Financial literacy education in the curriculum: making the grade or missing the mark?

Levon Blue¹, Peter Grootenboer¹ and Mark Brimble²

¹School of Professional Studies and Education, Griffith University, Brisbane, Australia 4131

²Griffith Business School, Griffith University, Brisbane, Australia 4131

Abstract

Financial literacy education (FLE) has become a global priority. In Australia, FLE has been added to the primary and secondary school curriculum. Teachers now have the added responsibility of educating students after receiving some form of professional development. Of concern is how teachers are being financially educated and supported to teach FLE critically and effectively. We find that more is needed to guide, educate and support educators in this area with clearer policy objectives, improved professional development and program evaluation required. Without a more robust and evidenced based approach we fear the policy intentions of FLE in schools may not be realised.

Key words: financial literacy education, teaching financial literacy

1.0 Introduction of FLE in curriculum in Australia

Following the global financial crisis (GFC) of 2008, a significant focus on financial literacy education (FLE) has emerged from countries around the globe (OECD, 2013). This includes the establishment of the International Network on Financial Education (INFE), which was endorsed by G20 leaders (G20, 2012) and currently has over 220 public institutions and 100 countries participating (Grifoni and Messy, 2012; OECD, 2013; OECD INFE, 2012). This financial education network meets biannually "to discuss the latest developments in their country and to collect evidence, develop analytical and comparative studies, methodologies, good practice, policy instruments and practical guidance on key priority areas" (OECD, 2013, p. 141). In addition to this network, "the first large-scale international study to assess the financial literacy of young people" (Programme for International Student Assessment (PISA) 2012 Financial Literacy Framework (FLF)) has been established (OECD, 2013, p. 139). Indeed, increasing financial literacy levels to improve financial well-being is of global concern (OECD, 2013) and is regularly identified as a core life skill for everyone (Kezar and Yang 2010; ASIC, 2011; Atkinson and Messy, 2012).

In Australia, to help improve financial literacy, the Australian Government launched the National Financial Literacy Strategy (NFLS) in 2011 (Australian Securities and Investment Commission (ASIC), 2011). ASIC which is an independent Commonwealth body and is "...Australian's corporate, markets and financial services regulator" (ASIC, 2014), is responsible for this strategy and the other financial literacy initiatives such as the MoneySmart and MoneySmart Teaching websites (http://www.financialliteracy.gov.au). Consumer and financial literacy has been defined as "the application of knowledge, understandings, skills and values in consumer and financial contexts and the related decisions that impact on self, others, the community and the environment" (Hession et al. 2009 p. 1). It is now being viewed as 'core curriculum' or as essential learnings for all young Australians in schools (Hession et al. 2009). After the GFC, many governments around the globe, including Australia, realised FLE had not been a priority subject. It was either not being taught or was being taught in such a way that it was hard to gauge knowledge levels since students were not being assessed on this subject. In other words, it was an optional part of the curriculum. Loreman et al. (2005 p. 135) defined essential learnings or core curriculum as skills that equip students "for a satisfying and effective participation in social and cultural life". Based on this definition, consumer and financial literacy as core curriculum seems appropriate. Therefore, we define

FLE as the teaching of personal financial knowledge with a direct intention of increasing an individual's financial literacy through this acquisition of knowledge.

In an attempt to reach individuals from all socio-economic backgrounds who may not otherwise receive this education and may be more susceptible to financial scams (Lusardi and Mitchell, 2013) efforts have also been made to add FLE to the curriculum. Indeed, the importance of educating students from an early age about personal finances remains desirable (ASIC, 2012a; 2012b; 2011) and it has been found that continuous exposure to FLE during a student's schooling experience is beneficial (Lusardi and Mitchell, 2013). This has lead to many countries around the globe, including Australia, integrating FLE into the curriculum for both primary and high school students. Financial literacy has been incorporated into subjects such as mathematics, science, history and English (ASIC, 2012a; 2012b; 2012c; ASIC, 2011) and may also include subjects such as humanities and social sciences; information and communication technology; health and physical education; sciences and environmental sustainability; civics and citizenship (The Australian Association of Mathematics Teachers (AAMT), 2012). The AAMT supports this whole of school approach to learning FLE skills and recognises the importance contribution mathematics education will have on an individual's FLE skills (AAMT, 2012).

