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# The Benefit of Work Placement in Tertiary Design Education

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# The Benefit of Work Placement in Tertiary Design Education

**Abstract**

The aim of this article was to document a project in work placement in third level design education. Students studying visual merchandising display and design were surveyed on their work experiences, one cohort was in second year and undertook a two week placement, the other were in their third and final year and were undertaking a two day per week placement for the entire academic year. The aim of this project was to research work placement as part of a tertiary design degree to ascertain the benefit for the student cohorts, and whether or not work placement should be considered for other design orientated subjects in the same faculty. The article discusses the learning theories behind work based learning and researches relevant literature. Students were asked to voluntary complete a survey on the validity of their work placements. The feedback from a student questionnaire conducted at the conclusion and during the work placements indicated that opportunities for student groups to work cooperatively with industry, encourages learners to develop, and encourages students to exceed their creative and theoretical learning of the course. The study concludes that work based skills may be an inherent role for all design disciplines. The author acknowledges that the results are from a small survey and a larger study should be conducted on a much longer basis, interviewing the same group of graduates over a period of, possibly, five years.

**Introduction**

Within the curriculum and pedagogic practices of contemporary higher education it is, important to advance approaches that can support the effective integration of practice-based experiences. Both practice and academic settings provide particular kinds of experiences and potential contributions to students' learning and each of these settings affords particular potentials for the learning of occupational practice (Billet, 2007a, 2009). In an effort to create a bond between under graduates and industry, second year B.A. Visual Merchandising students in an Institute of Technology in Ireland, were placed on a two week work placement and the third year students were encouraged to find work experience placements for two days a week during the course of their final academic year. The reasoning behind this was the students would develop their practical and theoretical skills and meet the learning outcomes of the course in a

commercial arena. During the work placement it was envisaged that they would make valuable connections within industry, learn skills that are not able to be applied in the context of a classroom, and use the theories learnt while in academia in a practical environment. Research was conducted to investigate whether or not work experience should be considered as an aspect of other design courses, and will discuss the learning theories relevant to practical learning.

Tutors and students may consider during the delivery of a programme that students have not related their learning to real practice. If this is the case, the students may have missed an important part of the educative learning possibilities within the working environment that they wish to enter. In a work environment students can engage in real work practices, learn how to communicate with colleagues and deal with work related problems. Learning becomes less theory based and more practical and contextual (Tucker, 2006). Exposure to actual or simulated workplace tasks and problems allows learners to experience ever-widening variation in knowledge application, and to see the limits to their understanding and how that needs to be addressed; both of these are said to be essential to deep learning and for a capacity to deal with novel situations (Bowden, 1997).

On entering the workplace post graduation, graduates are usually lacking in confidence and are unsure of their abilities. They may experience a feeling of anxiety and hope to have entered a sympathetic mentoring workplace. They may worry about how the theories learnt in a third level University or college can be transferred to the reality of the day to day interface of a working environment. This article will look at how this issue can be addressed by offering work placement as part of an undergraduate programme. The lecture hall or studio cannot replicate the atmosphere or complexities of the commercial arena. Higher education institutions are unable to acquire quality resources that can offer a realistic workplace setting, where students can have the opportunity to work with equipment and products that they will need to be familiar with. A work place setting would bridge the gap between student needs and the limited resources of the institutions (Tucker, 2006). The development of robust (i.e. transferable) knowledge is as likely to arise as much through experiences in practice, as it does through 'schooling' (Raizen 1991; Scribner 1984).

**Dimensions of Learning**

Ideally, work placements offer students the three dimensions of learning outlined by Illeris (2002) in his general theory of learning which argued that the emotional, the social and the cognitive must be taken into account for learning. Illeris (2007) argued that all learning always includes three dimensions: the content dimension of knowledge, understandings, skills, abilities, attitudes and the like, the incentive dimension of emotion, feelings, motivation and volition, and the social dimension of interaction, communication and cooperation. Illeris commented on the significance of the interplay of these dimensions and argues that "influences received from the environment are socially co-determined" (Illeris, 2004, p. 434), Illeris agreed with Lave and Wenger (1991) that "all learning is situated" (Illeris, 2004, p. 434) (cited by Morse, 2006).

