



You Cannot Give What You Do Not Have: Assessing Practicing Teachers' Capacity to Teach Personal Finance among Senior High Schools in Ghana

Abraham Ansong

University of Cape Coast, Department of Management Studies, School of Business, Cape Coast-Ghana

Abstract. A survey of practicing Senior High School teachers was conducted to determine teachers' background and capacity to teach personal finance. The results indicate that a majority of teachers have little personal finance education. Therefore, there is a great need to expand personal finance educational opportunities for teachers in order to meet both their personal and professional needs. Finally, because a majority of teachers see financial education as a subject that is appropriate primarily for higher grades, teachers must be educated on the developmental nature of financial reasoning and in learning how to make financial concepts accessible at different educational levels.

Keywords: Financial literacy, Practicing-teachers, Capacity, Ghana

Introduction

The need for financial literacy education has become a national issue in most countries as it has become increasingly clear that individual financial decisions collectively affect the national economy. Low levels of financial literacy, however, appear more pronounced in developing countries. Miller, Godfrey, Levesque and Stark (2009) in their paper entitled "The case of financial literacy in developing countries: Promoting access to finance by empowering consumers" postulated that in India, for instance, more than half of labourers surveyed consented that they store cash at home, while borrowing from moneylenders at high rates of interest. In Zambia and six other African countries, only 29 percent of adults have a bank account and 50 percent use no financial products at all. In Zambia as well, more

than two-thirds of people are unfamiliar with basic financial products and tools such as checking accounts, automated teller machines (ATMs), and debit cards. While in South Africa, 60 percent of the people surveyed do not understand the term “interest.”

Unfortunately, this problem extends to even students and the youth who otherwise should have been well prepared to take up the challenges of adult life. Ansong (2011) sought to understand how well recent high school graduates in Ghana understood basic consumer financial concepts and to ascertain those financial topics for which a significant proportion of students admit to not having knowledge. The sample for this research consisted of first year degree students with a business major at the University Of Cape Coast. There were 343 out of 613 business-major first year students enrolled in the school of business that were tested on 20 multiple choice questions dealing with basic knowledge of financial issues, which should be understood in order to function in everyday life. Of these, 190 were male and 152 were female. The highest test score was 75% and was achieved by only 1 student and the lowest was 5% and was achieved by 7 students. The average score was 35.87% for all students and the median score was 35%.

The lack of financial literacy breeds challenges such as inadequacy of retirement savings, rising debt levels, and personal bankruptcy that are no longer financial issues to be addressed solely by individuals (Way & Holden, 2009), governments must have a role to play. According to the Ghanaian Chronicle newspaper (Tuesday, 14 May 2013), the principal economic officer at the Ministry of Finance and Economic Planning of Ghana, Mrs. Marian Mensah has given indications of the introduction of financial education in the Senior High School syllabi. She said financial education is being addressed in the review of Senior High School syllabi in Business Management studies. According to her, the Ministry of Finance and Economic Planning is working with the Ghana Education Service with support from the German International Cooperation (GIZ) through Responsible Finance Ghana Project to develop a more detailed content to be addressed under personal financial education in the Senior High Schools.

While the growing emphasis on financial education in Ghana is commendable, little thought has been given to understanding the characteristics and needs of the population that would be critical to the implementation and success of this subject – the teachers (Way & Holden, 2009). The argument is that teachers can impact the financial literacy of their students not only cognitively but also by demonstrating good financial behaviours (Bandura, 1989). Globally, few studies (Garman, 1979; Lofgren & Suzuki, 1979; Way & Holden, 2009) have been conducted, largely in developed countries, to unearth the preparedness of teachers to teach personal finance. Therefore, motivated by the study of Way and Holden (2009), the main thrust of this paper is to explore the readiness of practicing teachers to teach personal finance in second cycle schools in Ghana within the framework of the Ministry of Education's long-term objective to develop a more detailed content to be addressed under personal financial education in Senior High Schools.

Theoretical Framework

This study is underpinned by the behaviourist, cognitive as well as the constructivist theories of learning. Behaviourist theories of learning indicate that the teachers have the ability to create the necessary environment (classical conditioning) to whip the interest of students in learning (Papalia, Old & Feldman, 2007). However, the tendency to provide the appropriate conditioning for learning to take place depends on their expectations, beliefs, attitudes, strategic thinking and intelligence (Bandura, 1989). Indeed, the social learning theory implies that experience is a significant cause of learning (Eggen & Kaucak, 2007). According to this theory students do learn by observing and imitating other people (Papalia, Olds & Feldman, 2007). Therefore, it is important that teachers serve as good role models to their students in financial matters.