Not everyone supports FLE as Willis (2009) has argued against FLE, asserting that there is not enough reliable empirical evidence showing a statistically-significant difference in regards to the effectiveness of FLE to positively influence financial behaviour and offers alternatives to FLE. These include (1) increasing social security if increasing retirement savings is the goal; (2) regulation to align mortgage sellers with incentives that offer long-term affordable mortgages, if mortgage defaults are of concern; and (3) other suggestions include providing "...consumers with pro bono professional assistance to help them navigate the market" (Willis, 2011, p. 432). These suggestions have been made with the belief that effective FLE "... would need to be individually tailored and given in one-on-one settings..." (Willis, 2011, p. 432) and that the current FLE models are lacking a critical component (Arthur, 2012) and are misguided by presenting all opportunities and risks as equal (Pinto and Coulson, 2011).

Opportunities for increased regulation, such as the ones suggested by Willis (2009) would certainly remove the reliance on FLE to inform and 'protect' consumers about issues such as insufficient retirement savings and unaffordable long-term mortgages. Tightened financial regulation could possibility redirect FLE initiatives to complement learning in these 'problem' areas by: educating individuals about how to

establish regular saving habits; explaining the pros and cons of existing home loans available; and, by teaching individuals to recognise 'complex' financial decisions that likely require independent financial advice (Blue and Brimble, 2014a). We believe that both increased financial regulation and FLE are required. These are two separate but complementary agendas including; increased financial regulation to concur inappropriate lending, increased retirement savings for those individuals at risk (long-term carers, stay at home parents and the disabled to highlight a few) and FLE to educate consumers about the 'simple' financial decisions they can make on their own and what type of 'complex' financial decisions will likely require advice from an independent financial professional (Blue and Brimble, 2014a). Thus making a case for independent financial professionals in the FLE process as the ineffectiveness of the generic and dictatorial approach to FLE curricula are highlighted.

In this paper, we have reviewed evidence and theory related to FLE and applied this to the policy approach to FLE being implemented in schools Australia wide. We examine the strategies that have been put in place to support, train and develop FLE teachers in Australian schools, argue that the approach needs further development and question if the intended outcomes are even achievable. Primarily, the capacity and confidence of teachers, even with the proposed professional development, to deliver FLE is of concern. With little evidence of teacher training being offered to preservice teachers to equip them with the skills and knowledge to deliver effective FLE. This will be further discussed in section four of this paper and it also includes our recommendations. The remainder of the paper is structured as follows: importance of FLE for young people is outlined; the complexities associated with FLE identified; we examine who is teaching FLE and; the important role teachers have in developing both the students' financial literacy identities and their own. In the next section we discuss concerns with the current approach to FLE, including issues of training, delivery and support and we discuss what the financial industry and financial educators' may be able to do together to create sustainable and critical FLE in classrooms. We conclude this by presenting our recommendations and conclusions.

2.0 Importance of educating young people about financial literacy

Due to its omnipresent nature and critical importance, FLE continues to be a global priority (OECD INFE, 2012). However, until recently receiving financial education through our primary and/or high schooling has not been the case. Moreover, most of

us have relied on the advice of family, friends and other social contacts to assist us make financial decisions (Lusardi and Mitchell, 2013). However, many countries around the world, including Australia, now recognise that financial education is the key to developing financially literate citizens (ASIC, 2011) and have made great strides to introduce it to children via the school (ASIC 2012a; 2012b; 2012c). Indeed, educating young people at the primary and high school level is seen as an important measure to help improve the financial decision making amongst youth. Kell (2012, p1) states the current generation is growing up in a "...society where money is increasing 'invisible" and are required to make financial decisions at earlier ages and deal with the consequences of these decisions." This is particularly true as today's youth are growing up in a fast paced consumer driven society with access to 24 hour online shopping, easy access to credit and the ability to accumulate financial debt before leaving home. Financial literacy has become a core skill for children growing up in a capitalist society with complex financial systems (Lucey and Giannangelo, 2006).

