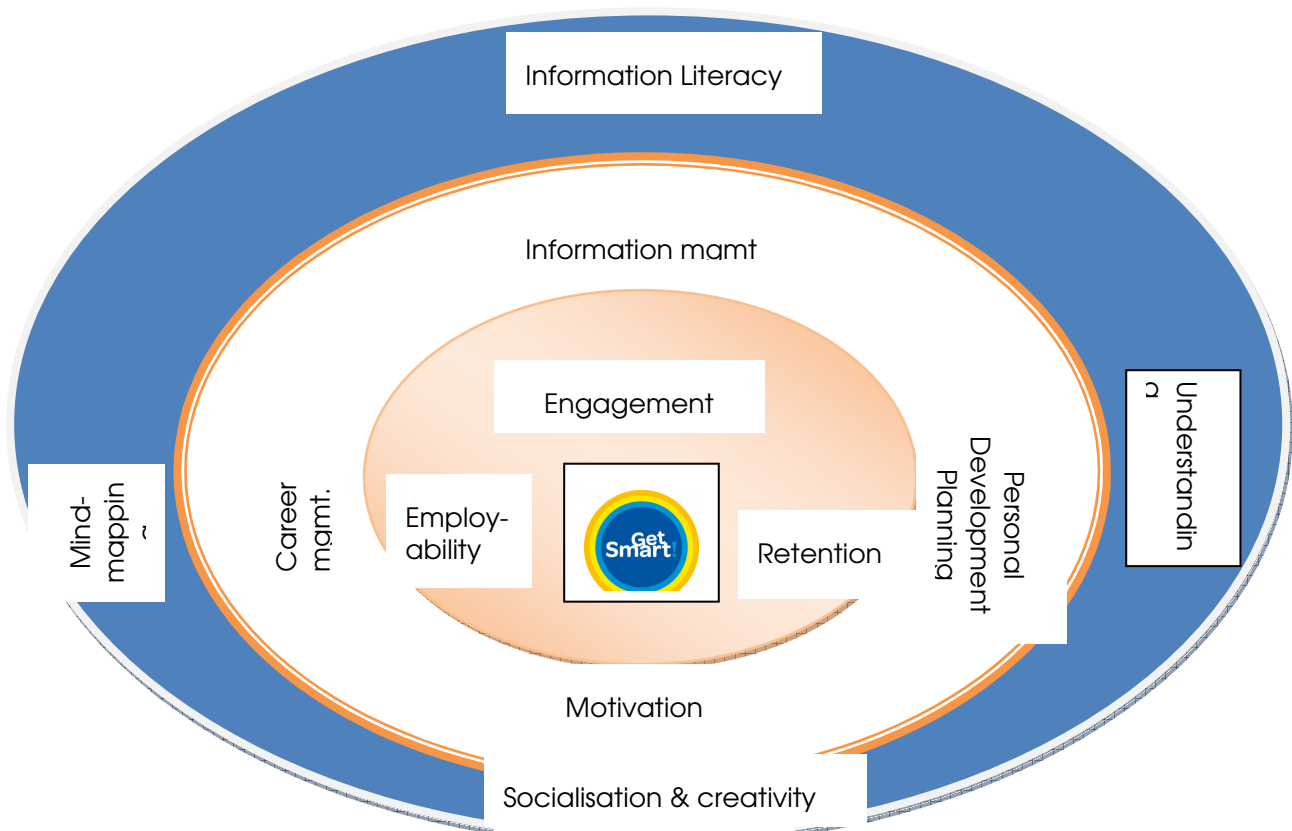

Figure 3 : Model of component parts of the Get Smart! Initiative **(Source: O' Rawe, 2010) [14]**

Specifically, Get Smart! is delivered:

(a) through a revised induction format, where students engage in a ninety- minute Get Smart! session of group activities, writing, information searching and reflection;
(b) by integration into the tutorials of *all* modules scheduled during the relevant semester. (Each of the 6 modules per semester commits 1-2 hrs to the Get Smart! initiative);
(c) by drawing on a three-session Information Literacy module which has been developed;
(d) through a four-hour Get Smart! workshop
(e) by extensive utilisation of a Communications assessment template. This will mean that in all modules where similar assessment modes are used, common marking criteria will apply. Four such templates have been developed: short essay assessment guidelines, business report template, extended essay assessment guidelines and business presentation assessment template.
(f) through Mind-mapping;
(g) by giving greater attention to written English, from the commencement of the student's participation in their programme at induction, and supported in time by on-line writing skills resources;.
(h) by giving Personal and professional Development (PDP) a central role;
(i) by increased resources and time allocated to online resources to facilitate independent learning.

