# **Economic Literacy Studies of Teachers**

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Keywords: Economic Literacy, Teachers.

Abstract: The purpose of this study is to determine and analyze the general picture of economic literacy of high school teachers based on level of education, work experience and budget expenditure that can affect the level of economic literacy. This research is based on numbers of unqualified economics teachers views of the competency test in 2013. The method used in this study is a descriptive study through a survey with data collection technique employed through testing and questionnaires. The study population were 130 high school economics teacher from 52 schools, while a sample chosen were 80 teachers from 30 schools. The collected data were then analyzed using descriptive statistics and cross tabulation data analysis techniques. The results showed that the overall economy literacy of economics teacher from high school were categorized as high. So, it can be concluded that high school economics teacher have sufficient economic literacy.

## **1** INTRODUCTION

Society in everyday life cant be separated from economic activities that link economic concepts with practice activities but in realizing there are still some obstacles faced in economic aspects, such as the implementation of various government policies in an effort to overcome the economic problems that occur. Another phenomenon that occurs in the society is the lack of information related to prices of goods that are not supported by adequate income to allow uneven levels of welfare. There is no data on the level of economic literacy of Indonesian society but based on the data found is the level of financial literacy as part of the economic literacy that has been owned by the Financial Services Authority (www.ojk.go.id) in 2016 whose level of financial literacy is still low reached 21.8% while the financial inclusion index was 59.7%. This illustrates the low level of economic literacy of the people.

One community in the society is a teacher. Teachers are role models for others generally and for learners especially in making decisions or actions. According to Ruslan (2011) revealed that the fact number of teachers in Indonesia only 1.1 million or 42.6% from the total of 2.6 million teachers of economics studies who now meet the qualifications of good or good quality. Preliminary research results on the economic literacy level of 25 economic teachers from 10 high schools in Bandung 2016 shows that the level of economic literacy of high school economics teacher in Bandung is in high category.

This condition is not in line with the behaviors of consumers when one of the behaviors of economic literacy seen from consumer behaviors. Based on research by Budiwati (2014) that high school teachers in Bandung have not been described as a rational consumer and when viewed from a preference of needs, most tend to be less well-planed or less rationalized. This is of course a problem because the teacher is a figure in the community who is required to have good attitudes and behaviors to be modeled by learners and other communities. These conditions can cause concerns that low levels of economic literacy, so that it is something that must be improved to overcome the economic problems and achieve the welfare of society.

According to Robert F. Duvall and CEO of National Council for Economic Education (www.minneapolisfed.org) economic literacy is a vital skill, just as vital as reading literacy. That economic literacy is an essential skill, as important as reading. The importance of other economic literacy relationship with teachers is maximum studies consider teacher's economic literacy as a means to increases students' economic literacy. It is true but teacher's economic literacy is equally

Economic Literacy Studies of Teachers. In Proceedings of the 2nd International Conference on Economic Education and Entrepreneurship (ICEEE 2017), pages 209-214 ISBN: 978-989-758-308-7 Copyright © 2017 by SCITEPRESS – Science and Technology Publications, Lda. All rights reserved

important and essential for self as a responsible citizen of the country. Teachers may raise awareness and economic literacy among the society through students (future citizen) (Pandey and Bhattacharya, 2012).

According to Sina (2012) the low level of economic literacy in the community will effect a person's difficulty in making in decisions, experiencing difficulties in the fulfillment of funds for various activities, consumptive attitude to society, gullible such as investment case, low spirit of society in saving, lack of information about the price of goods with lower income levels than their expenditures so that uneven levels of welfare and excessive shopping habits affect the difficult of being a smart consumer. The impact will lead to increasingly difficult society in achieving in welfare.

According to Jappeli (2009) research on economic literacy looks at the relationship between cognitive abilities (continued with PISA test scores, enrollment rates to college, community life expectancy), social interactions measured by the number of people and technology infrastructure and resources for investment measurement of GDP per capita, income growth or finance, social security system). Based on previous study Muhammad Rakib (2015) said that the socio-economic condition of the family and consumption behavior have a positive effect on the economic literacy of the community. And previous study Pandey and Bhattacharya (2012) to find out the actual state of economic literacy of senior secondary school teachers with sex, type of school board (CBSE & UP), and economics studied as a formal course.