It would be naïve of us to equate FLE with effective financial decision making. As increased knowledge does not necessarily equate to positive behaviour change (Citi Australia, 2010; West 2012). However, we argue that the importance of FLE in providing a key foundation for effective decision making. Where personal financial education has been mandated, students have greater financial knowledge compared with those students who have not had this exposure (Tennyson and Nguyen, 2001). Furthermore, Lusardi and Mitchell (2013) found that significant exposure over a long period of time to FLE is required to be deemed effective at raising student's financial literacy. Bosshardt and Walstad (2014) recently introduced national standards for financial literacy taught at the primary and secondary levels (in the United States). The six standards identified were established by the Council of Economic Education and involved economists, economic educators and teachers in this process. The six standards are: (1) earning income; (2) buying goods and services; (3) saving; (4) using credit; (5) financial investing; and, (6) protecting and insuring. These standards focus on financial decision making, specifically "...planning and goal setting, making the decision and assessing decisions" (Bosshardt and Walstad, 2014, p.68). We believe FLE is essential learning and should be taught formally at all levels of education, including the tertiary and higher education sectors (Blue and Brimble, 2014b). With national standards identified the process may have been made easier for teachers who are able to allocate time to teaching these standards (Bosshardt and Walstad, 2014).

2.1 The complexities of FLE

Part of what makes FLE so complex is that it involves more than just the development of financial knowledge and skills - it also involves personal and ethical dimensions, and these need to be grown in the contexts of families and communities. While FLE is about developing individuals, these individuals do not live and make financial decisions alone or with only their own personal interests in mind. Effective FLE will incorporate the ethical and critical dimensions and have more realistic expectations and outcomes for its students (Blue and Brimble, 2014a). For example, educating individuals about the 'simple' financial decisions they can make independently and what 'complex' financial decisions will likely benefit from independent financial advice, we suggest as an achievable teaching goal. Issues related to topics like environmental impact, community values and philanthropy will all be integral to a complex, morally-informed approach to FLE, and of course, these will vary from site to site and community to community, making it complex and inappropriate for a 'one-size-fits-all' model (Lusardi and Mitchell, 2013). Thus, while we support some principles for FLE, we fundamentally see it as needing to be sitebased and responsive to the particular needs, constraints and values that are evident in that site, in this case a school. However, there may be FLE topics that have relevance across all schools due to their general nature.

2.2 Who is teaching FLE in schools?

In 2011, the ASIC via the national financial literacy framework began integrating consumer and financial literacy into the mathematics curriculum for Foundation to Year 10. Following this, consumer and financial literacy was formally integrated in four areas of the Australian curriculum: mathematics, science, history and English in 2012 (ASIC, 2012a; 2012b; 2012c) and by 2014 will be an integral component of the new economics and business curriculum for years 5 to 8. With the changes to the Australian curriculum, school teachers now have an essential role to educate school aged children and young adults about financial literacy (ASIC, 2011; ASIC, 2012a; 2012b). Furthermore, education remains to be identified as a key driver used to increase financial literacy levels of young Australians and those with the greatest need for education in this area (ASIC, 2013). ASIC (2013) identifies the following four educational initiatives as key steps in achieving this goal. These include: (1) the integration of financial literacy into the curriculum; (2) sustainable school programs through the strategic partnership including professional learning and resources for

teachers; (3) increasing financial literacy in further education including vocational education and training sector and in the workplace; (4) working with community sectors and others to deliver financial literacy programs to those individuals with the lowest financial literacy levels and on topics that continue to cause the most problems (ASIC, 2013 p. 18). With ASIC responsible for leading this national policy they are also responsible for offering professional development to primary and secondary school teachers and the wider community including parents.