Closely related to the above, constructivist learning theory (e.g., Atherton, 2005) suggests that teachers' beliefs about a subject area—how it should be taught and to whom, as well as their beliefs about things such as the capability of different

groups of learners and how expertise develops—are important determinants of teacher effectiveness. Finally, the cognitive-information processing learning theories is one of the major groups of cognitive theories. This theory views the human learner to be a processor of information, in much the same way a computer is. When learning occurs, information is input from the environment, processed and stored in memory, and output in the form of a learned capability (Atkinson & Shiffrin, 1968). This implies that the knowledge and intelligence of the provider of such information (teachers) have a great influence on the kind of learning that takes place.

Methodology

This paper is part of a larger research project investigating the preparedness of Senior High School (SHS) teachers' capacity and readiness to teach personal finance in their respective schools. The survey design was employed for this study. The application of this study design using standardized questionnaires allow for easy comparison of responses and explanation of results. Furthermore, surveys are simple and cost-effective, ensuring a fair generalisability of results and conclusions when sampling is effective (Saunders, Lewis & Thornhill, 2007). Self-administered questionnaire was the instrument used for collecting primary data from the population. Way and Holden (2009) instrument was adapted to suit the peculiarities of the state of financial literacy in Ghana. Questions (10-11) relating to teachers' opinions about the ideal level to teach personal finance; perceived competency to teach selected financial topics and perceived competency in personal finance pedagogy were measured on a likert-scale. Because the required sample of the population (Senior High School teachers in Ghana) could not be obtained, a non-parametric statistical analysis was employed. Data collected was analysed quantitatively using descriptive statistics. Mann Whitney U-Test was used to compare differences between various groups.

The population for this study comprised of practicing Senior High School teachers who took various postgraduate courses in education (i.e., Master of Education in Teacher Education, Master of Education in Counselling and Master of Education in Administration) at the University of Cape Coast. The census approach was adopted and as a result all teachers within the reachable population were considered for the study. In all, five hundred questionnaires were distributed. Two trained teaching assistants and the researcher were responsible for the administration and collection of the research instrument. Three hundred and ten (310) usable questionnaires were received and analysed.

Respondent Characteristics

The sampled teachers had the following characteristics: nearly forty-nine percent (48.7%) of the respondents were female while fifty-one percent (51.3%) were male. Majority of the respondents were married (78%). Respondents were young and slightly experienced. The sample had a median age of 38 and a median of 12 years of teaching experience. Virtually all held a bachelor's degree, and only about 4% held a higher degree (i.e. master's or PhD degrees). Respondents represented wide disciplinary teaching assignments. Disciplines represented included business, mathematics, sciences, social studies, vocational/technical education, home economics, general and visual arts, and English language. In sum, only twenty percent taught business related courses while about eighty percent (80%) taught non-business related courses.

Teachers of non-business related courses were included in the study sample because it may be imperative to rely on such teachers to assist in financial literacy upon coming into effect of the Ministry of Education's long-term financial education proposal which is aimed at all Senior High Schools in Ghana given the insufficient number of business teachers. In addition, these categories of teachers are usually compelled to offer informal education on financial issues to both their students and communities in so far as they carry the title 'teacher'. Therefore, identifying any

weaknesses they may have and designing training programmes to address such shortcomings is an important capacity development issue that should not be ignored. It is important to emphasize that the focus of the proposed policy is to equip students in Senior High Schools with adequate knowledge in 'basic' financial issues to function in everyday financial decision making. Therefore, it is possible to coach these teachers to adequately teach such basic financial concepts.

Findings and Discussions

Teachers' Preparation and Experience in Personal Finance: Descriptive Statistics

Slightly over half ($n = 156$; 50.32%) of the teacher respondents reported that they had ever taken a tertiary level coursework with any financial education-related content. The course most frequently reported having been taken (by 37.66%) was Macro/microeconomics, followed by Finance and investment (36.36%), Accounting (20.78%), and Personal/Consumer finance (5.19%). While the overall results on finance-related courses taken at the tertiary level by the teachers are impressive, it is quite worrying that Personal/Consumer finance which, arguably, is most needed for daily personal financial decision making is given less attention at most educational levels in Ghana.

