

# *eCULTURE*

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*Volume 5*

2012

*Article 2*

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## Workplace Integrated Learning, Environmental Volunteering or Service Learning?

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# Workplace Integrated Learning, Environmental Volunteering or Service Learning?

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## **Abstract**

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### **Workplace Integrated Learning, Volunteering or Service Learning?**

This discussion paper introduces the concept and practice of environmental volunteering as part of the process of Workplace Integrated Learning (WIL) at Edith Cowan University. As well as introducing the theoretical background and definitions of both volunteering and WIL, this paper describes examples from Natural Sciences domain of students doing environmental voluntary work with community groups as a practicum which is a core unit within their course. Literature suggests that these examples should neither be defined as volunteering nor WIL so their definitions and classifications are debated. Review of these examples in light of the literature suggests the conclusion that volunteering is a useful mechanism to support Workplace Integrated Learning for students who are studying in the domain of Natural Sciences. This paper introduces research that is being conducted into the attitudes of students about the volunteering aspect of the practicum and provides some qualitative comment from one of the 120 students currently enrolled.

### **Introduction**

Work Integrated Learning (WIL) is “an umbrella term for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum” with WIL placement being “a type of WIL that requires the student to be situated in the workplace” (Patrick et al., 2008). For the sake of ease of language, this paper will use the term Workplace Integrated Learning (Edith Cowan University, 2010) for work-based learning (Boud & Solomon, 2001), learning in the workplace and community (LiWC) (Victoria University, 2012), work integrated learning (Cooper, Orrell, & Bowden, 2010; Patrick, et al., 2008) and work experience (Little, Moon, Pierce, Harvey, & Marlow-Hayne, 2001).

There are several classifications of WIL. For example, three models of WIL in Cooper et al.'s (2010) classification are *professional programs*, *service learning* and *cooperative learning*. Other theoretical frameworks include the six characteristics of work-based learning that Boud et al. (2001) advocate, non-work integrated learning (Harvey, Geall, & Moon, 1998), seven key dimensions and three models of work integrated learning (Cooper, et al., 2010). The Taxonomy of WIL (TWIL) is a recent classification of WIL which has four categories: *community and service-focussed employment*, *required professional practice*, *field and industry based work experience* and *other WIL opportunities* (Groenewald, Drysdale, Chiupka, & Johnston, 2011). Another recent definition is an inclusive classification, stating that: WIL logically refers to all and any learning that is situated in the workplace or arises directly out of workplace concerns (Lester & Costley, 2010). Smith et al. (2009) agree, defining WIL as learning which is embedded in the experience of work whether paid or unpaid, full-time or part-time, formally endorsed as part of a university course or extra-curricular and complementary or totally independent of studies, which is made meaningful for a student when reflected upon as part of career development.

At Edith Cowan University, Workplace Integrated Learning (WIL) is viewed as a distinctive form of learning experience that incorporates students being in a workplace setting (Edith Cowan University, 2010), providing many learning opportunities denied in classroom settings. "Workplace" rather than "work" is specifically used to acknowledge valuable professional and personal skills that students learn in a workplace that are not directly part of work. WIL uses a workplace as a vehicle for learning. Yet learning is not a by-product of work, it is fundamental to engaging in work practice (Smith, Meijer, & Kielly-Coleman, 2010). The learning may or may not align with the higher education qualification being studied but is not only subject-specific. Students apply generic and specific knowledge and practical skills from on-campus or on-line learning to a workplace setting and ideally they then apply knowledge and skills from the workplace setting to university learning.

Volunteering can be an important way for young people to develop confidence and skills offering a clear pathway to social and economic participation in the future (Australian Government, 2011). Schools and universities have introduced volunteering programs for students to develop a sense of social responsibility, connectedness and leadership as well as to develop employability skills (Australian Government, 2011). Higher education student volunteering has caught the imagination of policy makers and practitioners in recent years (Holdsworth & Quinn, 2010). While recent initiatives to promote student volunteering in the UK have been welcomed, relatively little has been documented about its use and role in higher education and its assumed benefits (Holdsworth & Quinn, 2010).