At present, almost any primary and/or high school teacher has the ability to become a financial literacy educator as it is expected that existing teachers will incorporate FLE lessons into the various subjects they teach. Teachers will usually be offered some form of professional development to assist with the development of skills and knowledge in this area. Online professional development is offered from ASIC and targets both teachers and students. Teachers are offered two resources: first, a financial health resources aimed at improving their financial wellbeing through effective financial decision making and second, FLE lessons for use in the classroom including a learner's guide and approximately 7.5 hours of FLE lessons for both primary and secondary school teachers (ASIC, 2012a; 2012b; 2012e; 2012f). The resource targeted at teachers' financial health highlights that this skill set and knowledge area is also lacking by many teachers who are often quickly acquiring these skills before they incorporate FLE lessons into their classroom curricula.

The MoneySmart Teaching trial took place from April 2012 to June 2013 and feedback from this trial is expected in 2014. Australia has a total of 9,468 government and private schools that are either primary, secondary and/or combined schools (Australian Bureau of Statistics, 2012). During the trial phase 92 schools participated which is less than one percent of the total schools operating in Australia. The aim of the MoneySmart Teaching program has been identified as creating (through education and the skills acquired) a generation of responsible well informed financial decision makers who "don't spend more than they earn!" (ASIC, 2013a, p.1). ASIC also recommends that an educator at each school becomes a MoneySmart facilitator who leads the way in providing FLE at their school. "ASIC is working with Australian state and territory education authorities to support teachers by delivering the 'MoneySmart Teaching' program" (ASIC, 2013 p. 18). Furthermore, once a school identifies a MoneySmart facilitator and/or forms a leadership team to ensure FLE is effectively taught across the curriculum, the school will become a MoneySmart School (ASIC, 2012a). At present, ASIC requesting that schools interested in becoming MoneySmart School submit their registration of interest via

their website. However, the level of interest remains to be seen as the focus of many schools in this 'audit' culture is either maintaining or increasing their standing on this widely criticized national assessment program – literacy and numeracy (NAPLAN) which is publicly reported on the *My School* website (Hardy and Boyle, 2011; Lingard, 2010). We are not suggesting that FLE be added to the NAPLAN in an attempt to gain legitimation and the attention of schools, but we do highlight the present focus on curriculum and educational practices that result in positive quantifiable results.

To fully equip teachers with the knowledge and skills required to teach FLE critically and effectively we question whether a website, resources and limited online professional development will in fact be enough. Harter and Harter (2009) found that teachers trained in financial literacy curriculum had students who demonstrated higher achievement than students who were taught by teachers who did not received this financial training. Similarly, Chamber and Hill (2013) found that a positive effect on student achieve can be found when a well-designed curriculum was taught by trained teachers. This highlights the scale and complexity of the task and the significance of what is being asked of teachers. Given that exposure to an FLE course or courses during pre-service teacher education at university does not exist in Australia we question how teacher's will be able to achieve the vision (or goal) set for them by ASIC; "to achieve successful and sustainable consumer and financial behavioural change" (ASIC, 2013a p. 1). Moreover, the teacher's role in delivering effective FLE in the classroom is pivotal to this program's success. Of concern are the grand expectations of FLE for students and how teachers will be able to apply ASIC's FLE resources in the classroom to the foster positive behaviour changes desired.

2.3 The Teacher's role in developing student financial literacy identities

While it is not clear what strategies are most effective for developing the financial literacy of individuals and communities, authorities across the world have indicated that school based education is an integral part of the process (OECD, 2013). This school based approach is pursued despite strong evidence from the United States demonstrating that increased attention and coverage of FLE in schools has not only failed to equate with greater competency, in relation to financial literacy, but has actually led to a decline over time (Jump \$tart Coalition, 2011). The report concludes that poor student motivation and perceptions of the relevance of the FLE content may be behind this. Given this situation, it is important to consider how schools can

best provide an education that leads to good financial literacy learning outcomes. This involves a range of factors (e.g., curriculum), but it is well known that teachers are the single most important factor in determining the quality of students' learning (Lingard et al. 2003).