Figure 4 :   How 'Get Smart' is implemented **(Source: O' Rawe, 2010) [14]**

Another initiative in one of the Engineering Schools in DIT also emphasises the importance of integration. An initiative by lecturer Mr Eddie Conlan was entitled "Integrating Engineering Ethics and Research Skills in a First Year Programme".(Conlon, 2008) [15]. According to the lecturer involved, his key teaching tool is the use of group projects to develop students' learning skills. The importance of addressing the motivation for engineering students studying non-technical modules is also emphasized. Conlon (2008,p 6) [15] suggests that:

> This emphasis on generic professional practice skills can be seen as a response to changes in the organization of work resulting from increased global competition and new forms of work organization. The demand for new skills can be seen as part of a broader agenda in higher education focusing on what is called employability.

In relation to the implementation of a TS's initiative in any school, the same practitioner wrote:

> The key distinction is between embedded and bolted on approaches. With the latter approach, skills are developed independently of core course material through specific modules focused on communications, study skills or group work. While there is explicit reference to the development of transferable skills this approach is problematic as students often fail to grasp the academic value of modules divorced from their overall teaching and learning experience. This tends to lead to disengagement and the constant questioning of the relevance of these modules to engineering. A further problem is that students are often assessed on their ability to carry out a set of discreet tasks such as writing a report, doing a presentation or using the library. With the integrated approach skills are developed and taught explicitly within the core discipline and the same amount of emphasis is placed on the development of transferable skills as technical abilities. Explicit reference is made to the value of developing such skills and opportunities are provided for students to reflect on their abilities and hopefully develop.

> Conlon (2008,p 6) [15]

In summary, the aforementioned initiatives strongly espouse and practice an integration approach.

In terms of enabling such a change of emphasis to take place among subject-specific academic staff, Drummond et al (1998) [8] suggest that it is often not possible to transform overnight many established patterns that academics have in regard to their teaching. These writers assert that in practice this may mean promoting and supporting incremental approaches to the development of personal transferable skills across programmes. The key role of academics however cannot be emphasised enough and they state "*Crucially however in a situation where change cannot be simply imposed, influencing the hearts and minds of teaching staff becomes crucially important*" (Drummond et al , 1998, pp. 24-25) [8]. This is not least because in the view of many authors, the most effective approaches to TS's necessarily involve at least the majority of teaching staff. In keeping with the above views of making the incorporation of TS's a success, the last word is encapsulated by dela Harpe and Radcloffe (2001, p 172) [11]

Staff conceptions of teaching and learning and their attitudes and beliefs about their roles and responsibilities are at the heart of effective change. Staff need to become aware of their current conceptions and, where necessary, need assistance to change them to reflect a more learner-centred and process-oriented approach which is essential to skills development. Staff concerns about academic pride and insecurity must also be faced and addressed. Moreover, staff need to be realistic about their current skills and be prepared to commit to ongoing development.

3. Factors influencing the role of students

In referring to the acquisition of TS's, Wilde and Hardaker (1997) [16] observe that the major obstacle to development of younger students' intellectual and practical autonomy may be the teaching to which they have been exposed prior to their arrival in HE. They refer to the fact that traditional entry learners can become accustomed to transmissive teaching and the memorizing of information for reproduction in examinations and may find some of the approaches in skills development deeply unsettling. Indeed in Ireland, the current Minister for Education, Mr Ruadhri Quinn made a speech at a Teachers Union Conference and made the following pertinent point: "*we need to move from teaching students to learn to remember, into learning how to think*". Quinn (2011) *.*Drummond et al (1998) [8] therefore purport that it is vitally important that students are encouraged to value key skills development and their integration through planned and positive measures. One important point in this regard is the significance of highlighting the importance of TS's as an issue to students very early in their programme of study. The aforementioned programmes in place in DIT satisfy this criteria.