Fewer than nine percent (9%) had attended a workshop or seminar that had content related to the teaching of personal finance in the past three years. For a country seeking to introduce personal finance into the curricula of its Senior High Schools (SHS), this is definitely a sign of an inadequate preparation for those that will ultimately be responsible for the implementation of this policy. Further, barely twenty-six percent (26%) of the teachers said they had attended a workshop or seminar related to personal finance topics in the past three years, although it is not possible to say whether this is due to lack of interest, lack of access, or both. While the Ghana Education Service is the most important provider of workshops and seminars on financial education (40.54%), teachers were more likely to have attended workshops provided by tertiary institutions (29.73%), financial

institutions (21.62%) and financial planners (8.11%). It is not clear, however, whether or not the content of these other workshops and seminars were tailored in ways most appropriate for Senior High School students' financial education.

When asked whether they had ever taught financial literacy topics, only sixteen percent (16%) of the respondents reported that they had done so. Of these respondents, the largest percentage (80%) reported having integrated financial literacy topics into a regularly offered credit course they taught in another subject area rather than offering it as a separate, stand-alone course. This is obvious in view of the fact that a stand-alone course in personal finance is yet to be introduced into the SHS curricula.

Teachers' Opinions about the Ideal Level to Teach Personal Finance

As shown in Table 1, about 75% of the respondents rated the Senior High School (SHS) level as the appropriate stage where personal finance should be taught; followed by the Junior High School (JHS) level (49%). However, over-half of the teachers (57%) apparently questioned the relevance of teaching personal finance at the basic levels. Probably, these teachers view personal finance to be too complex a topic for elementary school children to appreciate. The preference of the SHS level as the ideal stage for the introduction of the course by the respondents could positively encourage their needed participation during the implementation stage of the Ministry of Education's policy on financial literacy at this level in view of the position of the constructivist learning theory (e.g. Atherton, 2005) that teachers' beliefs about who to teach it to can influence their effectiveness.

Table 1: Preferred Level to Teach Personal Finance

	Strongly Disagree	Moderately Agree	Strongly Agree	Total
SHS	5.84	18.83	75.32	100
JHS	28.95	22.37	48.68	100
Basic	57.33	16.00	26.67	100
Total	30.71	19.07	50.23	100.00

Teachers' Perceived Competency to Teach Financial Topics

To gain a sense of teachers' perceptions of their own preparedness to teach personal finance, teachers were asked how competent they felt to teach specific topics. As shown in Table 2, Savings and investment (54.30%), Financial management (52.63%) and Financial responsibility and decision making (51.66%) had slightly over-half of the teacher respondents agreeing to be very competent of teaching them. The reverse scenario is that about half of the respondents do not feel very competent of teaching these courses. The finding reflects about the exact number that reported not to have taken any course with a financial education-related content at the tertiary level. However, from the logic of cognitive theory of learning, more worrisome is the fact that more than half of the teacher respondents were less confident of teaching risk management and insurance as well as credits and debts.

Table 2: Competency to Teach Financial Topics

	Not		Very	
	Very	Adequately	Competent	Total
Income and careers	32.89	26.32	40.79	100
Financial Management	26.97	20.39	52.63	100
Credit and Debts	34.21	25.66	40.13	100
Financial responsibility and decision making	28.48	19.87	51.66	100
Savings and investment	24.50	21.19	54.30	100
Risk management and insurance	37.75	27.15	35.10	100
Total	30.80	23.43	45.77	100

Teachers' Perceived Competency in Personal Finance Pedagogy

Part of the survey asked teachers how well qualified they felt in some pedagogical domains related to personal finance education identified by Way and Holden (2009). These included their perceived ability to design curriculum, employ instructional strategies, and address learner needs. As shown in Table 3, about 20%

to 47% of teachers reported feeling ‘not well qualified’ to integrate financial education concepts into their discipline, use on-line learning resources, modify financial education methods and content for diverse learners, assess how social/cultural background relates to financial literacy understanding, develop examples to explain financial concepts, or assess the degree to which instruction affects students’ financial behaviour.