A long history of research exists about the most effective ways of learning and teaching traditional school subjects like mathematics and history, but less is known about effective pedagogy (teaching) in FLE. As would be clear from the preceding discussion, financial literacy entails more than just knowledge and skills it is deeply personal and financial decision-making involves attitudes, values and emotions. If the goal of FLE includes the development of a 'financially literate identity' that informs and enables effective financial decision making, how does this develop, how is it supported and how is it sustained? Furthermore, when does the role of an independent financial professional come into play? We view FLE as a complement to independent financial advice that can enhance the relationship between individuals and their advisors (Brimble et al., 2014) rather than a substitute for financial advice regarding complex financial matters. In addition, financial literacy is primarily focussed on adult life, despite being relevant to school aged students. As a result, the immediate significance is limited; therefore, it would appear essential to expose youth to the types of financial decision-making that they are presently encountering as well as preparing them for the future. Critically however, it is not known how to achieve this in a school setting to best develop financial knowledge, skills, behaviours and underpinning constructs. With all these factors in mind, the teacher's role in FLE is central and requires support to effectively develop confidence in teaching FLE.

Pedagogical practices that promote identity development (i.e., the development of knowledge, skills and attitudes) in financial literacy requires attention to students' understandings, abilities, beliefs and emotions. Also, promoting financial literacy involves moral and ethical decisions. Hence, this teaching is a form of praxis (Grootenboer, 2013). Pedagogical praxis for the development of financial literacy is concerned with enabling students to develop knowledge, skills, attitudes and dispositions that would enable them to make informed, prudent and ethical decisions regarding financial matters. Whilst discussing this sort of pedagogy is beyond the scope of this article, it would include approaches that involved students in considering the broader impact of financial decisions in the context of their families and communities. Importantly, we argue that this is largely under-researched, undertheorised and under-developed, undermining the potential to achieve the implied

outcomes. It is also unclear how the program will be evaluated over the short and long term.

Lastly, focus on a "cooperative rather than competitive" FLE curriculum with educators understanding the importance of "teaching children to respect people of all financial circumstance" (Lucy and Giannangelo, 2006, p. 269), may be required. This may include ensuring that "competitive consumerist views fostering an idea of self-worth founded on acquisition of goods and services" (p. 276) are not developed. "By advocating ideas of self-respect based on posessionary themes, educators fail to instil necessary resistance to spending impulses promoted by comparative motivators" (Lucy and Giannangelo, 2006 p. 276). Thus moral and ethical dimensions of financial decision making do not always equate to effective financial decision making and could be explored further in classrooms.

2.4 The role of the FLE curriculum in developing teacher's financial literacy knowledge

In addition, to having a role in developing the financial identity of students, teachers can develop their own financial identity through FLE. Way and Holden (2009) report that nearly all K-12 educators they surveyed (1,200 in the United States) indicated the need for financial education; however, less than one fifth "...stated they were prepared to teach any of the six personal finance concepts normally included in the educational rubrics" (Lusardi and Mitchell, 2013, p. 37). Baron-Donovan et al. (2005) found that "...teachers reported scepticism and hesitancy about teaching the psychology of money section" p. 72). Furthermore, in a study assessing the financial literacy of undergraduates students in the United States "...education students were relatively the weakest" (Hanna et al. 2010, p. 35) and were consistently shown to "...have a mean score lower than either the liberal arts or business students in every category" (Hanna et al. 2010, p. 33). Beal and Delpachitra (2003) also reported that in Australia university students were no more skilled or knowledgeable in personal finance. We highlight these findings for two reasons: to demonstrate that existing teachers often have discomfort about teaching FLE and that pre-service teachers (undergraduate education students) often have low knowledge in this area. We are concerned that professional development will fail to fill this gap in knowledge, particularly in the timeframe and manner suggested.

To further complicate a teacher's ability to adopt a financially literate identity through teaching FLE, the simple act of story sharing, where both the educator and student exchange stories in an attempt to help each other learn from past mistakes

and/or to encourage positive pathways around financial obstacles and traps, has been discouraged (ASIC, 2012d). FLE teachers are cautioned about providing advice and have instructed to "...avoid generating conversations which may result in personal disclosures in this area, or the sharing of confidential information about themselves or other" (ASIC, 2012d p. 5). Therefore, we highlight the teachers' ability to effectively teach FLE with limited skills, knowledge and support, as an area of concern.