The two trademark approaches to learning highlighted by various pedagogy theorists like Biggs,(1987) [17], Ramsden, (1992) [18]; Marton *et al,* (1997) [19] are the *surface* approach and the *deep* approach. The latter approach clearly appeals to the integration of TS's into the learning process with the aforementioned writers referring to it occurring when students have an intrinsic interest in the task and an expectation of enjoyment in carrying it out. They posit that students adopt strategies that help satisfy their curiosity and makes a task coherent with their experience. By viewing learning as a two-way street, students can be seen as co-workers in the educational process. Their crucially indispensable role in (co-) working to achieve the successful integration of TS's across their programme of study must therefore be constantly recognized and supported.

In terms of students own experience of TS's,it is suggested that there is an information deficit in this regard; "*Despite the assumption that transferable skills are part and parcel of a graduates portfolio, there is a lack of information about the extent to which such skills may be perceived by students to be valuable.*" (Burke et al, 2005 p.141) [20]. Their main key finding however is that students perceive that they have acquired a variety of useful skills as a result of their undergraduate work.

Cottrell (2001) [9] espouses a notion that is helpful. She suggests that if institutions want students to feel safe about risk-taking and to admit to their difficulties and ignorance of certain matters, then they

must see some potential 'reward'. Many people can find presentations for example, quite challenging, even threatening. Such students need to feel there is a benefit and not a penalty. The views of Dela Harpe & Radloff (2006) [11] also support the importance of having students as *partners* in the design and implementation and ongoing evaluation/modification of the curriculum to support skills development. In terms of a solution, Drummond et al (1998) [8] also embrace the idea of *encouraging* students and contend that in the drive to make the integration of TS's a success, students themselves need to be motivated to develop their skills. This type of motivation can be difficult because of students' previously mentioned prior method of learning at post-primary level.

Students adoption and practice in DIT

The matter of students themselves being resistant to TS's being integrated onto their modules should not be overlooked. Conlon, E. (2008) [15] speaks about student motivation among engineering student cohorts in DIT when distinguishing between the integrated and bolt-on approaches. He describes the latter approach as problematic as students often fail to grasp the academic values of modules divorced from their overall teaching and learning experience. Conlon (2008) [15] applies the Chada, D.,(2006) description of TS's in engineering education He agrees that they are the skills that are taught and developed explicitly within a core discipline and the same amount of emphasis should be placed upon TS's as the subjects requisite technical abilities. Conlon (2008) [15] further asserts that by making explicit reference to the value of developing these skills, students are provided with the opportunities to reflect on their abilities and hopefully develop. Taking responsibility for their own learning is indeed at the heart of incorporating TS's into HE with Wilde, and Hardaker,(1997) [16] suggesting that such skills are the best means towards fostering student autonomy.

To this end, another initiative developed by the Learning, Teaching and Technology Centre (LTTC) in DIT (2010) [21] was the LEAD initiative. It aimed to get student buy-in by being provided as a module which could be taken in addition to or as part of a programme. The acronym LEAD stands for Lead, Engage, Achieve and Develop. It states it's focus as:
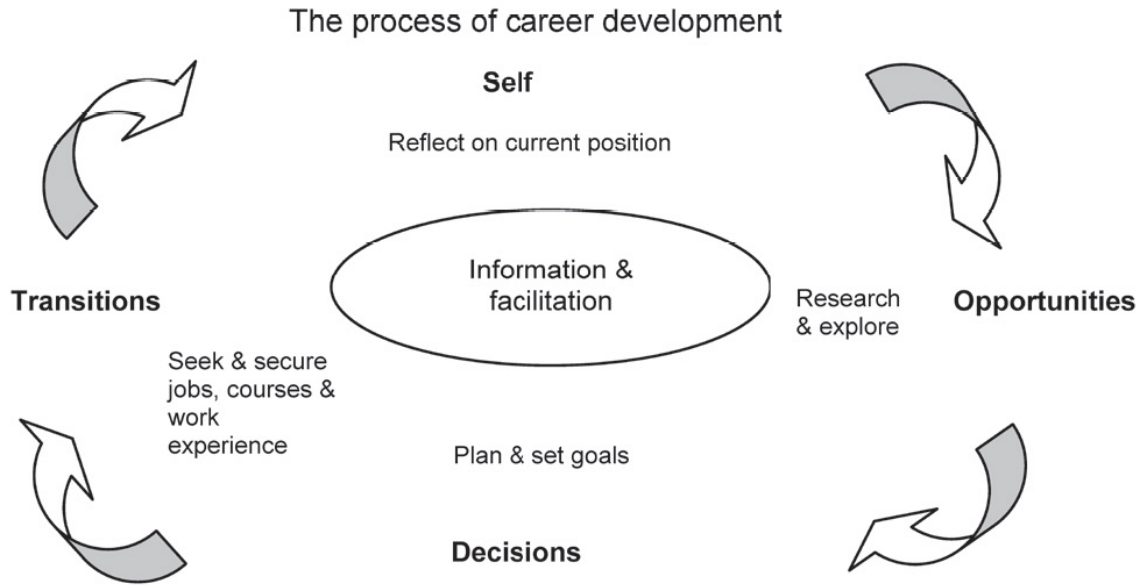
> wanting to recognize student commitment to extra-curricular activity and co-curricular activities by providing student with opportunities to plan, develop and reflect upon employability skills achieved through e.g. volunteering, mentoring and participation in clubs and societies.
>
> DIT (2010) [21]