Several other authors have reported on the effect of the teacher's economic (Walstad 1980; Greenfield 1982; Chizmar & Halinski 1983; Schober 1984). Many researchers have previously investigated factors the socio-economic to economic literacy, but currently the author tries to combine factors socioeconomic with one application of economic literacy in terms of finance. Based on the mention above phenomena, this study tries to find and analysis economic literacy of high school teachers in Bandung seen from level of education, work experience and budget expenditure.

#### **2** LITERATURE REVIEW

Economic literacy is defined as the understanding and application of basic economic concepts to reallife situations (not just classroom based) (Salemi 2005). Economic literacy is important because teachers as consumers are facing the problem of making choices in the market (Yunus, Ishak and Jalil 2010). The National Council on Economic Education (NCEE 2008) advocates the development of economic literacy of teachers and students. When teachers have the skills and to exercise curriculum effectively, they can prepare students to act as intelligent and economically literate individuals at school and in society (Agnello, 2001; 2007).

National Assessment of Economic Education (NAEE) survey was completed in 1987 by the Joint Council on Economic Education. The results of the study indicate that (a) state mandates do have a negative impact on teacher attitudes, (b) teacher attitudes do have a direct relationship with student learning, and (c) increased economic education and training for teachers may have a positive effect on teacher attitudes and this effect in return may improve student's performance.

In the United States, The National on Economic Education (NCEE) is given task to socialize economy literacy and according to NCEE, the criteria used as a method to measure economy literacy level comprises of 20 indicators developed in form of a test of both micro and macro economy. Based on prior researches, it was mentioned that the level of economic literacy in a country is inseparable from social-economy groups and became one of the main factors which affects the level of economy literacy (Walstad, 1999; Jappeli, 2009; Bhattacharya, 2012; Hashim & Kayode, 2013; Yasmin dkk, 2014; Varum dkk, 2014; Budiwati, 2014; Rakib 2015).

Sina (2012) also suggests that economy literacy had an effect on assets, accurate debt management, protection, increased amount of savings, and more wisdom on money management, it helped to create values and welfare that crystallized in smart behavior. It also helped to prompt individual awareness on how to enhance smarter option patterns. It means that every individual comprehend on how to do some analyze whenever they have to make a decision, in other words decision makers would think first before they make a decision.

### **3 METHODS**

The research method used in this research is descriptive method with the distribution of surveys. The object of this research is economic literacy while the subject of this study is economic studies teachers a high school in Bandung. The population of this research are 130 high school economic studies teachers from 52 different schools as for the samples obtained are 98 teachers, but due to some problems that encountered during research, the number of samples are 80 teachers with the utilize of random sampling and proportional random sampling. The instruments used for this research is the research testing and questionnaire about economic literacy variables.

Based on the results of testing the validity of each item, then the result r <sub>count</sub> > r <sub>table</sub> so declared valid and feasible to be used as an instrument. Testing instrument reliability test in this research from each item question on the questionnaire consisting of one variable research results r <sub>count</sub> > r <sub>table</sub> so it is declared reliable means all research variables can be declared trustworthy. The data obtained were analyzed using descriptive statistics. Overview of economic literacy level of high school teachers in Bandung using frequency calculating, percentage and cross tabulation (crosstab) and t test.

### 4 RESULTS AND DISCUSSION

The teacher's economic literacy level is derived from a test of the Test of Economic Literacy (TEL) developed by the National Council for Economic Education (NCEE) in the form of 20 questions. The description of the level of economic literacy of high school teachers in Bandung 2016 can be seen in Table 1.