Although there is no agreed definition of volunteering, the three criteria of free will, non-pecuniary motivation and benefit to others can be applied to any action to assess whether it is volunteerism or not (Hockenos, 2011). Another description or definition differs: all volunteering involves freely giving time to help others or support a cause yet some people may be reimbursed for the cost of volunteering (Australian Government, 2011). This discussion paper describes environmental volunteering by Natural Sciences students as part of their core first year practicum and describes their experience with environmental community groups against current models of work integrated learning (Cooper, et al., 2010; Groenewald, et al., 2011) and non-work integrated learning (Harvey, et al., 1998). The paper also presents some preliminary and mainly anecdotal assessments of the benefits of such volunteering to both student and the organisations involved, with the results of formal evaluations by students and supervisors (being done for the first time this semester) the subject of future paper(s). This type of activity would be classified as a form of volunteering by either of these descriptions but not according to the Australian Bureau of Statistics (ABS). A volunteer is defined as someone who willingly gave unpaid help in the form of time, service or skills through an organisation or group. Unpaid work under some form of compulsion, for example as part of study commitments, is excluded from ABS measures (Australian Bureau of Statistics, 2010). Students gaining university credit are not volunteers by ABS definition. The students described in this paper do not gain university credit but must complete the unit in order to graduate. So this is an interesting example to question whether their experience

should be called volunteering or WIL.

## **Volunteering**

Australia has a strong tradition of volunteering, reflecting the character of the nation. Australia's National Volunteering Strategy encourages educational providers to promote, support and recognise volunteering in schools and universities (Australian Government, 2011). Attracting young people to volunteering is vital for volunteering in the future (Australian Government, 2011). Integrated approaches are needed at national and institutional level to support the development of university student volunteering (Darwen & Rannard, 2011).

One commonly held misconception is that young people do not volunteer (Hockenos, 2011). Roughly thirty percent of the Australian population aged 25-34 volunteered in 2010 with 27% in 18-24 year age bracket (Australian Bureau of Statistics, 2011), less than the national average of 36% (Australian Government, 2011). People of 35-44 and 65-74 years were more likely to volunteer than those in younger and older age groups (Australian Bureau of Statistics, 2010) with people aged 45-54 years reporting the highest rate of volunteering (Australian Bureau of Statistics, 2011). In WA, 75.6 % of volunteers are motivated to continue to volunteer by giving something back to the community and 82.5% of 18-24 year olds are motivated to continue to volunteer by having fun (Volunteering WA, 2011).

Student volunteering makes a relatively small contribution to the voluntary sector in terms of number of participants and scope but it reinforces an ideal of self-reliance and relates to the development of employability skills (Holdsworth & Quinn, 2010). Volunteering has the potential to foster a form of moral engagement that recognises the need to take responsibility for others but not necessarily as the 'privileged server' to the 'unprivileged recipient' (Holdsworth & Quinn, 2010). Students are becoming more aware of the need to extend their curriculum vitae and this future benefit for their own career prospects is motivating some to undertake volunteering (Holdsworth & Quinn, 2010). Volunteering positions typically require applications including a curriculum vitae and statements addressing selection criteria. So the application process provides students with worthwhile experiences during the recruitment process before the actual experience of volunteering. Research data is being collected from the example described in this paper to determine what motivates these tertiary students. Data about the selection and recruitment process in various community groups is also being gathered.

Volunteering as unpaid work or service which contributes to the work of a formal organisation and is managed by a workplace model differs from volunteering as activism or as leisure according to Rochester's three perspectives (Smith & Cordery, 2010). While international conservation volunteering may not be a panacea to save threatened biodiversity (Lorimer, 2009) long running projects can be halted without volunteers. So volunteering in its various forms continues to be important to environmental projects.

## **Workplace Integrated Learning (WIL)**

Community Engagement and Workplace Integrated Learning (WIL) (by a variety of names) are key elements in the strategic direction of several Australian universities, providing a bridge between students academic work and their professional future (Martin, Fleming, Ferkins, Wiersma, & Coll, 2010). ECU seeks to enhance student learning by incorporating WIL and other community engagement strategies, aiming to engender in students a sense of community connection and consciousness (Edith Cowan University, 2010).

WIL is an authentic socio-cultural experience; learning is embedded and embodied in the contexts of the learners and their work environment (Choy & Delahaye, 2009). Students apply generic and specific knowledge and practical skills from on-campus or on-line learning to a workplace setting and ideally they then apply knowledge and skills from the workplace

setting to university learning. The interdependency of *knowing* and *doing* provide the epistemological base for WIL which is rooted in pragmatism (Lester & Costley, 2010), highlighting the rationale for WIL to be incorporated throughout higher education courses. Academics who view their teaching primarily as preparing students to become capable professionals who are competent to practice in their profession may see students' ability to apply knowledge to practice in practicum as a key indicator of quality university based curricula (McAllister et al., 2011).