3.0 Discussion - Concern with 'neutral' approach to FLE

Generally speaking, many FLE curriculums and/or programs tend to teach similar or 'neutral' content to culturally diverse audiences and therefore are suitable for a basic understanding of concepts only (Pinto and Coulson, 2011). More complex concepts may be a challenge for some teachers. Becoming financially literate involves two dimensions: the knowledge dimension (that can be achieved through FLE) and the application dimension (where an individual applies their newly acquired knowledge and makes an effective financial decision) (Huston, 2010). The ability to apply the newly acquired knowledge is often not as easy as it sounds and/or not possible for some individuals. This can be particularly true for individuals of low-income levels who may have little or no means to change their financial circumstances (Lyons et al. 2006). There may be uncomfortableness from educators teaching FLE who are not confident with their own financial decision-making. We have found this to occur in cases where the train the trainer model of FLE was offered (Blue et al. 2014). Therefore, we argue that FLE alone is not the solution to raising financial literacy levels and its limitations should be understood. Indeed, the need for tighter financial policies around complex financial products and for access to financial advisors/counsellors to assist individuals with complex financial decision making to achieve more sustainable outcomes (discussed further in the recommendation section of this paper) is also required.

3.1 Understanding a need for praxis to foster critical FLE

Teachers' professional and discipline-based identities are integral to teaching and learning of FLE. Their skills and knowledge regarding finance and personal financial management could be further developed through appropriate curriculum resources and professional development, but it is less clear about how other aspects of their financial identities could be fostered (e.g., personal attitudes and values). Similarly, teachers have general pedagogical skills and knowledge, but specific pedagogical approaches relevant to the unique, often site-specific, demands of FLE are required

for FLE praxis. This pedagogical content knowledge will be grounded in the teachers' own financial and professional identities, but will also need to be focussed on developing students' financial identities.

What makes the current situation more complex is that FLE is almost universally uncritical, politically motivated (Arthur, 2011) and formulaic. Many generic FLE courses (designed and funded by financial institutions) are aimed at low-income individuals and are offered by community organisations. Indeed, many generic FLE programs are premised on a belief that individuals should follow without questioning the 'universal' advice of the experts (the experts being the financial institutions responsible for designing these generic one size fits all FLE programs) (Pinto, 2013; Pinto, 2012). Of concern are individuals wishing to change their financial circumstances after attending FLE workshops/programs/courses, but are unable to, resulting in negative feelings/impacts. Therefore, there is a need for FLE practitioners to understand that not everyone: can change their financial circumstances; has an individual wealth accumulation focus; and, wishes to take all FLE lessons on board. Comprehending these three points may help educators to design relevant and appropriate lessons. Shifting the focus to simple rules (or gentle nudges) that help guide financial behaviour may have more merit for individuals seeking small changes in their financial decision making (Thaler and Sunstein, 2008) rather than generic FLE programs with grand expectations about improving financial decision making.

Grootenboer (2013) has argued the importance of having skilful and knowledgeable practitioners from a pedagogical perspective, but that good "...teaching is more than knowledge and technique – it is a form of praxis" (p. 1, emphasis in original). As such, it demands an emphasis on "the moral, ethical and caring dimensions of teaching", are lacking in many current FLE practices. Moreover, communities having the greatest need for FLE are frequently also those having the least appropriate FLE. Context specific and site-based FLE praxis are required to prevent inequalities and marginalisation that can occur when financially vulnerable individuals/communities are unable to relate to, or act upon, the FLE they experience. Therefore, the praxis of FLE needs to be shifted to align with morally informed financial decision making that considers the overall well-being of the individual/community, not just the financial aspect of what makes their life worthwhile. Thus, the need for an understanding of praxis (i.e. a conception of FLE as praxis by FLE practitioners) is likely required for critical FLE to be possible. Furthermore, exploring the overlooked and unexplored area of increasing the praxis of FLE practitioners is key to developing new FLE models. We suggest that this is a substantial task that is critical to informing the program in question.