Table 1: Economic Literacy Level on High SchoolTeachers in Bandung City Year 2016

| Criteria | Frequency (F) | Percentage (%) |
|----------|---------------|----------------|
| High     | 48            | 60             |
| Medium   | 25            | 31,2           |
| Low      | 7             | 8,8            |
| Total    | 80            | 100            |

Table 1 illustrates the level of economic literacy of high school teachers in Bandung, on average being in the high category of 60% or as many as 48 teachers, only 8.8% in the low category. This indicates that high school teachers in Bandung generally have economic literacy. Based on test result test of 20 questions then it can be described in Table 2.

Table 2: Overview of Economic Literacy by NCEE Category

| No | Indicators                      | Total     |
|----|---------------------------------|-----------|
|    | indicators                      | (Teacher) |
| 1  | Demand for goods                | 37        |
| 2  | The role of entrepreneur        | 63        |
| 3  | Tendency to save                | 78        |
| 4  | Individual income               | 68        |
| 5  | National income                 | 47        |
| 6  | Demand and supply               | 77        |
| 7  | International trade             | 73        |
| 8  | Government policy               | 30        |
| 9  | Economic agents                 | 66        |
| 10 | Benefit of international trade  | 34        |
| 11 | Impact on the price of goods    | 75        |
| 12 | Use of resources                | 72        |
| 13 | The role of the capital market  | 68        |
| 14 | Cost benefit of economic        | 55        |
|    | transactions                    |           |
| 15 | Cost benefit of decision making | 35        |
| 16 | The role of government          | 63        |
| 17 | Budget state                    | 71        |
| 18 | The impact of inflation         | 68        |
| 19 | Industrial development          | 72        |
| 20 | Function of money               | 60        |

Based on Table 2, it can be seen that most economics teachers can understand the proce level of saving tendency, this is indicated by the number of teachers who are able to answer the problem as much as 78 teachers while the least economic teacher is the impact of government policy on pricing, it is shown with the number of teachers who only answer as many as 30 teachers. Therefore, it is not surprising that the majority of the people still have difficulties in understanding the policies adopted by the government and impacting prices. In an effort to strenghten the economic literacy of various factors capable of influencing it, a t-test of economic literacy based on these factors can be seen in Table 3.

Table 3: Economic Literacy t Test

| No | Factors                | Result |
|----|------------------------|--------|
| 1  | The Level of Education | 2.05   |
| 2  | Work Experience        | 4.37   |
| 3  | Budget Expenditure     | 1.65   |

Based on Table 3, the average economic literacy results from the different tests of each factors and the average value of economic literacy is 1.49. when viewed from the overall value of the level of education, work experience and budget expenditure has an average greater than 1.49, so can be

concluded that these factors can increase the economic literacy of high school teachers in Bandung and work experience has contributed more than others to 4.37 towards the economic literacy of high school teachers in Bandung. Other analysis result see the level of economic literacy based on influencing factors by using cross tabulation (crosstab) can be seen in the next table.

Table 4: Economic Literacy and the Level of Education Crosstab

| EL      | High  | Medium | Low | Total |
|---------|-------|--------|-----|-------|
| Re      | (%)   | (%)    | (%) | (%)   |
| Diploma | 0     | 1,3    | 0   | 1,3   |
| S1      | 57,5  | 26,3   | 8,8 | 92,5  |
| S2      | 2,5   | 3,8    | 0   | 6,3   |
| Total   | 60,00 | 31,3   | 8,8 | 100   |

Table 4, it showed us that economic teachers with a bachelor's degree had higher grade on the economic literacy level. The higher the cognitive grade and studying experience a person has, means that he had higher ability on economic literacy. This is related to how teachers get the process of learning or learning experience, especially on the formal path to influence the knowledge and understanding in the field of economy. Learning experiences will affect in behaving including determining economic behavior in everyday life.

The cognitive ability obtained by the teachers would affect their economic literacy. It would also affect their economic behavior in daily life. The level of education had an influence on decision making, because through education the teachers would obtain knowledge and comprehension in form of skills and behavior. These results supported by numerous prior researches, some examples are Markow & Bagnaschi (2005), Hashim & Kazeem (2013), Yunus, Ishak & Jalil (2010), and Jappeli (2009) these research done to observe the difference on education levels to economic literacy.