Engeström (1987) stressed that learning is a long-term process of internalization and externalization, appropriation of available cultural resources and design of a novel form of practice. Engeström (2001) saw learning in the workplace as a mechanism for creating shared meanings and curriculum as an ever-evolving solution to local crises. In other words, while school education is essentially about the reproduction of culture, vocational education — whether located in institutions or worksites — has the potential to foster creativity and competence in workplaces and other settings, however such creativity requires a broad knowledge base. According to Engeström (2001 p. 137) 'a full cycle of expansive transformation may be understood as a collaborative journey through the '*zone of proximal development*' [ZPD] of the activity' (as cited by Fitzsimons, 2003).

Boud (1989) has also tried to unravel the concept of experiential learning; he summarises his understanding in three different ways. Primarily, he pointed to three dimensions that are typical of all activities that refer to the concept of experiential learning, namely 'learner control', the learner's 'involvement of self', and some 'correspondence of learning environment to real environment'. He also pointed to four approaches to adult education where experiential learning has functioned as a way of liberating learning activities from traditional ties: 'freedom from distraction' (teaching technology, especially in vocational education), 'freedom as learners' (self-directed learning), 'freedom to learn' (student-centred education), and 'freedom

through learning' (critical pedagogies and social action). Finally, Boud identified three teaching approaches within experiential learning, namely 'the individual centred approach', 'the group-centred approach', and 'the project-centred approach' (Boud, 1989). There is considerable evidence in literature supporting the general value of 'work integrated learning' in a co-operative 'interdependent' process (Herbert and Rothwell, 2005, p. 16) involving academia and business organisations; and many organisations do attach some strategic importance to this by offering direct work experience to those who may be their future employees. Essentially, employers seek people who are 'work ready' (Herbert and Rothwell, 2005, p. 6; Fanthorne, 2004). The UK Dearing Report (1997) on Higher Education is much quoted in the following literature (Davies, 2000; Ellis and Moon, 1998; Ellis, 2000; Falconer and Pettigrew, 2003; Herbert and Rothwell, 2005; Morgan and Turner, 2000; Neill and Mulholland, 2003). Key issues noted in the report are, skills for graduates (communication, numeracy, capability in information technology, and learning how to learn); the message from employers in respect of 'the value of work experience […] particularly emphasised by small to medium enterprises (SMEs) who need employees to operate effectively in the workplace from the first day' (Dearing, 1997, Summary Para 39 in Ellis and Moon, 1998, p. 185); and the need for graduates to be flexible and responsive (Davies, 2000; Morgan and Turner, 2000). Davies (2000) also quotes Hawkins and Winter (1995) (Report for the Association of Graduate Recruiters), Cooper and Lybrand (1997) (for the Committee of Vice Chancellors and Principals and the Department of Education and Employment) and Harvey *et al.* (1997) – all identified the qualities needed by future graduates as perceived by employers (Davies, 2000) (cited by Morse, 2006).

Workplace learning is a paradigm case of informal education which is undervalued particularly by all levels in the formal education system. Historically, training has been viewed as the antithesis of education. Training as mindless, mechanical, routine activity has been contrasted with education as development of mind via completion of intellectually challenged tasks (Winch 1995, as cited by Holford, Jarvis and Griffin 1998). However, work experience is inherent in many training practices, such as apprenticeship schemes for trade's people, and internships for medicine and law. According to the Irish Medical Council Guidelines the overall aim of the Intern Year is to provide an educationally sound experience that professionalises the new doctor

with appropriate knowledge, skills and attitudes, at the end of the internship each graduate must receive a Certificate of Experience in order to become eligible for full registration. The physician's art of diagnosis and the lawyer's skill of advocacy are learned on the job at least partly by imitation and, indeed, some research doctoral programmes seem to have similarities with apprenticeships (Moodie, 2008). It can perhaps be argued that the integration of education and training or practical experience into a unified learning experience has always been very much a part of university courses in medicine and related subject areas. At the other end of the spectrum, there is no reason why work-based learning need only be a component of what we might term the "vocational" courses. Hamm (1998) put forward the proposal that students of arts and social sciences would be just as able to bring creativity, initiative and enthusiasm to a work placement and, in terms of broadening out their career horizons, we could speculate that they would be just as keen to do so (Falconer and Pettigrew, 2003).