Table 3: Competency in Personal Finance Pedagogy

	Not Well Qualified	Adequately Qualified	Very Well Qualified	Total
<i>How to:</i>				
Integrate financial literacy in your discipline	21.71	38.16	40.13	100
Use online-financial literacy resources	47.37	30.26	22.37	100
Modify financial literacy content and method for diverse learners	37.91	32.68	29.41	100
Develop examples to explain financial literacy concepts	35.53	30.92	33.55	100
Assess students financial literacy understanding	31.79	32.45	35.76	100
Assess how social/cultural background relates to financial literacy understanding	25.83	32.45	41.72	100
Assess the degree to which instruction affects students’ financial behavior	29.80	28.48	41.72	100
Total	32.85	32.20	34.95	100

It is significant, however, to emphasise that the highest percentage (47%) relates to the inability of teachers to use on-line financial literacy resources. Given that the trend in the transfer of knowledge and education generally is drifting

towards online studies, this deficiency among the teachers needs to be addressed to ensure the long term sustainability of the intended financial literacy policy.

Having Taken Tertiary Level Financial Literacy Course and Confidence in Personal Finance Education

The study sought to establish whether teachers that took a tertiary level course with financial education content were more confident of teaching personal finance than those that did not. As shown in Table 4a and 4b, those who took a course with financial education content at the tertiary level were more confident of teaching personal finance than those who did not. However, the difference had a small effect size of 0.135, based on Cohen's (1988) criteria. Similarly, as shown in Table 4a and 4b, those who took a course with financial education content at the tertiary level felt more competent in personal finance pedagogy than those who did not. Again, the difference had a small effect size of 0.211, based on Cohen's (1988) criteria.

Table 4a: *Having Taken Tertiary Level Financial Literacy Course and Confidence in Personal Finance Education*

	Taken Financial Literacy Course	N	Mean Rank	Sum of Ranks
Confident of Teaching Personal Finance (CTF)	Yes	150	162.14	24321.00
	No	150	138.86	20829.00
	Total	300		
Competency at Personal Finance Pedagogy (PF)	Yes	152	167.22	25418.00
	No	146	131.05	19133.00
	Total	298		

Table 4b Test Statistics^a

	Confident of Teaching Personal Finance (CTF)	Competency at Personal Finance Pedagogy (PF)
Mann-Whitney U	9504.000	8402.000
Wilcoxon W	20829.000	19133.000
Z	-2.338	-3.637
Asymp. Sig. (2- tailed)	.019	.000

a. Grouping Variable: Taken any University or tertiary level course with any financial education related content

Workshop Attendance and Competence in Personal Finance Education

The research also sought to find out whether there was any difference in the competence of those who attended workshops on teaching financial literacy and those who did not. As shown in Table 5a and 5b, there is no difference in competence among the respondents relating to both teaching and pedagogical issues on personal finance between those who attended these workshops and those who did not. Given that most of these workshops were organised by bodies other than the Ghana Education Service and tertiary institutions (i.e. financial institutions and financial planners), it is most likely that the content and emphasis of these seminars may not be directed towards teaching and pedagogical issues. Thus, it is not surprising that attendance of such workshops makes no difference among these teachers.

Table 5a: Workshop Attendance and Competence in Personal Finance Education

	Workshop Attendance	N	Mean Rank	Sum of Ranks
Competency of teaching personal finance (CTF)	Yes	30	166.90	5007.00
	No	268	147.55	39544.00
	Total	298		
Personal finance pedagogy (PF)	Yes	28	162.14	4540.00
	No	268	147.07	39416.00
	Total	296		

Table 5b: Test Statistics^a

	CTF	PF
Mann-Whitney U	3498.000	3370.000
Wilcoxon W	39544.000	39416.000
Z	-1.173	-.890
Asymp. Sig. (2-tailed)	.241	.374

a. Grouping Variable: Attended any workshop or seminar on teaching financial education within the past three years

Having Taught Financial Literacy and Competence in Personal Finance Education

Finally, the research looked at the difference in the competence of those who have been teaching personal finance and those who have not. Indeed, as shown in Table 6a and 6b, those who have ever taught or have been teaching financial literacy are more competent in financial education than those who have not. Nevertheless, the effect sizes of both competency of teaching (0.201) and competency of pedagogical issues in personal finance (0.231) were both small.