3.2 Is the current approach to FLE working?

Other factors also greatly influence one's ability to carry out FLE teachings, including personal, social, economic, cultural and psychological factors (Brimble and Blue, 2013; Huston, 2010; Pinto and Chan, 2010). An assessment of existing FLE programs established that they are only palatable in their current forms (Gross, 2005) and that more research is needed to (1) educate consumers on the emotional bias that influences financial decision making (Gross, 2005; Huston, 2010); (2) identify a connection between financial psychology and mental health (Klontz et al. 2011; Lowrance, 2011); (3) develop tailored FLE for the needs of the clientele (based on gender, culture, life stages and/or socio-economic status (Brimble and Blue, 2013; Buckland, 2010; Lahn, 2008; Pinto and Coulson, 2011); (4) identify what simple financial decisions FLE can assist an individual in making independently (Blue and Brimble, 2014a); and (5) sustain FLE initiatives by having affordable financial advice and counselling available (Willis, 2008) for individuals to access when facing complex financial decisions.

Willis (2008) proposes that FLE should be replaced by increased financial policy and regulation and Willis (2011) concludes that financial "...firms fear the other forms of regulation they believe they would face if they could not point to financial education as the cure for consumer financial woes" (p. 433). This sentiment is shared by Pinto (2009) as the assumptions behind FLE are unpacked and the unrealistic role financial literacy plays in big economic problems are exposed. Enhanced regulating of the financial industry and developing strategies to address poverty and mental health are suggested (Pinto, 2009). Furthermore, doubt is cast "on the true intention of the crusader" (Pinto, 2013, p. 110) as they (the financial industry) profit from financial illiteracy, "...whether in the form of bank fees and service charges or in the form of 'advice' disguised as sales pitches for their own products" (Chevreau, 2011). Furthermore, once individuals become financially literate, more questions of "the crusader" will be asked (Carrick, 2011; Pinto, 2013). Questions specifically relating to financial industries contradictory role in supporting the cause (increasing financial literacy through FLE initiatives often offered by the industry or financially supported by the industry), while continuing to profit from financial illiteracy in a market where more financial regulation on this industry is warranted. Substantial steps need to be taken to have FLE teachers working in concert with a financial industry whose interests are focused purely on assisting individuals facing complex financial decisions. This is an important area to develop, as is educating future

teachers how to critically and effectively teach FLE. Until further work is done in this area, it is our opinion that the current FLE practices are not working.

3.3 Partnerships for a sustainable FLE approach

A sustainable model in any educational reform may involve a pedagogical shift from the traditional deficit model to an inclusive model (Boaler and Staples, 2008; Jorgensen et al. 2010) as well as a shift from the "banking model" (where knowledge is seen as being 'deposited' in students) of education to problem-posing pedagogy (Freire, 1993). A key belief that underpins the inclusive model is having "high expectations of learners" (Jorgensen et al. 2010), that could be appropriate when teaching FLE. Furthermore, moving from the "banking model" of education in FLE, where the educator is believed to have all the knowledge that he/she "pours" into the student/client, to problem posing pedagogy (Freire, 1993), enables the content of FLE to address local issues the community is facing and to critically engage the learner. A sustainable FLE model may also include the partnership of financial experts such as personal financial counsellors/advisors who are accessible, trust worthy and affordable and can be regularly called upon to support the financial decision making process. A key here will be the engagement of appropriately motivated financial professionals to ensure the alignment of purpose re the FLE and the effective logistical management of this task across the schooling system. To achieve this we propose the relevant professional associations (in Australia the Financial Planning Association of Australia for example) to participate in this and engage and coordinate their members. In addition, the members of such organisations are bound by a professional code of conduct, are required to avoid/manage conflicts of interest and have high levels of education (both entry level and ongoing) which should provide a useful 'filter' for industry participation. Forming these partnerships between the financial industry and tertiary financial educators to develop FLE curriculum is recommended for sustainable FLE. Furthermore, it may be necessary to offer FLE courses at the university level to further support teachers in this area of learning and to consider the inclusion of this field in teacher training programs.