The supervision of a student and project has the potential to improve the knowledge, skills and values in relation to the member of staff offering the placement and also becomes an addition to their résumé or CV. Skills mentioned above such as planning an induction and devising a learning contract 'refining the learning need into specific objectives' (Anderson et al, 1996, p. 20), working on a time-limited project, undertaking a supervision/mentoring role offering them a new type of responsibility and also gaining "the learning they take from the experience, both in having to explain intuitive reasoning and in listening to a different perspective (from the student)" and 'the satisfaction of knowing you have made a difference to someone else' (Clutterbuck, 2001, p. 44). I believe that this model of instruction would benefit most undergraduates. Students can gain valuable practice in their chosen profession and can become part of a community of practice. Students engaging in meaningful work placements experience the best of deep learning, and transform their information and ideas into knowledge and understanding (Entwistle, 2000).

**Learning Theories that Relate to Work Based Learning**

How students learn in education placements is of great interest to researchers. Piaget's cognitive development theory (Piaget, 1985), Bandura's Social Learning Theory (Bandura, 1977), and Kolb's Experiential Learning Model theories (Kolb, 1984) explore the socio-cultural context of learning and find a complex set of challenges. Kolb (1984) acknowledged the value of learning outside the classroom, where there are new challenges to practice and reflect on their outcomes. The socio-cultural context of learning highlights the roles colleagues and workplace mentors in student learning in cooperative education placements. It is widely accepted by educationalists that work placements provide a unique and valuable learning experience for students, particularly providing students with a range of personal experiences which relate to and integrate with their prior academic experiences, and encourages the student to participate in the adult world of work (Daloz Parks, 2001). Within the work environment are "real world" processes, people and problems with which the student can engage (Ayling, 2006). A learning theory related to Work Based Learning is constructivism, particularly Vygotskys "zone of proximal development" which is the difference between what students can accomplish with help (from a tutor, industry expert or fellow students), and what they can achieve on their own without help. The Zone of Proximal Development applies to "any situation in which, while participating in an activity, individuals are in the process of developing mastery of a practice or understanding a topic. (Wells, 1999, p333).This "scaffolding" allows the student to gain knowledge how to perform a task that they may not have accomplished otherwise. Scaffolding is a powerful metaphor as it suggests supports that are gradually withdrawn when learners have constructed their understanding and can act independently (Jordan, Carlisle, Stack, 2008 p64). Vygotsky defined scaffolding as the "role of teachers and others in supporting the learner's development and providing support structures to get to that next stage or level" (Raymond, 2000, p176).

In Vygotsky's view, the learner does not learn in isolation. At the heart of Vygotsky's theory lies the understanding of human cognition and learning as social and cultural rather than individual phenomena. (Kozulin et al, 2003). Instead learning is strongly influenced by social interactions with more knowledgeable or capable others in a meaningful context. The communication that occurs in this setting helps the learner

construct an understanding of the concept and to rehearse new tasks within the safety of a supportive environment.

Four stages have been identified in learners' progression through the Zone of Proximal Development:

1 Scaffolding is provided by others.

2 Scaffolding is provided by learners themselves – for example, by self-talk.

3 Scaffolding becomes redundant as learners act automatically.

4 Scaffolding is required again if there are changes in the task or context.

(Tharp, Gallimore, 1988).

Bandura's social learning theory outlined three requirements for people to learn and model behaviour: retention (remembering what one observed), reproduction (ability to reproduce the behaviour), and motivation (good reason) to want to adopt the behaviour.

> *Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. Fortunately, most human behaviour is learned observationally through modelling: from observing others one forms an idea of how new behaviours are performed, and on later occasions this coded information serves as a guide for action.*
> (Bandura, 1977, p.22)

Laves Situated Learning Theory argued that learning is embedded within activity, context and culture. Lave believed that knowledge needs to be presented in authentic contexts — settings and situations that would normally involve that knowledge. Social interaction and collaboration are essential components of situated learning — learners become involved in a "community of practice" which embodies certain beliefs and behaviours to be acquired. As the beginner or novice moves from the periphery of a community to its centre, he or she becomes more active and engaged within the culture and eventually assumes the role of an expert. Other researchers have further developed Situated Learning theory. Brown, Collins & Duguid (1989, pp.32-34) emphasize the idea of cognitive apprenticeship:

> *Cognitive apprenticeship supports learning in a domain by enabling students to acquire, develop and use cognitive tools in authentic domain activity. Learning, both outside and inside school, advances through collaborative social interaction and the social construction of knowledge.*

However, Lave and Wenger (1991) were overly dismissive of the role 'teaching' plays in the workplace learning process and of learning in off-the-job settings. Other writers have addressed this limitation by focusing on workplace pedagogy and the creation of strategies and environments to support it (Engestrom, 1994; Billett, 1998, 2001; Fuller & Unwin 1998, 2002). These were likely to include approaches which enable employees to participate both on and off the job and in so doing, experience the pedagogic benefits of engaging in communities of practice within and beyond the workplace. (Fuller, Hodkinson, Hodkinson, Unwin, 2005). Situated learning is related to Vygotsky's notion of learning through social development. I believe that valuable learning can take place during work placement by instruction being given by an accomplished industry mentor.


