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Teaching financial literacy in introductory accounting course: A reflection and proposal

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Abstract

Numerous financial literacy studies have consistently identified young adults to have low levels of financial capability. Of particular concern is that many of these young people do not have adequate money skills to ride their freedom during university time which may contribute to suboptimal financial behaviours. Prior research into university students' financial literacy and financial education in school suggests that many students are not confident about money matters with many preferring to learn about financial literacy in university. Accordingly, an initiative including workshops on basic budgeting and saving topics, and a seminar delivered by a financial guru during university orientation week was trialled. However, attendance to these workshops and the seminar were disappointingly low. The experience prompted the researchers to consider other approaches to help students improve their financial literacy. This paper provides a reflection of the orientation week initiative, as well as proposes ways to incorporate financial literacy in introductory accounting course.

Introduction

The need for financial literacy education on university campuses is vitally important to the future financial health and well-being of today's young adults. As higher education costs continue to rise, students are increasingly relying on student loans to finance their education. Financial illiteracy has been attributed as one of the reasons for the spiralling student and credit card debts that young adults accumulated.

The number of university graduates with large debts is growing but fewer graduates are earning enough to pay back their loans (Norton & Cherastidtham, 2016). According to data from the Parliamentary Budget Office (PBO), the number of Commonwealth Supported Places (CSP) students accessing loans through the Higher Education Loan Programme (HELP) has increased by 11.2 per cent annually over the past five years, rising from 308,000 in 2010 to 522,000 in 2015. The associated annual cost is projected to rise from $1.7 billion in 2015 to $11.1 billion in 2025 (PBO, 2016). Knott (2015) cited Australian Tax office statistics which shows that the number of graduates with debts above $40,000 has doubled over the past two years to more than 100,000. Adding to this financial stress from rising student loan debt is the fact that job prospects are still challenging for many graduates.

It is therefore important to invest in improving the financial management skills, attitudes and behaviours right from the start of the university experience as financial issues and the need to work are often cited as the key reason why students drop out of university (Ross *et al.,* 2012). A recent US survey, Money Matters on Campus (2013), found that 28 per cent of 40,000 first-time college students already had a credit card, and most had more than one. About 25 per cent had outstanding balances in excess of $1,000 and 5 per cent owed more than $5,000. These early signs of financially risky behaviour at the outset of the college experience only add to the pressure of staying enrolled and completing a degree.

Research from Australian studies provides evidence of financial illiteracy of university students. For instance, in a study of first-year university students at a Queensland university, Beal and Delphachitra (2003, p.18) concluded that "students were not skilled or knowledgeable in financial matters" and added "this lack of financial skill will tend to impact negatively on their future lives through incompetent financial management". In a more recent survey of 393 university students in Australia, Palm, de Zwaan and Chardon (2015) revealed that majority of respondents received very little financial education in high school. Recognising the deficiency in their understanding of financial matters, a large proportion of respondents had indicated a preference to learn more about financial life skills in university without enrolling in a whole course (Palm *et al*., 2015).

In an attempt to provide an immediate response to students' call for learning financial literacy in university, an orientation week initiative undertaken by the authors with a number of stakeholders at Queensland University of Technology (QUT) was trialled in February to March 2016. A range of activities were conducted, including devising an online financial literacy quiz, setting up a "money booth" where resources sheets about numerous money topics were available to students and where they could sign up to attend workshops on money topics, as well as a free seminar delivered by a well-known financial guru. Despite the publicity by the university and the array of resources available to commencing students, the attendance to these activities was very low.

Reflection on the lack of voluntary participation from commencing students in the orientation initiative have prompted the researchers to consider other means of helping students to improve their financial literacy in the formal curricula. However, the challenge in affecting any change in a university degree, especially an already crowded curricula, is not underestimated. Hence, a small-scaled change is proposed for trialling in an introductory accounting unit, as a first step towards incorporating financial literacy teaching in university.