### **Conservation Volunteering for Environmental Sustainability Education**

Environmental sustainability education has the responsibility to expand consciousness of the need to live in non-destructive harmony with natural systems (Haigh, 2006). Informal environmental sustainability education can be an effective way of increasing understanding of environmental and sustainability issues (Haigh, 2006). Formal environmental sustainability education, and specifically personal involvement in environmental action, may be an effective way for universities to facilitate tertiary students' increasing understanding of environmental and sustainability issues. This highlights the rationale for environmental volunteering and WIL to be incorporated throughout higher education courses. Many non-government organisations (NGOs) are based on the notion that a community of people can improve the world via a collective effort across many locally-based projects. The hard, slow tasks of environmental conservation, education and restoration may not gain media attention but through this direct, practical experience people learn how to care for and respect nature. Internationally, volunteering makes major contribution to conservation of biodiversity and improved sustainability outcomes, especially in developing countries (Devereux, 2008). Conservation volunteering may offer the opportunity to make a difference through a politically and economically appealing model of social enterprise (Lorimer, 2010).

Edith Cowan University is working with NGOs and other community-based environmental stewardship organisations (community groups) to encourage tertiary students to become involved in their local environmental issues and projects in practical ways. Environmental volunteers are generally not strongly motivated by reasons that one might expect from the general volunteering literature (Wahl, 2010). So data collection about these tertiary students' motivation will make a useful comparison with the literature (this is ongoing).

While the trend in higher education is for increasing student volunteering and involvement in community activities, there has been little research on volunteers' motivations and the effects of the experience on volunteers, especially in the context of conservation and environment (Bruyere & Rappe, 2007). Significant attitudinal and behavioural differences were identified between environmental and non-environmental volunteers including a strong regional attachment building loyalty to a local area (Randle & Dolnicar, 2006), although participation in conservation volunteering may not necessarily change deep-seated perceptions and attitudes towards nature (Halpenny & Cassie, 2003). Behavioural change as evidenced by the propensity to engage in environmental volunteering, along with attitudes to the environment, remained stable from 2003 to 2009 in surveys of 14,000 people in England and Wales (Anderson, Lee, Pryce, & Taal, 2010). Volunteering may provide quantifiable benefits like increasing work skills that may lead to a better paying job (Alonso & Liu, 2012). Volunteers make a remarkable sacrifice trading the opportunity cost of engaging in other activities in exchange for the common good (Alonso & Liu, 2012). Though student volunteers are less likely than other volunteers to help plan or coordinate services, students are not used exclusively for routine tasks (Edwards, Mooney, & Heald, 2001).

The benefits to the organisation of attracting volunteers are generally more tangible and have received more research attention. Community volunteer work and involvement is especially crucial in rural areas where human and financial resources are limited (Alonso & Liu, 2012). Although environmental volunteer organisations are experiencing changes in their culture, structure and funding arrangements which make the tasks of functioning and

attracting volunteers increasingly difficult, many are increasingly reliant on volunteers (Dolnicar, Irvine & Lazarevski, 2008) with some dependent on volunteers for particular skills. Greater recognition of environmental volunteers as co-learners and co-producers of ideas about ways to intervene in ecosystems and their rehabilitation is called for (Buizer, Kurz, & Ruthrof, 2012), especially when tertiary sciences students are the volunteers (Haigh, 2006).

### **Natural Science Practicum at Edith Cowan University**

Natural Sciences Practicum 1, SCI1120, consists of the equivalent of five days of volunteer work or work experience with an agency, NGO or industry related to the natural sciences. Students gain practical and hands-on experience, and make a positive contribution to the work that these groups undertake. Although students have considerable flexibility in the type of work undertaken, the emphasis of this first year practicum is on volunteering for a non-profit organisation. Students are encouraged to use this initial experience as the foundation from which to build a network of contacts and a portfolio of extra-curricular experiences during their time at university that will enhance their career prospects. In their third year, students complete a second practicum (SCI3214 Natural Sciences Practicum 2) which is more formal work experience via a ten day placement in an organisation(s) of the type they may typically work for upon graduation. This third year practicum is designed as a capstone of their WIL.

SCI1120 is a core (compulsory) component of all undergraduate degrees in biological sciences, marine and freshwater biology, conservation and wildlife biology, environmental management and environmental science in the School of Natural Sciences at ECU. This unit has been running since 2007 and evolved from other work experience practica and programs which were core components in the environmental management degree for over twenty years. In 2007, it was decided to formally divide these activities into two units: a first year practicum aimed at volunteering and a third year unit focussed on formal work experience, a move strongly supported by the course consultative committee. At the completion of their volunteering, employers or supervisors give a written letter or a standard certificate as evidence of their volunteering efforts. SCI1120 is marked on a pass/fail basis and is not for credit, but is a required unit in the course. Starting this year, students must write a succinct reflective evaluation (answering specific questions). Students are given considerable flexibility and scope in the type of volunteering and choice the organisations they help. A website and noticeboard promoting suitable organisations and volunteer programs is maintained by the coordinator of the practicum and students use this and/or their own contacts to organise a placement suited to their and the organisation, often based on availability. Many students volunteer at more than one organisation. Students have the whole academic year to complete their volunteering.

### **Intended purposes**

The two learning outcomes of SCI1120 are: to participate confidently in volunteer or work related activities of a host agency, NGO or industry; and to describe the relevance and application of activities conducted by the agency, NGO or industry with whom they volunteered or undertook work experience. This unit, along with others, targets work-readiness. It helps prepare the students with practical knowledge in the field they are interested in working in upon graduation. Students also see the usefulness of this unit in getting a job, because of their work-based training. The organisations which students volunteer for often employ graduates and several graduates have gained employment with the organisation they volunteered with, sometimes supervising/organising other volunteers in a paid capacity.

The intended purpose for students' university study is for them to learn about the structures of various environmental groups, their sources of and reliance on funding, and their

links to government and other organisations, and to understand how these fit within the broader environmental and conservation industries. NGOs play an important role in the conservation of biodiversity and in promoting the sustainable use of our natural resources, ranging from advocacy to 'hands on' action, and they rely heavily on volunteers to perform these functions, often with a strong links to local communities (Brightsmith, Stronza, & Holle, 2008; Haigh, 2006). Many government agencies (including independent statutory authorities such as zoos and botanical gardens) also rely on volunteers to implement certain programs and activities related to conservation and environmental management. Hence volunteers play a pivotal role in the wider industry in which students seek work in upon graduation. The practicum therefore contributes to students' understanding of the social and human dimensions of environmental management - how solving environmental problems is not only about understanding the science and technical aspects, but also how people and organisations work together to solve these problems. Many students have grasped the idea of volunteering from school and are familiar with the fundamental concept of volunteering being more than direct personal benefit, but also helping others and contributing to a bigger cause. The degree to which these altruistic objectives of the practicum are being met is difficult to gauge at this stage, but we hope to learn more about this from students' personal reflections and formal evaluations which have commenced this year.

### **Work Done by Students as they Volunteer**

Students choose volunteer work that is related to their course. For example, biology students tend to go to zoos and veterinarians. Lost dog homes and cat havens are popular for students studying wildlife biology. If students are more interested in genetics and molecular biology, they try to find work in laboratories. Indeed, it is the laboratory-style biology students who have the most trouble finding suitable placements. In such cases, students may undertake activities that are more like work experience than volunteering. Although there is considerable flexibility in the type of experience, and this can be tailored to students' courses and aspirations, the emphasis is on volunteering with the unit outline stating that students should be working with a community group.

Marine biology students mostly volunteer doing general tasks like restoration and rehabilitation especially of coastal dunes, and sometimes they do survey work with government fisheries and marine organisations. Older students view the practicum more strategically for practical work orientated to getting a paid job. Younger students see it more like volunteering with a community-based organisation. Most common is for students to work with organisations that specialise in the supply of volunteers for particular projects for local government and other organisations, particularly in environmental management and conservation. For example, Conservation Volunteers Australia (CVA) are well organised, have activities almost every day as well as week-long programs in various parts of the country, and focus on hands-on, restoration type work such as weed control and track maintenance. Some students tap into local community groups doing active bushland management. Volunteers are often attracted to charismatic mega-fauna (Campbell & Smith, 2005) and volunteering for wildlife sanctuaries and zoos is popular across all courses. Some wildlife sanctuaries that deal with injured animals have too many volunteers and only take students who are keen and committed to a long-term investment of themselves and their time.