**Methodology**

The results for this paper are from a small pilot study, conducted by questionnaire, which was seeking out students' views of the benefits that they considered they did, or did not, gain during work placement. Permission for the survey was sought and gained from the Head of the Department. The methodology used to gather the data was a mixed methods approach. Creswell (2009, p.116) suggested *mixed methods research questions should address both the qualitative and the quantitative components in a study*. Quantitative data was gathered by asking participants to answer six questions; the first four of these elicited either a yes or no response, the remaining two questions each had three responses, i.e. highly rewarding, good, disappointing. Statistics, such as the number of pupils emitting either a positive or negative response were gathered. Qualitative, anecdotal data was gathered by asking for students comments; therefore giving information on relevant contextual issues, possible biases, and values. They were informed that the data would be compiled and the information would be used in the writing of this paper, and anonymity was granted. The survey was distributed to the two cohorts of students who had either completed or were in the process of the two work-based learning modules within the Visual Merchandising degree programme. The second year students undertake a two week work placement in semester one. For third year students the work placement takes place two days a week for the duration of the academic year and was in progress when the survey was conducted in February 2010. The total sample was 27;

consisting of: 11 current second year students and 16 current third year students in their final year.

> *Qualitative researchers handle their data in different ways, but all face the need to organise the data collected for a study, and to analyse it a way that offers a credible and meaningful account of the data in relation to the research questions they have identified* (Opie, 2004, p.166).

During the data analysis themes emerged such as the benefits to the students learning, the factor of working outside normal college hours and how the students felt about working collaboratively with their work place colleagues. The findings are presented in a thematic way.

**Discussion and Findings**

The first theme that emerged from the survey was the benefit of the work placement to the students learning with one hundred per cent of the students surveyed believing the work experience was beneficial. Comments from the second year cohort included;

*'Absolutely. It is an invaluable first hand personal experience'*,

*'Yes it gave me a much greater insight into the field in which I would like to aim towards working in.'*
The third year cohorts stated;
*'I've learned faster because I had to use VM skills to complete the tasks I was given'*,

*'Yes, definitely I think that I have learnt so much from being out in the industry than just class based.'*

All the third year students surveyed agreed that the work experience had aided their understanding of the theories of display design/visual merchandising, ten of the eleven second years also responded yes, one second year student responded no. Second years commented;

*'Yes, when you see the methods being applied throughout stores it helps you understand and appreciate the theories behind display'*,

*'In most ways, yes, again the hands on approach of all the theories and design principles can be laid down in front of you to see and experience.'*

The students who felt the work experience had not aided their understanding of the display theories said during their time at the store the Christmas window installations were already *'in full swing'* and they felt they had little to do. Third years commented on how their understanding of the theories of display design/visual merchandising had benefited from being able to use them in a practical setting, comments included;

*'Yes, as it is easier to understand something when you are doing it rather than just learning about it'*,

*'Yes, it has put what we learned into practice.'*

The findings of the survey agreed with Billet (2007a, 2009) that both practice and academic settings provide particular kinds of experiences and potential contributions to students' learning and each of these settings affords particular potentials for the learning of occupational practice. The majority of the students felt more work-based experiences would have been beneficial to their learning. Ten of the eleven second year students believed more would have been beneficial, one student argued that it was the correct amount of time, comments were;

*'Very much so, I found the work experience to be so beneficial to me, you learn not only the basic skills you're taught, but also freedom to be creative you learn outside the box, you think and create on the spot!!'*,

*'I think the work experience is a brilliant idea I learned exactly how a VM spent their day.'*

One student felt that the two weeks work experience during second year was appropriate;

*'In second year, no. I think the addition of a third year and the two days of work experience has made up for it and makes second year more intense.'*

Third year students commentated that more work experiences would be beneficial and commented;

*'As it establishes links with industry and makes what you have learned in class easier to understand.'*

The student's encounter of work experience and the establishment of the links with industry is emphasised by the Dearing Report (1997) that states *businesses need employees to operate effectively in the workplace from the first day* (Dearing, 1997). Comments included;