This paper serves two purposes. First, it provides a reflection on the orientation week initiative, including the preliminary results of the online financial literacy quiz. Second, guided by the constructive alignment model (Biggs, 2003), this paper proposes a number of teaching and learning activities about financial literacy in introductory accounting course. These activities are designed to promote active learning that provides relevant and engaging ways for which students can develop meaningful connections about personal finances and accounting. Implemented successfully, these teaching and learning activities can help address some of the negative perceptions students may have about accounting. The remainder of this paper is organised as follows: the literature on financial literacy particularly in relation to young people is presented. This is followed by a description of the orientation week initiative and its results (or lack of). A proposal for incorporating financial literacy in introductory accounting course is then developed, followed by a concluding remark.

Financial literacy and young people

A widely used definition of financial literacy is “the knowledge and understanding of financial concepts, and the skills, motivation and confidence to apply such knowledge and understanding in order to make effective decisions across a range of financial contexts” (OECD, 2012, p.13). While definitions of financial literacy vary, the vast majority of these characterise financial literacy as a vital life skills for all consumers that is comprised of knowledge and complementary attitudes and behaviours that support the implementation of this knowledge in daily financial decision-making (Ali *et al.,* 2014).

There has been rising global interest in financial literacy as a core life skill due to considerable changes in the landscape for the management of individual and household wealth (OECD, 2012). One of the most noticeable changes is that individuals are increasingly facing a wider range of complex financial products and services for a longer period of time. In Australia and other developed countries, young people are facing increased school and higher education debt (Lusardi, Mitchell & Curto, 2010), and young people are expected to make more complex financial decisions at a much younger age than their parents (OECD, 2012). Nowadays, for example, credit cards and mobile phone deals are increasingly available for young people who may not have the necessary financial knowledge to understand the terms and conditions of the products and services (FLF, 2007). Further, many students may have signed up to university loans without fully understanding how interest and repayment works (de Zwaan, 2015).

While Australians in general have reasonable levels of financial literacy, certain groups, including young people, do not have levels of financial literacy sufficient to understand financial concepts and make sound financial decisions (Ali *et al.,* 2014). In particular, The

ANZ Bank Adult Financial Literacy Survey finds that 18-24-year-olds perform poorly at forward financial planning and keeping track of finances, have a lower ability to choose suitable financial products and have a weaker awareness of financial liability (ANZ, 2011). Research finds that many Australians have significant gaps in financial knowledge and that complex, unfamiliar or long-term financial matters are challenging for these people (ASIC, 2011). Studies also find that while young people are confident in their capacity as consumers (FLF, 2007), their more limited ability to manage income and understand their consumer rights places them at risk of poor decision-making. The consequences of poor decision-making for young people include the risk of serious financial error leading, in some cases, to debt stress (Commonwealth Bank Australia Foundation, 2006).

Financial literacy is widely understood to be an intergenerational skill, that is, financially literate people acquire these skills in part from their parents (Lusardi & Mitchell, 2014). However, there is now a significant "generational gap" because rapid economic and social changes limit the role of intergenerational financial learning (OECD, 2012). The consequence is that the financial landscape for young people is vastly more complex than that of their parents' generation. In the absence of intergenerational learning, young people can be seriously disadvantaged by not having financial knowledge and skills that are commensurate with the financial decisions they are required to make.

The first year of university constitutes an especially important transitional stage of development within the larger transitional period because most university students are not yet financially independent but are actively learning the skills needed to be financially independent (Arnett, 2004). Part of the pathway to financial independence requires that university students perform healthy financial behaviours. According to the Student Financial Well-being Model (Shim *et al.,* 2009), those university students with stronger intentions to perform positive financial behaviours and who reported higher levels of perceived control over their personal finances were more satisfied with their financial status and less likely to incur debt. This financial well-being was, in turn, positively associated with academic success, physical health, psychological health, and overall life satisfaction (Xiao *et al.,* 2009).
The first year of university is characterised by a host of major, life-changing experiences that often overlap; in particular, students typically experience various difficulties associated with

adjusting to living away from home (e.g. Tinto, 1988). As Scanlon et al. (2007) showed, one set of difficulties derives from the exigency of learning to manage finances because, for the first time in their lives, many students find themselves required to manage money and to pay their own bills. Accordingly, there have been numerous calls to include financial literacy as part of high school and university curricular (Gill & Bhattacharya, 2015; Lusardi & Wallace, 2013; Samkin, Low & Taylor, 2012).