Getting out and about is a key facet of this module and students are assessed by reference to a portfolio they submit at the end. It is not delivered as weekly classes but instead has three workshop sessions over a six month period with most of the learning self-directed. Other student supports also exist within the DIT which also incorporate elements of skills development. The DIT Career Support Services is a case in point. The following is noted by Kenny et al (p. 16, 2007) [4]

> The DIT Careers Service has developed a series of career development programmes for students across the Institute, ranging from bespoke one-day workshops to assessed integrated programmes. The cementing of the partnership approach between careers practitioners and academics is required to ensure all students have access to career development and employability skills. The integration of self-awareness, reflection, personal decision making and action planning should be included in vocationally orientated curricula to ensure deep learning as well as enabling students to take control of their development and progression through learning and work.

While the aims espoused above are not comprehensively implemented, they are an ongoing work-in-progress in many parts of the institute. Alongside the idea of support for students,must however be the notion of responsibility for one-self:

The process of career development

Self

Reflect on current position

Transitions   Information & facilitation   Research & explore   **Opportunities**

Seek & secure jobs, courses & work experience

Plan & set goals

Decisions

Figure 5: Dynamics of Career Learning **(Source; Law and Watts) [22]**

Inherent in the processes of managing one's career is the element of volition, personal control, knowledge of oneself, and knowledge of the factors that influence one's decision- making, both personal (e.g. self-efficacy, confidence) and societal (family, community,(sub)culture, labour market trends). (Kenny, 2007 p. 14) [4]

This idea of students taking responsibility for their own learning is also something that is promoted not alone in the Engineering fields in DIT and elsewhere in the Institute, but specifically in the aforementioned 'Get Smart' initiative in the Tourism and Hospitality sphere within DIT. According to O' Rawe (2010, p.1) [4]

Concepts of self-management, group management, information management and social awareness are highlighted, thereby further developing the student personally and professionally.

Overall, student-centered learning has been recognized as the essence of real deep leaning, with Stefani et al (1994) [23] suggesting that it gave third level students the opportunity to develop an ability to self-evaluate and reflect on their own work.This can lead to a greater understanding of the expectations of lecturers at third level. Meeting and exceeding their own expectations can be achieved through the integration approach provided they are is sync with the two other components of the institutional role and that of the academics.

Conclusion

The matters relating to TS's integration as discussed in this paper are complex and challenging. They by no means claim to be generalisable to the institute as a whole. The barriers to the implementation of such TS's on a consistent and uniform basis are manifold and potent yet the prize inherent in its ultimate adoption can lead to real active learning. Rewards in terms of real personal development and growth experiences for students are also recognized. Institutions and academics alike will also benefit from the more meaningful contribution they can make to the student experience. The theories, exponents and practitioners of it all suggest it should be embraced more widely in HE but the exercise in 'change management' that it entails should not be underestimated.

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