The higher the level of education will be better if accompanied also by economic education and ideally who have understood the economic education can have a better level of economic literacy also because economics education is a study how human can meet limited economic resources to fulfil the unlimited needs of human. Exposure on economic literacy enables a person to act using knowledge or education to make right decision regarding finance (Kuhlin, 2009). In any higher learning education, they still can make a sound decision in their own family consumption. This is because could be due to their experience and they learn from their close friends and personal observations (Yunus, Ishak and Jalil, 2010). This urge was supported by Walsh and Mitchell (2005) who stated that gender, age and education level influenced consumer's decision making in the market place.

Table 5: Economic Literacy and Work Experience Crosstab

| EL           | High  | Medium | Low | Total |
|--------------|-------|--------|-----|-------|
| WE           | (%)   | (%)    | (%) | (%)   |
| < 1 year     | 1,3   | 0      | 0   | 1,3   |
| 1 – 5 year   | 2,5   | 0      | 0   | 2,5   |
| 6 – 15 year  | 7,5   | 3,8    | 2,5 | 13,8  |
| 16 – 25 year | 13,8  | 12,5   | 0   | 26,3  |
| 26 – 35 year | 33,8  | 12,5   | 6,3 | 52,5  |
| > 36 year    | 1,3   | 2,5    | 0   | 3,8   |
| Total        | 60,00 | 31,3   | 8,8 | 100   |

Table 5, it showed us that economic teachers with the work experience between 26-35 years had higher grade on the economic literacy level. According to Varum, Santos and Afreixo (2014) revealed about the effect of work experience factors on the economic literacy level. Work experience had higher-margin level and this become profitable because it can accelerate economic literacy from a person's work experience. The acceleration of work experience toward economic literacy could be as a result of several important factors such as time, frequencies, assignments, applications and result. The same thing according to Koshal, Gupta, Goyal & Choudhary (2008) they verified that the marginal rate of economic literacy on the order of experience increased at a greater rate, which suggested that gains in economic literacy are accelerated by experience in the job market.

When viewed from the understanding of the experience it self is what has been felt, known, do it. Then, the definition of work is an activity to do something then with the longer working means more problems and solutions in handling something, of course, to overcome certain problems needed skills or knowledge skills that have been accepted. Ideally, the longer a teacher the more skill he has.

The longer of the work experience gained then expected to have an impact on the better quality of teaching and learning process. Long work experience also in a profession is not an easy thing, especially when married and have a burden of family dependents. The number of dependents of the family to be one reason for housewives to work to earn income. The more respondents who have children and dependents of their families, the time provided for work more effective (Widyawati and Pujiyono, 2013). Table 6: Economic Literacy and Budget Expenditure Crosstab

| EL         | High | Medium | Low  | Total |
|------------|------|--------|------|-------|
| BC         | (%)  | (%)    | (%)  | (%)   |
| Accordance | 18,6 | 18,6   | 7,0  | 44,2  |
| Sometimes  | 27,9 | 11,6   | 7,0  | 46,5  |
| No         | 7,0  | 0      | 2,3  | 9,3   |
| accordance |      |        |      |       |
| Total      | 53,5 | 30,2   | 16,3 | 100   |

Table 6, that can be seen from the high economic literacy is capabillity to arrange expenditure budget, teachers who make budget expenditure of 43 teachers and in accordance with the budget expenditure but as many as 37 economic teachers have no expenditure budget and based on the observation that it does not matter because the expenditure does not exceed its income. So it can be concluded that the economic teacher in Bandung has been able to manage finances regularly.

Managing monthly expenditures is important for overall financial planning. The principle that expenditure should not exceed the income received. Especially in the midst of the many economic problems faced by everyone must always be wary of unexpected expenditures even rising raw material prices and resulted in increased expenditure.

The necessity of this awareness is realized or not much around us that there is no financial problem on the grounds that the amount of income needed is small to manage, while for the big income also feel a lot of money so do not need financial management high level of economic literacy should Able imagine by way of understanding finance And ownership of resources within a family will be relatively limited, depending on the number and quality of people participating in income-seeking, whereas the needs and wants of each family member are relatively unlimited. