

Independent Learning Skills, Self-Determination Theory and Psychological Well-being: Strategies for Supporting the First Year University Experience

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The purpose of this article is to explain why the first year in higher education experience of Australian tertiary students can be improved through the explicit teaching of independent learning skills. Becoming an independent learner has many benefits, but the focus of this piece is upon the connection between independent learning and the improvement of student psychological well-being. High psychological distress levels appear to start in the first year of university education. We argue that explicitly teaching students independent learning skills is an important curriculum-based strategy that will contribute to the significant task of addressing this issue.

Introduction

This article argues that the first year curriculum of all disciplines in tertiary education must intentionally include instruction on the development of independent learning skills. Independent learning skills are one of the secrets to success in tertiary level learning, and the importance of such skills is acknowledged in the graduate learning outcomes and capabilities of almost every Australian university (for the discipline of law, see Davis & Owen, 2009). We contend that developing independent learning skills has the capacity to increase the psychological well-being of first year university students. This connection is important, given the growing body of evidence that a large proportion of Australian university students are experiencing high levels of psychological distress, and this distress often begins in the first year (Stallman, 2010; Leahy, Peterson, Wilson, Newbury, Tonkin & Turnbull, 2010; Larcombe, 2014). Importantly, independent learning ‘is a goal, not a starting point’ (Knight, 1996, p. 35) and students, peers, academics and tertiary institutions are all involved in the journey.

We begin by exploring the concept of ‘independent learning’ and its key elements. Second, we discuss the justifications for including explicit instruction on independent learning skills in the first year curriculum. We believe, as tertiary educators involved in the teaching of first year students, that we have an ethical imperative to act to address the high levels of psychological distress being experienced. Third, this article explains why explicitly teaching independent learning skills to first year students can support their psychological well-being. We discuss how training students to become autonomous and self-regulated learners provides them with a key to a successful first year experience. As independent learners, students are less reliant on teacher-directed learning, and more able to capitalise on, and even to create their own, opportunities for self-directed and peer-directed learning (Meyer, Haywood, Sachdev & Faraday, 2008). We draw upon Self-Determination Theory, to explain how the development of independent learning skills can be considered beneficial to student well-being. Finally, we sketch out some practical ideas for teaching independent learning skills to first year students in the formal curriculum.

What is independent learning?

There are many different definitions and descriptions of the term ‘independent learning’. The terms ‘self-directed learning’ and ‘learning how to learn’ are sometimes used interchangeably

with independent learning (Meyer et al, 2008). The most common descriptor of independent learning is ‘self-regulated learning’ (Meyer et al, 2008, p. 2). According to Zimmerman (1986, p. 308), when students are able to self-regulate their learning, they:

- have an understanding of their own approach to learning and how best to maximise their learning in the most efficient ways;
- are motivated to take responsibility for their learning; and
- are able to work with others to enhance the depth and breadth of their learning.

The University of New South Wales Learning Centre describes independent learning in the following way:

Being independent at uni means that you are responsible for managing your studies, your time and yourself. In high school, you might be used to teachers reminding you when work is due, telling you what and when to study, and checking your progress. University learning requires you to learn and complete assignments independently, plan your workload, meet deadlines and organise your time. This level of self-management can be a challenge. Some students thrive, others find it difficult to adjust at first (UNSW, 2013).

A significant review of the international literature on independent learning conducted by Meyer et al in 2008 notes the definitional consensus in the literature that independent learning is ‘a process during which learners develop the values, attitudes, knowledge and skills needed to make responsible decisions and take appropriate actions in regard to their own learning’ (p. 15). The literature also consistently notes that independent learning is ‘fostered by creating opportunities and experiences that encourage learner motivation, curiosity, self-confidence and self-reliance, and is based on the understanding by learners of their own interests and a valuing of learning for its own sake’ (Meyer et al, 2008, p. 15).

Meyer et al ‘contrast the dependent learner with the independent learner’ as a way of illustrating the ‘benefits of independent learning’ (2008, p.15). They argue that independent learning can be conceptualized as developing along a continuum, ‘stretching from the dependent learner to the independent learner’ (2008, p. 15). A dependent learner receives knowledge passively accepting the teacher as the expert and sees their own role as secondary (Boekaerts, 1997). Dependent learners react to the teacher’s guidance and are not active in directing or regulating their own learning. Independent learners on the other hand take an appropriate degree of ‘ownership’ of their learning. Independent learning is therefore reliant upon factors which are both internal and external to a student. The internal elements of independent learning include the skills and attitudes that individual students have to acquire. The external elements include the development of a strong relationship between teachers and students, and the establishment of an ‘enabling environment’ (2008, p. 28).

In our view, the *idea* of independent learning and the *expectation* that students will be independent learners, is not sufficiently spelt out to first year students through the formal curriculum. Reflecting on our observations of students at different Australian law schools, it seems that formal curriculum design in law assumes that students already have independent learning skills when they arrive at university, or will develop them organically/implicitly during their time at university. Instruction on *how* to be an independent learner is not commonly found in law lectures, and anecdotal evidence suggests that a similar lack of explicit instruction is a feature of first year studies in other disciplines. A scan of Australian university websites indicates that at most institutions, it is the academic skills and learning

centres that have the responsibility for providing support to students who need help in the development of such skills. Students must identify themselves as people in need of this assistance and be proactive in seeking it out.

In our view, more explicit, faculty-based support should be provided. If we want our students to develop the internal skills and attitudes they need to become self-regulated learners in their first year, then we should be teaching them the most effective ways to acquire these skills and attitudes, rather than leaving them to ‘work it out for themselves’. Decentralising the responsibility for core graduate learning outcomes (like independent learning) away from learning centres towards faculty curriculum is entirely appropriate, where graduate outcomes are faculty specific. Independent learning skills may also look very different, depending on the faculty a student is enrolled with. Perhaps ironically (at least semantically) it is our argument that students should not be left to independently learn how to become independent learners. Fine-tuned skills in planning, organisation, self-instruction, self-monitoring, and self-evaluation that support positive learning outcomes (Zimmerman, 1986, 2008) can be, and should be, explicitly taught in the formal curriculum. Students, with the help of faculty staff can begin the graduated shift from dependent to independent learning. In providing this instruction, academics would be fulfilling their role in terms of Meyer et al’s external element of independent learning – establishing an enabling environment for our first year students. We would also be appropriately supporting students to develop the internal elements of independent learning by facilitating their own intentional creation of strategies and approaches that optimize their own learning (Zimmerman, 1986, 2008).

It is also important for us to teach first year students what independent learning *is not*. For example, being an independent learner does not mean ‘learning on your own’ or in an isolated way (Meyer et al, 2008; UNSW, 2013). We can encourage engaged forms of independent learning by facilitating peer study groups, who may meet up for weekly revision or for exam preparation (Damon & Phelps, 1989). We can also teach students that it is an appropriate part of independent learning to seek out the assistance of those facilitating their learning (Ashford & Cummings, 1983) – their lecturers, tutors and other support providers such as academic skills and learning centres.

Imperatives for university educators to include independent learning skills in the first year curriculum

An examination of academic learning materials for Australian universities shows a comprehensive emphasis on independent learning as (arguably) *the* most critical skill at the tertiary education level. Most universities have well established academic learning centres, with websites promoting independent learning and giving tips on how to be an independent learner. The website for The Learning Centre at UNSW, comments that ‘A major difference between school and uni is the higher degree of independence expected from uni students. Studying at university allows you far more control over your work than school. However, uni also offers far less supervision’ (UNSW, 2013). Student comments are also provided to reinforce this message: ‘With school ... we were pretty much spoon-fed, whereas when we came to uni, with all the independent research, I found myself quite unprepared’ (UNSW, 2013).

Our first argument in support of explicitly teaching first year students independent learning skills, relates to the *nature* of tertiary level education. At university, there is a significant expectation that students will take responsibility for their own learning. Independent learning

is self-directed learning, where an individual can choose what they want to learn, how deeply they wish to learn about something and the methods/processes they use to go about learning. This expectation does exist at other levels of education, particularly as students progress to the final year of high school. However, the expectation is far more pronounced at university, and having the skills and attitudes to take responsibility for one's own learning is a critical key to student success in their tertiary education.

Academic staff are responsible for the intentional design of the curriculum and its quality - its content, the ways in which it is delivered effectively, and the ways in which student achievement of desired learning outcomes is assessed (Kift & Field, 2009). However, academic staff cannot be responsible for the entire student experience. We cannot control how much individual effort a student is prepared to devote to their own study, or how serious, engaged, or motivated they are to learn and to make the most of the learning opportunities that are made available to them. These are aspects of the learning experience that students must control for themselves. As university level teachers, we have a professional responsibility to create optimal learning environments for our students, but students themselves must be committed to their own learning success. For this reason, independent learning skills should be explicitly taught in the first year. It should not be assumed that students have these skills when they arrive at university, and it should not be left to chance as to whether they develop the skills or not.

Second, and relatedly, independent learning skills should be taught at university because they are critical to optimal achievement and maximizing learning outcomes for all students. As Zimmerman notes 'even high-ability students' often do not achieve optimally because of their failure to take an independent learning approach and to self-regulate their learning (Zimmerman, 1986, 307). If we are to provide appropriate support for the first year learning experience, the explicit teaching of independent learning skills needs to happen in the classroom and online through the formal curriculum. Students should be persuaded as to the importance of independent learning skills and approaches, and specifically taught a range of effective strategies for developing these skills. In the minds of our students, independent learning and academic success (however measured) should be linked.

Third, independent learning skills should be explicitly taught to students from their first year because the capacity to learn independently is an acknowledged graduate attribute, capability or learning outcome of all Australian universities, and these skills should be integrated into the curriculum in a scaffolded way (Kift, 2009). At Deakin University, independent learning is part of a self-management graduate learning outcome. Self-management is defined as being able to 'work and learn independently, and take responsibility for personal actions' (Deakin, 2014). The Queensland University of Technology has two graduate capabilities that relate to independent learning. The first is 'the capacity for life-long learning including: searching and critically evaluating information from a variety of sources using effective strategies and appropriate technologies', and the second is 'the ability to work independently and collaboratively including: managing time and prioritising activities to achieve goals, demonstrating the capacity for self-assessment of learning needs and achievements, and being a cooperative and productive team member or leader' (QUT, 2014).

Whilst acknowledging the above arguments in favour of explicit instruction in independent learning, the focus of this article is upon independent learning and the psychological well-being of university students. There is now a growing body of evidence that the psychological

well-being of our students should be a concern for university educators.

As an example, Helen Stallman's work (2010, 2011, 2012) has established that Australian university students experience significantly higher rates of psychological distress than the general population. Stallman argues that university students are an at-risk population, for whom universal early interventions are required if their mental health is to be protected. In 2010, Catherine Leahy and others published the results of a cross sectional study at the University of Adelaide which tested the prevalence of psychological distress amongst different faculties. 955 students were surveyed, and of that number 48% were classified as being psychologically distressed. Law and mechanical engineering students were the worst affected with 58% of law students and 52% of mechanical engineering students experiencing psychological distress. Further, 44% of medicine students were found to be experiencing psychological distress, as were 40% of psychology students. In 2011 the University of Melbourne's Centre for the Study of Higher Education acknowledged the developing concern in the tertiary sector about the mental health of students when it hosted a National Summit to assist 'the sector to develop improved policy and practice responses to the growing incidence of mental health difficulties and mental illness on campus' (CSHE, 2011). More recently, research findings from the University of Melbourne show high levels of psychological distress across a range of disciplines (Larcombe, 2014). Larcombe led an institutional survey of well-being in 2013 with more than 5,000 students surveyed across six different faculties and graduate schools. This study found that students in diverse academic programs reported high levels of psychological distress that would be likely to have an impact on the quality of their learning.

There is, therefore, compelling Australian empirical evidence that early intervention is justified to prevent a decline in university student psychological well-being. This is a significant project for tertiary educators, and particularly for those of us working in the area of the first year experience. We believe the evidence has now created an ethical imperative to act. Our argument is that teaching independent learning skills in the first year formal curriculum is one possible strategy which may contribute positively to tertiary student psychological well-being. This argument is based on Self-Determination Theory from the field of positive psychology.

Independent learning skills, Self-Determination Theory and student well-being

Self-Determination Theory (SDT) is an influential branch of educational and positive psychology (Deci & Ryan, 2002; Ryan & Deci, 2008). It is a complex meta-theory that attempts to explain how and why an individual's behaviour is self-motivated and self-determined (Deci & Ryan, 2002). One sub-theory which falls under the general umbrella of SDT is Basic Psychological Needs Theory (BPNT). BPNT involves three basic psychological needs that humans seek to satisfy in order to thrive. These three basic needs are competence, relatedness and autonomy.

Competence concerns an individual's 'experience of effective interactions with the environment' (Niemic, Ryan & Deci, 2010, p. 176) and their sense of ability, capability, and mastery in relation to tasks and challenges (Krieger, 2011, p. 172). Relatedness concerns what is considered to be a universal desire to bond and interact with other people, and experience caring for them. In other words, it refers to the experience of meaningful and reciprocal connections with key others (Niemic, Ryan & Deci, 2010; Krieger, 2011). Autonomy refers to the subjective experience of an individual's behaviour as being self-

governed, volitional, and congruent with their true beliefs, values, and interests (Niemiec, Ryan & Deci, 2010, p. 176). It concerns the common need to be the causal agent of one's own life, and to act and make decisions for oneself in accord with those beliefs, values, and interests.

In addition to the three basic human needs, SDT also considers how self-motivation and self-determination are influenced by two different classifications of motivation (Deci et al, 2013; Ryan and Deci, 2008). The first is intrinsic motivation which is grounded in an inherent drive to seek out challenges and new possibilities and to act in accordance with one's own genuine sense of interest and/or enjoyment. The second is extrinsic forms of motivation, which are essentially reasons for acting that come from external sources, are primarily predicated on external recognition, demand or possible reward, and are typically a means to an end.

SDT posits that autonomous self-regulation is supported when a person has their basic needs of autonomy, competence and relatedness met, and when they have predominantly intrinsically motivated goals. The theory also says that autonomous self-regulation may be supported when a person relies on extrinsic forms of motivation, if those extrinsic motivations are harnessed in a way that is self-determined. Importantly, empirical associations between the factors examined by SDT and law students' well-being have been documented in both American (e.g. Sheldon and Krieger, 2004) and Australian studies (e.g. Larcombe, Tumbaga, Malkin, Nicholson & Tokatlidis, 2013).

Critically, for our purposes in advocating the importance of explicitly teaching independent learning skills to first year students, the two elements of SDT's basic theory work together to highlight that autonomous self-regulation is a key factor and condition for promoting learning, academic performance, and wellbeing (Vansteenkiste, Niemiec, and Soenens, 2010). That is, student well-being can be seen to be supported if students are equipped with independent learning skills that allow them to be self-regulated, autonomous, and motivated to be 'active participants in their own learning process' (Cubukcu, 2009, p. 54). On the basis of SDT, the teaching of independent learning skills can be seen as one theoretically informed approach to enable tertiary learners to 'personally activate, alter, and sustain their learning practices in specific contexts' (Zimmerman, 1986, p. 307). This is beneficial for both student learning and well-being.

Practical ideas for promoting student well-being through the teaching of independent learning skills to first year students in the formal curriculum

Fortunately, the task of teaching independent learning skills to students in the first year formal curricula across tertiary disciplines is not necessarily a difficult one. There is already much expertise in every Australian institution that is ready to be harnessed for this endeavour. Much of this expertise exists in central academic learning and skills centres. However, there is also much relevant expertise within Faculties of Education, and within the disciplines themselves. In this section, we briefly sketch out some practical ideas to encourage independent learning skills.

First, an institutional and Faculty level commitment to the importance of this task must be developed. It is the responsibility of first year educators to engage with First Year Coordinators, Directors of Curriculum, Heads of School, Associate Deans Learning and Teaching and Executive Deans to persuade them of the importance of this student well-being strategy, and to provide the knowledge and expertise to enable effective and efficient

curriculum reform to achieve it.

Second, collegial relations must be developed between academic support services staff and discipline academics, as well as between Faculties of Education and other disciplines within our universities. Kift's senior ALTC Fellowship (2009) showcased effective models for how such cross-institutional partnerships might be developed and structured successfully to support the transition pedagogy of the first year. With institutional commitment and collegial and supportive professional relationships in place, expertise can be shared to intentionally design approaches to teaching independent learning skills across the core subjects of the first year curriculum that are discipline appropriate. There is a wealth of resources available to support this effort. Taking, as just one example, Edith Cowan University's Centre for Learning and Development's *Teaching tips for developing self-managing learners* (2013), a possible framework for curriculum interventions can be quickly formulated:

First, set the foundations for students to be independent learners: This can be done by:

- 'talking to your students about their previous learning and teaching experiences;
- discussing their expectations of the course – how are they expecting to be taught, assessed and how do they expect to facilitate their own learning;
- talking about your expectations and the requirements of the course; and
- reaching a shared understanding of these expectations (Edith Cowan University, 2013, p. 1).