*'Other work placement or freelance work would help my understanding of visual merchandising.'*

One student felt that the time spent on work experience was adequate and argued;

*'In second year we have two weeks and in third year it's two days a week. This is enough along with college it's a good balance.'*

A second theme that emerged was the factor of time, and how the students felt about working outside of their normal college hours. The second years work placement was for a two week period in November and consisted of two different placements with a week in each. Ten of the eleven second year respondents stated they did not mind working outside of their normal college hours, however one student felt it was problematic. Comments among those who did not mind working outside of scheduled college hours were;

*'Definitely not, for doing experience you can't expect to do the normal 9-5 hours because life and work is not like that, especially our profession, it's so varied that's the appeal the varied hours'*,

*'I think that the hours were reasonable and although I worked later than I would stay in college I didn't have to be in for the very early hours of the morning as the display team did every day.'*

The student who did mind working outside college hours commented;

*'I feel that as a student I would prefer to work within my college hours as being a student I already have an extremely busy schedule.'*

The third year cohort were undertaking work based learning of two days a week throughout the academic year. The majority of the cohort, twelve out the group of sixteen, did not mind working outside of college hours and stated;

*'No, but felt it had an impact on my work ethic for college, due to long hours',*

*'No, because I consider Monday and Tuesday, (the days we had work experience) college days, so it was no hassle.'*

Three of the student cohort felt that working outside college hours was a problem, statements included;

*'Yes, because having a job, doing college work and being on placement can be very tiring and stressful''*

*'Not enough time to do projects, as we have our own working jobs.'*

One of the third year students had mixed feelings about working longer hours and commented;

*'I said yes and no as it was very awkward trying to get to work for eight but I did not mind working late sometimes.'*

A third emerging theme was the student's experience of working collaboratively with their peers in industry. Of the eleven second year cohort, seven found working collaboratively enjoyable, three found it satisfactory and one found it difficult;

*'I think it was a little difficult to contribute to the group at first where in college we usually work alone on our ideas for windows'*,

*'I enjoyed working as a team. To have been given the opportunity to give my views, and take in other ideas and great expertise.'*

The student who found it difficult stated;

*'I saw how they did their work but I didn't get to do much by myself. My first week we didn't work with the VM at all he never gave us anything to do.'*

Out of the sixteen third year students, eleven found working collaboratively enjoyable, four found it satisfactory, and one found it difficult. Comments include;

*'Every body works in teams and with others, in college it's mainly working on your own, so it teaches you team skills'*,

*'More relaxing as sometimes groups discuss ideas.'*

A Collaborative working experience is related to Bandura's Social Learning Theory, Kolb's Experiential Learning Model Theories, Vgotsky's Zone of Proximal Development, and Laves Situated Learning Theory. At the heart of these theories lies the understanding of human cognition and learning as social and cultural rather than an individual phenomenon. As previously discussed, learning is strongly influenced by social interactions with more knowledgeable or capable others in a meaningful context. The communication that occurs in this setting helps the learner construct an understanding of the concept and to rehearse new tasks within the safety of a supportive environment. Overall, of the second year students three found their work placement highly rewarding, six found it good, one disappointing, and one student ticked both good and disappointing. Comments from the second years include;

*'I felt so happy and confident, I came out with a little a job offer and confident in my skills and ability. It was also fantastic to see what it's like in a proper job rather than just classe*s',

*'I think work experience is very  beneficial I thought my experience was cut a little short though and did not get to see the window displays to the very end as a week was not enough'*,

*'I ticked yes and no because I had a disappointing result in one of my work experiences but the second one was good'*,

*'Very good, I particularly enjoyed one store more than the other one but I learnt a lot from them both, it gave me more of an insight'*

*'I didn't enjoy my work experience but I'm glad that I got the opportunity to do it anyway.'*

Of the sixteen third year students, eight found their two day a week work based learning highly rewarding, eight found it good, and none found it disappointing. Comments included;

*'It's beneficial and it adds an extra to our CV's when we finish. It shows we have both the college skills and workplace skills'*,

*'It's a brilliant chance to get experience in the field you want to work in.'*

Other students felt;

*'My work experience wasn't as good as I imagined, I would have liked to do more work and be more involved'*

*'It was a bit boring as I done {sic} the same thing day in day out for the most of the time.'*