It is also essential to consider the importance of having learner-centred and activity oriented FLE curriculum. A better understanding and evidence of the value and impact of FLE in schools on the current and future financial decision making abilities of students is required. Drawing on this knowledge could then inform the professional development of teachers and help provide a better suite of resources for use in the class room that cater for a range of student contexts (age, culture,

numeracy, and general circumstances). This will facilitate a shift to an evidenced based experiential learning model that involves personal reflection regarding financial experiences and the formulation of future financial plans. Also a sophisticated approach to FLE program design and delivery and hence teachers with specific training and capabilities are required. Therefore, further investment is required by all stakeholders (government, business, financial professionals, education providers and teachers) to achieve this.

These issues highlight the complexity of an effective delivery of FLE. We suggest the approach currently outlined for professional development of teachers will be insufficient to equip the teachers for this task. This is compounded by the evidence of a lack of confidence in the teacher ranks to being with.

4.0 Recommendations

It is clear that FLE is a key social and economic issue and that it can, in part, be addressed by effective and sustained coverage in school curricula. Evidence to date, however, suggests that outcomes of such programs have largely failed to live up to expectations, yet offer key insights for countries like Australia that are just beginning the process of integrating FLE into school education programs. Based on our analysis we recommend the Australian policy makers and education officials consider the following.

- R1: Foster and support a rigorous evidence base on effective praxis in FLE in schools
- R2: Develop robust professional development programs for educators in conjunction with professional associations, leading practitioners and the academe that generates FLE specialists
- R3: Partner with a(n) education institution(s) to develop a teacher training program in FLE
- R4: Carefully consider the pedagogical approach to FLE in schools vis-à-vis
 moving towards a realistic and achievable set of outcomes. This includes the
 development of a robust evaluation framework to track progress in this regard

The resource intensiveness of this task is also apparent and hence to facilitate recommendations 1-4 we believe a national approach to FLE implementation in schools (if not FLE in general) is required. This would act to (1) provide program level structure, content and resources; (2) inform teacher training, ongoing

professional development, networking and certification as an FLE practitioner/educator; and, (3) facilitate evaluation of programs, dissemination of outcomes and resultant continuous improvement. In doing so, we suggest the necessary scale and coordination would be facilitated.

5.0 Conclusion

Literature from around the world highlights the ubiquitous problem of financial illiteracy. This affects most individuals to a varying degree with those having lower education and income levels, in greatest need. Effective FLE has the potential to reach more individuals, if it is made more widely available. To achieve this, many efforts to increase financial literacy levels to improve financial well being are currently being implemented. This has lead to FLE being introduced to the curriculum in Australia and elsewhere. FLE is now a part of the primary and high school curriculum with future phases to be implemented and plans for the tertiary sector having been proposed.

We find that teachers, not financial education specialists, are teaching FLE and that no formal qualifications exist to become a FLE teacher. Existing and future teachers have either expressed concern about low levels of confidence in teaching financial education or demonstrated that they have low financial literacy knowledge. Complicating the matter is the limited resources and support available to enhance current and future educators in this knowledge area.

The need for educators teaching FLE to be better supported by: 1) offering exposure to FLE lessons in their pre-service training; 2) establishing appropriate boundaries around the types of lessons that offer their students then most relevance outside of the classroom; 3) providing access to independent financial professionals to assist with 'complex' financial decision-making students are facing in adult education FLE courses; 4) having tighter financial regulations (particularly where individuals are most vulnerable to scams and where education is not likely to have an effect), and; 5) having access to independent financial counsellors/advisors for 'complex' financial decisions that are supported by the governments funds directed at FLE initiatives. We therefore argue that the approach to FLE in schools needs to be reconsidered with significantly greater resourcing placed into teacher professional development, further research into approaches for youth FLE and steps taken to build this into the teacher training programs. This provides a variety of avenues for

further research and for enhanced cooperation between the financial advice practitioners, researchers, teachers and policy makers.

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