Such conversations are autonomy supportive as they acknowledge students' perspectives and feelings, allow students to exercise agency in relation to aspects of their learning and course experience, and facilitate students' internalisation of rationales for the aspects over which no choice is available (Su and Reeve, 2011).

Cultivating students' "self-interest" in their studies provides another foundation for them to become independent learners. Students' autonomous motivations for their tertiary studies can be cultivated by encouraging students to develop 'self-interest' in their learning, as part of the first phase of a broader cycle of self-regulated learning consisting of: (1) a 'planning phase'; (2) a 'monitoring and implementing phase'; and (3) an 'evaluation phase' (Hunter Schwartz, 2008, p. 3). Such self-interest may stem from: a spontaneous interest in 'learning for its own sake'; students consciously reflecting on the reasons they chose to attend university in the first place, which allows learning to be contextualised in the bigger picture of students' lives; finding interest in the challenges and stimulation of tertiary learning, and students reflecting on how they may be able to use what they are learning in their personal and professional lives (Hunter Schwartz, 2008, pp. 42-43). Each of these types of self-interest can be seen to relate to intrinsic motivations, or internalised extrinsic motivations, for independent learning.

A second step is to provide ongoing support for students as independent learners:

- 'Give an overview of the subject matter so that learners have a framework within which to build their knowledge ...
- Encourage and build confidence especially in the early stages by providing opportunities for students to bring questions and observations to class which have arisen from their independent reading.
- Encourage, and create opportunities for students to share, strategies that helped them learn a particular concept or process ...

- Create situations where students can control aspects of classroom learning such as selecting a reading for critical analysis for the next class.
- Gradually move over time from a role as teacher to that of a learning facilitator and teacher as students become more confident independent learners' (Edith Cowan University, 2013, p. 2).

Such strategies offer students choices, encourage them to express their perspectives and feelings, foster intrinsic motivation, and provide meaningful rationales when no choice is possible, all of which are autonomy supportive (Su and Reeve, 2011), and acknowledge the emotional dimensions of learning (Brookfield, 2006).

Third, develop a process for teaching independent learning strategies. For example:

- 'Develop student awareness of different strategies through small group retrospective interviews about tasks, modelling think-aloud then having students think aloud in small groups, discussion of interviews and think-alouds.
- Develop student knowledge about strategies by providing rationales for strategy use, describing and naming strategy, and modelling strategy ...
- Develop student ability to evaluate own strategy use through writing strategies used immediately after task, discussing strategy use in class, keeping dialogue journals (with teacher) on strategy use.
- Develop transfer of strategies to new tasks by discussions on metacognitive and motivational aspects of strategy use, additional practice on similar academic tasks, assignments to use learning strategies on tasks related to cultural backgrounds of students (Edith Cowan University, 2013, p. 3).

According to Hunter Schwartz, it is this evaluation phase that completes the cycle of self-regulated learning, and distinguishes 'expert learners' from their peers (2008, p. 3).

Conclusion

SDT represents an important theoretical framework for considering how independent learning skills can promote self-management capacities, and consequently the psychological well-being of first year students. Our argument is that SDT's key concept of autonomous self-regulation, which is maintained by intrinsic motivations and goals and self-determined extrinsic motivation, as well as the satisfaction of the basic psychological needs of autonomy, competence, and relatedness, provides a theoretically grounded basis for arguing that the teaching of independent learning skills can support the well-being of first year students. Independent learning skills provide students with strategies to enact intrinsic motivations and goals, and contribute to a self-determined response to extrinsic motivations. They also play a part in the satisfaction of the basic needs of competence, relatedness and, in particular, autonomy.

In this article we have argued that first year educators in Australian universities face an important ethical imperative. We must use our ability to intentionally design the first year curriculum so that it is a tool of early intervention in the promotion of tertiary student well-being. Whilst important, this task is not difficult. It simply requires recognition of our own agency in the duty of supporting student well-being, and collaboration to bring existing expertise in the teaching of independent learning skills into the formal curriculum of all tertiary disciplines.

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