**Conclusions and recommendations**

Harvey *et al* (1997) have systematically explored the views of a wide range of employers and graduates to identify the nature and extent of the knowledge, abilities and skills that graduates will need in the twenty-first century if they are to be successful at work. Respondents overwhelmingly endorsed work-based placements as a means of helping students develop the attributes necessary for that success. Their conclusions included the view that placements were seen by employers and graduates as the single most significant element of the majority of degree programmes; that students who have experienced a work placement are in the main better prepared for work; that placements can offer real opportunities for students to decide on a future career path; and, that there is considerable support for work placements to provide students with opportunities to develop an awareness of organisational culture and opportunities for skills development. The authors concluded that younger, full-time students, other than those who had had a significant placement experience on their course, left university with little idea of the nature and culture of the workplace and initially found it difficult to adjust to working life. Work placements were often mentioned by the respondents as helping students towards success at work, by improving links and bridging the "skills gap"(Falconer, Pettigrew, 2003).

The students surveyed for the basis of this article concur with the benefits discussed by Harvey, Falconer and Pettigrew among others that work placement was overwhelmingly beneficial to them. Some of the cohort felt that it provided them with invaluable first hand experience, suggesting agreement with Bowden (1997) that exposure to work place tasks is essential for deep learning. Arguably, despite any flaws in the process, being involved in work settings that enable theory and practice to be synthesised, will strengthen graduates' ability to compete in the job market, especially if they are introduced to a suitable employment network. This small pilot study, while acknowledging the limitations placed on the results due to the narrow experience and small sample size, does suggest that work-based learning is both a valuable and useful experience from the visual merchandising student's point of view. Fanthorne (2004, p. 2) describes a point made by Liz Rhodes, Director of the National Council for Work Experience, in an interview in October, 2003, that '*in the future universities are likely to be assessed on the employability of their departing students in terms of the length of time it takes them to find work*'. The visual merchandising

students stated that the work-placement could be added *'to our CV's when we finish. It shows we have both the college skills and workplace skills',* this concurs with Billett (2007a) that both kinds of learning make particular contributions to student learning and *Herbert* and Rothwell (2005) findings that employers seek people who are 'work ready'.

Therefore, should work based skills play an inherent role for all design disciplines? In the current economic climate it may be difficult to find employers willing to take students on work-placement, particularly in areas such as interior design. With architects facing up to 50% unemployment this year (Architecturenow, 2010), Interior Design students may well find it impossible to source work-placements. However, other design disciplines such as Visual Communications and Product Design may find work placements easier to come by, during their final year, National University of Ireland, Maynooth, BSc in Product Design students;

> *Undertake a 9-month, full-time, paid work-experience placement in a*
> *relevant employment, ensuring that learnt material from the programme is*
> *consolidated in practical, real-life experience. Industrial Work Experience*
> *is also an opportunity to impress future potential employers.*

The findings of the study are such that from a student's point of view work-placement is a rewarding, positive and beneficial experience and should be encouraged in all disciplines of design, if the economic situation allows it.

This study, in order to substantiate the findings, would be required to be developed in a number of ways: a much larger study would eliminate any small sample bias which should include students and graduates who have studied a more traditional curriculum without the benefit of a work placement. It should include students from a wider number of institutions to exclude any institutional bias and also from a wider spectrum of programmes, particularly other design based degree programmes, to eliminate any bias related to the visual merchandising programme. A wider study would add to the findings and it would also eliminate any bias due to the nature of the narrow focused visual merchandising programme. Further improvements could be made by collating more data regarding the cohort sample such as age at commencement of the programme of study and also ascertaining those students who have prior work experience. A larger study should be conducted on a much longer basis, interviewing the same group of graduates over a period of, possibly, five years.

This would ascertain if the graduate's perception of work-based learning changes as their experience of the labour market increases.

Finally, it would be helpful to be able to measure the value of work based learning on these students from the employer's perspective. Examining the different inputs provided by the employers would allow a review to establish if the benefits detected by the students are singularly related to work-based learning, or are part of their integration within the workplace (Falconer, Pettigrew, 2003). Overall this would enable an evaluation to be made of the real benefits of programmes including work-based learning as against the more traditional programmes. The results would provide a basis for potential employers to evaluate the suitability and cost of recruiting graduates from the different backgrounds of study. The colleges can then evaluate whether work-based learning truly enhances the student's learning and whether the resources employed in this type of programme are justified. Jackson and Prosser (1989) neatly summarised this practical application of learning: I hear and I forget; I see and I remember; I do and I understand (Falconer, Pettigrew, 2003).

Kerry Meakin, June 2010.

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