Orientation week financial literacy initiative

In response to students' preference of learning financial literacy in university without enrolling in a whole course and the call to take a community approach in raising the financial literacy of university students (Palm *et al.,* 2015), an initiative was trialled at QUT as part of the university's orientation program in February to March 2016. A working party was formed, including two authors of this paper, staff from the University's Equity Section, financial counselling, and student services. The working party was tasked to develop a range of activities to raise students' awareness of the importance of sound money skills, just in time when many of them will be facing the need to learn to be financially independent for the first time in their life.

First, an online financial literacy quiz, based on the financial literacy measures used in Palm *et al.* (2015), was refined to be made available to students during the orientation week. Second, a "money booth" staffed by welfare officers and financial counsellors was set up during the orientation week. In this booth, numerous resources on money matters, such as, a guide to budgeting in university and how to manage student debt, were made available. Thirdly, to avoid overcrowding of activity during orientation week, a number of free workshops on money topics were organised in weeks 2 and 3 of the semester. Fourth, a free seminar on money matters by Noel Whittaker, a well-known financial guru, was arranged to be held in week 4 of the semester.

Link to the financial literacy quiz as well as the array of activity was broadcasted to commencing students via the University Registrar's email. Additionally, the financial literacy initiative was advertised to students via the University's intranet where students could sign up to various orientation activities. Students were also able to complete the financial literacy quiz, as well as sign up to the money workshops and financial seminar at the money booth.

Despite the publicity of the financial literacy initiative by the University, attendance to the various activities was disappointingly low. We received 133 responses to the financial literacy quiz, with 95 completions. The money workshops, which were run in various campuses across the university, were attended by an average of 30 students in each. Less than 50 students turned up to the Noel Whittaker seminar, which was over-registered (in a lecture theatre with a sitting capacity of 200). Although this seminar was recorded and live-streamed to students in other campuses, download rate reveals that it was not as popular as originally thought.

A number of factors might be at play for the lack of success and engagement by students in this financial literacy initiative. Although the idea of providing financial literacy "just in time" when commencing students might need it for the first time was commendable, evaluation by various stakeholders suggests that orientation week might not be an ideal time for introducing "serious" topics such as those about money. Comments especially from members of the student union provide insight that majority of students perceive orientation week as the chance to sign up to social and sporting clubs, obtain "freebies" and form social networks with fellow freshmen.

Further, an unanswered question in the delivery of financial literacy activities to commencing students is what type of student will choose to participate? Echoing Willis (2011, p.430) who contends that "Ironically, those who participate voluntarily already have more financial knowledge, better budgeting and planning skills, and lower financial discount rates conducive to good money management than those who decline". The voluntary nature of participating in the financial literacy initiative might present a selection bias in that those who participate voluntarily might already have more interest in money matters than those who decline.

As shown in Figure 1, the sample is over-represented by Business students with 54.35 per cent indicating this as their main area of study. Business students could be expected to have a higher interest in money and related matters. This has implications for the results of the quiz, in that the financial literacy scores are likely higher than the overall population.

<insert Figure 1 here>

Of the financial literacy areas assessed by the quiz, students generally performed well in basic numeracy such as budgeting, simple interest, and calculating percentage discounts. Performance was considerably lower in more advanced literacy areas, particularly related to investment returns, superannuation, and tax. The results for each of the quiz areas are shown in Table 1. It is possible though that these results are skewed by the participants in the quiz.