Table 6a: Having Taught Financial Literacy and Competence in Personal Finance Education

Ever taught financial literacy topic		N	Mean Rank	Sum of Ranks
CTF	Yes	50	189.10	9455.00
	No	250	142.78	35695.00
	Total	300		
PF	Yes	50	190.30	9515.00
	No	248	141.27	35036.00
	Total	298		

Table 6b: Test Statistics^a

	CTF	PF
Mann-Whitney U	4320.000	4160.000
Wilcoxon W	35695.000	35036.000
Z	-3.467	-3.684
Asymp. Sig. (2-tailed)	.001	.000

a. Grouping Variable: Ever taught financial literacy topic

Conclusion

One outstanding conclusion of this study is that a majority of teachers have little personal finance education. Therefore, policy makers in the Ghanaian educational system need to design and incorporate programmes at the tertiary levels that will enhance teachers' financial literacy. This is important because having had formal education related to personal finance, especially at the university

level, is a significant predictor of teachers' perceived competence to teach personal finance topics. Disturbingly, about the same percent of respondents (about 50%) that answered not to have taken any tertiary level education course was the same percent that felt less competent to teach financial education. At present, however, few teachers are teaching financial topics (16%) in any way. One of the main implications of this study is that there is a great need to expand personal finance educational opportunities for teachers in order to meet both their personal and professional needs.

A noteworthy finding is that while barely half of the respondents felt competent to teach and handle pedagogical issues on most subject matters, other courses however reported woeful results. Risk management and insurance, credits and debts, and the use of online financial literacy resources fell into this category. Again, these findings are consistent with previous research about teacher readiness. Parsad, Lewis, & Farris (2000) found, for example, in a national survey of teacher preparation that while most (96%) teachers felt very well or moderately well prepared for teaching overall, they felt much less prepared in specific aspects of pedagogy such as implementing state or district curricula (44%), implementing new methods of teaching (45%), or addressing the needs of students from diverse cultural backgrounds (32%).

The findings of this study also indicate that teachers need assistance in learning more about both financial education subject matter and pedagogy. Based on teachers' own perceptions of their competency, priority should be given to the topic areas of risk management and insurance, credit and debt, and the use of online financial literacy resources.

Finally, because a majority of teachers see financial education as a subject that is appropriate primarily for higher grades, there is the need to educate teachers on the developmental nature of financial reasoning and in learning how to make financial concepts accessible at different educational levels. It is important to stress that, books and other learning materials so far have not been designed to suit

the understanding of children (Way and Holden, 2005). This is a developmental area where educationists in finance need to address their attention to, particularly, in developing educational materials suitable for children.

References

- [1] Ansong, A. (2011). Level of knowledge in personal finance by university freshmen business students, *African Journal of Business Management*, 5(22), 8933-8940.
- [2] Atkinson, R.C.; Shiffrin, R.M. (1968). "Chapter: Human memory: A proposed system and its control processes". In Spence, K.W.; Spence, J.T. *The psychology of learning and motivation (Volume 2)*. New York: Academic Press. pp. 89–195.
- [3] Bandura, A. (1989). Social cognitive theory. In Vasta, R. (Ed.) *Annals of child development*. Greenwich: JAI.
- [4] Cohen, J.W. (1988). *Statistical power analysis for the behavioural sciences* (2nd edition). Hillsdale, NJ: Lawrence Erlbaum Associates.
- [5] Eggen, P & Kauchak, D. 2007. *Educational psychology windows on classrooms*. 7th ed. New Jersey: Prentice Hall.
- [6] Garman, T. E. (1979). The cognitive consumer education knowledge of prospective teachers: A national assessment. *The Journal of Consumer Affairs*, 13(1), 54-64.
- [7] Lofgren, W. L., & Suzuki, W. N. (1979). An assessment of the competency of secondary school teachers in consumer education, economics, and personal finance. *The Journal of Consumer Affairs*, 13(2), 380-386.
- [8] Miller, M., Godfrey, N., Levesque, B., & Stark, E. (2009). The case of financial literacy in developing countries: Promoting access to finance by empowering consumers. Joint note by OECD, DFID and World Bank. Retrieved on 15th May, 2013 from www.mfw4a.org/documents.../the-case-for-financial-literacy-in-developing-countries
- [9] Papalia, D. E., Olds, S. W., & Feldman, R. D. (2007). *Human development*. 10th ed. Boston: McGraw Hill.
- [10] Saunders, M., Lewis, P. & Thornhill, A. (2007). *Research methods for business students* (4th ed.). Harlow, Essex: Prentice Hall Financial Times.
- [11] Way, W.L. & Holden, K.C. (2009). Teachers' background and capacity to teach personal finance: Results from national survey. AFCPE conference paper.