Others types of organisations where students have volunteered include: 1) international organisations specialising in providing volunteers for research and conservation projects, such as Earthwatch, Projects Abroad and Raleigh International (for which there is often an associated fee and may be considered a type of volunteer tourism; Cousins, 2007; Haigh, 2006); 2) government departments and agencies with formal volunteering programs (e.g. Kings Park and Botanic Gardens, Perth Zoo, Department of Environment and Conservation's Nearer to Nature Program); 3) environmental activist and campaigning groups (e.g. The Wilderness Society, Friends of the Earth); 4) community-based conservation groups (e.g. 'Friends' groups involved in managing local bushland reserves; and 5) universities

where students assist with research projects (including helping post-graduates students). The School of Natural Sciences, specifically the coordinator of the practicum, has also organised and run ecological restoration activities for students, including propagation and planting in local bushland and elsewhere in conjunction with other organisations (e.g. dune restoration with Town of Mosman Park). Altogether, in the order of 4000-6000 volunteer hours are provided annually through this first year practicum, mostly to community- and government-based environmental/conservation organisations.

### Student Attitudes

Most of the 100 to 120 or so students each year really value the experience, though their anecdotal comments have often been vague. Most Natural Sciences students have recently completed their schooling though there are a few mature age students. This year, data is being gathered from students to determine what learning outcomes they think they achieved and what they gained from the volunteering experience. Data gathering will not be completed until this year's cohort finishes the unit and will form the basis of future papers. However, the students' responses to date demonstrate the value of their reflective evaluation and provide some positive insights into students' attitudes towards their environmental volunteering experience. For example, one student stated that she gained

“A good insight into the role and scope of work of conservation establishment – contacts with people in industry & clarification of the direction I want to focus on after study”.

She responded that she achieved the learning outcome of:

“Confidence in participating in conservation activities in a professional context including networking and making contacts”.

She stated that she:

“developed skills in plant propagation and nursery work, seed collection and field based operations and report writing”.

In the survey, she was asked what she learnt about herself. Her response was:

“Comfortable with broadening my knowledge and experience within new environments, good at relating to new people and picking up new skills – not very comfortable at being exposed to quite negative, bitchy staff politics – need to work on coping mechanisms for that”.

She wrote that she learnt about her course discipline area:

“Conservation work has such a broad scope in terms of the amount and type of field work available, as well as more office based reporting roles. Very diverse industry”.

She stated that her most memorable experience was:

“Field based seed collecting near the coast – absolutely stunning place to be ‘working’”.

When asked if she planned to any other volunteering, she replied:

“Yes, particularly during uni breaks as it provides great insight and experience to focus my endeavours for the future and can lead to further opportunities”.

When asked if she had any recommendations for other students doing this unit, she replied:

“Embrace the opportunity as all experience is valuable whether it has been ‘good’ experience or not. You can learn something from everyone you meet and it may not be about who you know, but who knows you.”

When asked what other benefits the volunteering will give her, she replied:

“A sense of confidence in what I have to offer to future employers, and that I am on the right track in terms of really enjoying the career path I have chosen”.

Letters from organisations generally give very positive feedback that they have made worthwhile contributions with a good attitude. Anecdotal evidence also suggests that the majority of students have a good attitude and had an enjoyable time. Organisations that rely on volunteers sometimes ask for more volunteers suggesting their experience has been positive. Comments from second and third year students state that the unit was very valuable in some of their coursework units, particularly where they need to demonstrate a familiarity with community groups and how they work. A few students each year, although generally keen to start, express that it is a bit of an inconvenience after having trouble fitting the

practicum into their life, possibly as a result of poor time management, while others say that they are too busy.

The SCI1120 links with the SCI3214 unit in third year and some students use the same organisation as they have that link. The School actively encourages these links with community groups. While some people are never introduced to volunteering and do not know how to get started (Danson, 2010), these students may feel welcomed and attracted to volunteering after their studies.

### Summary

The three criteria of free will, non-pecuniary motivation and benefit to others can be applied to any action to assess whether it is volunteerism or not (Hockenos, 2011). The first year practicum experience within the natural sciences at ECU certainly meets two of these criteria in terms of no payment and benefits to the organisation they are volunteering for. The compulsory nature of the practicum is seemingly at odds with the concept of volunteering; however the obligation is in terms of the number of hours with student given a very wide choice in the nature of activity and organisation. Furthermore, the practicum is designed as one component in an integrated program of WIL within the courses, but one which reflects the importance of volunteering to the industry in which graduates will be part of.

Specifically, the first year practicum makes an important contribution to environmental volunteering in terms of providing substantial volunteer hours to an industry and organisations which are increasingly reliant on volunteers to reach their specific operational objectives, as well as to achieve broader sustainability and biodiversity conservation goals. There is also anecdotal evidence of considerable benefits to the students involved, although we hope to further explore and report on such benefits when the current formal evaluations by students and supervisors are completed.

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