<insert Table 1 here>

As noted above, there is a high representation of business students in the sample. The sample also has an average age of 25.7 years. Thus there are older participants in the survey who will have higher levels of financial literacy given they have more experience with managing money and are not identified as an 'at risk' group (ANZ, 2011). Coupled with that, only 48.42 per cent of the sample are first year students. These figures again raise the question of self-selection bias with the possibility they are completing the quiz to confirm their level of financial literacy.

As part of the quiz, we asked students their particular preferences for learning financial literacy. The topics asked for were broad but investing was the most mentioned, followed by superannuation, and taxation. These particular topics are considered higher-level financial literacy areas, and their popularity within the responses could again be linked to the sample being older, more experienced, and enrolled in business degrees. The summarised topic areas are presented in Table 2 with the counts.

<insert Table 2 here>

Given the lack of participation in the various financial literacy activities, the researchers concluded that a just in time approach is not the most effective means to help students improve their financial literacy. While some students did attend and/or take part in the quiz, it is likely they are already interested and improving their financial skills. This rationale led the researchers to consider other approaches in more formally delivering financial literacy education in university curricula.

A proposal for teaching financial literacy in introductory accounting

Our proposed intervention aims to respond to two challenges. The first is the call to include financial literacy as part of university curricula (Kelly *et al.,* 2010; Lusardi & Wallace, 2013). The second, is an attempt to challenge the negative perception students have about accounting (Buckmaster & Craig, 2000; Christensen, 2004; Mladenovic, 2000). It appears that personal finance education in university is uncommon. Bianco and Bosco (2011) examined the curricula of 100 Association to Advance Collegiate Schools of Business (AACSB) accredited schools and found that less than half of the business schools offered a personal finance course for business majors while 90 per cent of non-business majors are not offered any such course. Hence, a semester-wide undergraduate personal finance course such as the one reported by Gerrans and Heaney (2015) would seem to be a rarity.

Given the costs involved and difficulty of gaining approval of a required personal finance course for all business students, it is believed that accounting educators can do their small part by introducing some personal finance concepts in their existing courses. Accounting educators should be very capable of delivering personal finance course content as there are many linkages between personal finance and the course material in the introductory accounting courses. The dilemma is there is barely enough time in a first semester accounting course to cover the required concepts of the course, let alone introduce personal finance concepts. Responding to the call by Fernandes, Lynch and Netemeyer (2014) who suggest either a "just in time" approach to financial education or a continuous effort to significantly impact outcomes, a small-scaled intervention in an introductory accounting unit is proposed. We hope other courses offered later in the curriculum will build upon our initial efforts.

Many students perceive accounting as a number-crunching activity, driven by procedures and rules, and performed by individuals working alone (Geiger & Ogiby, 2000; Mladenovic, 2000). Perceptions such as 'accounting is dull in content and unadventurous in mode' are particularly common among first year accounting students (Buckmaster & Craig, 2000, p.375). As Christensen reports, 'our first year students just *knew* accounting was as boring as watching paint dry' (2004, p.119). Accounting, it appears, is something that students already knew about – a concept of debit and credit that has to be meticulously placed and has to produce one correct answer (Christensen, 2004).

Similar experiences have been reported in the literature that students have pre-conceived ideas about accounting education, that it is something to be memorised, (see for example Marriot & Marriot, 2003), or that teachers will show them the procedures to follow. The result is that students view their role in this context as passive recipients of information, lacking initiative and refusing to participate in the learning process unless the activity forms part of graded assessment.

According to educational reform based on constructivist learning theory, “subject matter and assessment should be challenging, authentic, promote the use of metacognitive skills, and address both learning processes and learning outcomes” (Shepard, 2000, p. 8). This learning theory is in contrast to notions of passive knowledge transference typical of the more traditional direct instruction model. Allied to constructivism are the principles of constructive alignment. Constructive alignment (Biggs, 2003) exists when there is consistency of relationships (alignment) between the three elements of learning objectives, teaching and learning activities, and assessment, in order to achieve desired learning outcomes. Biggs (2003) explains that constructive alignment has two aspects in that the *constructive* aspect refers to what the learner does, which is to ‘construct meaning’ through relevant learning activities. The *alignment* aspect, on the other hand, refers to what the teacher does. The teacher sets up a learning environment that supports the learning activities appropriate to achieving the desired learning outcomes (Biggs, 2003).

Our proposed intervention is guided by the constructive alignment model (Biggs, 2003). We aim to explore a learning design which facilitates deep approaches to learning. Specifically, we aim to investigate the type of tutorial activities that would encourage students to actively take part in the learning process and allow them to demonstrate through formative assessment the depth of knowledge they construct, what helped them construct this knowledge and how.

For instance, with the desired learning outcome for students to demonstrate their understanding of the concept of debt, a series of action-oriented learning activities using real life examples and business world artefacts can be used in tutorials. Students can work in groups and/or in pairs depending on the activity. By using real transaction records in these learning activities, such as invoices and loan agreements, these teaching and learning activities helped students to make connections with real-world scenarios and provide a holistic view of learning by establishing linkages between topics. Learning was situated in the context of how students will use the knowledge in their everyday life and in the real business world.

As a further example, with the aim of providing a meaningful purpose for studying the topic on cash flow and managing cash using cash budgets, an activity involving students to apply the accounting concepts into their everyday life can be the focus of this tutorial session. The group activity involves students in developing personal cash budgets for the semester. They can work in teams to estimate their cash receipts (source of income) and cash payments (expenses). This cash budget will show whether they would be in surplus or deficit for the semester. For this activity, the formative assessment can consist of interactive class presentations. Part of the presentation can involve discussion of how student groups would go about investing the surplus or financing the deficit and discussing their strategies with the audience.

This activity should help students to contextualise and personalise the knowledge by promoting an appreciation of accounting concepts based on relevant, real life examples. It reinforces the idea that everyone can apply accounting knowledge to manage finances and promote long-term wealth management, thereby 'personalising' their learning. Such knowledge can then be used as the basis for understanding bigger business transactions, in the course of progressively exposing the students to accounting concepts.

Concluding remark

Improving financial literacy through education programs has become a resounding issue since a lack of financial literacy has been acknowledged as one of the aggravating factors of the global financial crisis. Young adults, in particular, were consistently found to have low levels of financial capability. Hence, there have been repeated calls to include financial literacy as part of high school and university curricula. Prior research has advocated a community approach in raising the financial literacy of university students. This paper documents the failure of an orientation week financial literacy initiative undertaken by the researchers. Reflection on this experience has prompted the authors to consider other approaches to incorporate financial literacy in university, namely a small-scaled change in an introductory accounting course. Our suggestions for improved constructive alignment particularly in the topics when it is relevant to bring in personal finance concepts, will enhance opportunities for students to actively engage in the learning process and may help address students' negative perception about accounting.

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Figure 1 – Respondents’ Main Area of Study

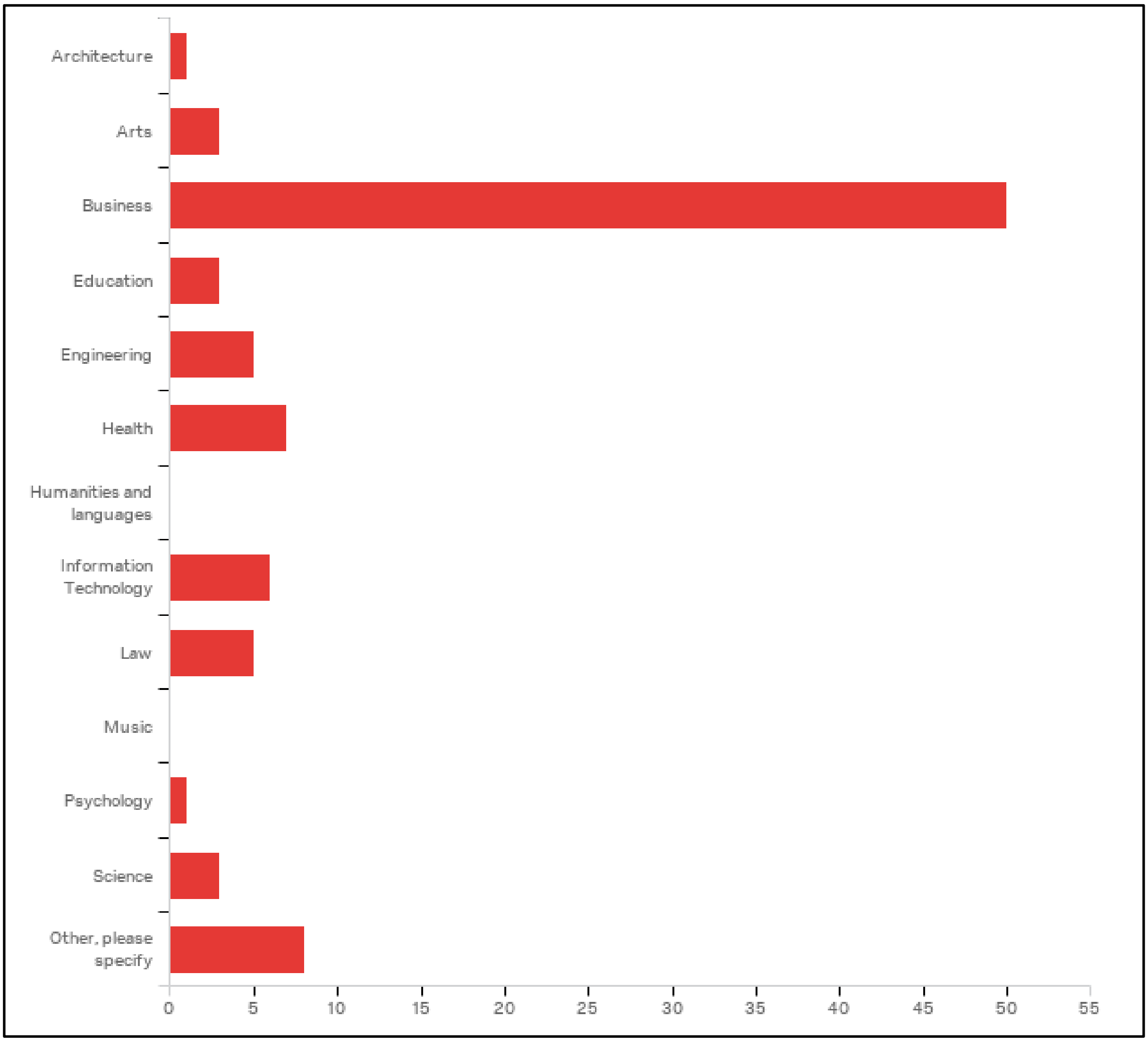

Table 1 – Financial Literacy Assessed Areas

Assessed Area	n	% Correct	% Incorrect	% Do Not Know
Interest	119	94.12	4.2	1.68
Inflation	116	77.59	17.24	5.17
Investment risk	113	85.84	13.28	0.88
Investment returns	115	30.43	64.35	5.22
Budgeting	107	93.46	5.61	0.93
'Good debt'	103	86.41	11.65	1.94
Credit card interest	99	76.77	21.21	2.02
HECS	98	70.41	18.37	11.22
Percentage discount	105	96.19	2.86	0.95
Insurance	99	82.83	13.13	4.04
Superannuation tax	99	66.67	13.13	20.20
Super performance	99	64.65	22.22	13.13
Assessable income	98	60.20	36.74	3.06
Tax payable	95	78.95	15.79	5.26
GST	95	52.63	36.84	10.53

Table 2 – Summary Table of Preferred Topics

Topic	**N**
Taxation	15
Super and retirement planning	16
Investing	31
Loans	3
Debt management	1
Budgeting	8
Saving	7
Getting a job and/or earning money	4
Banking	2
Insurance	2
Buying a home	1
Managing HECS	1
Risk	1
All topics or general personal finance	15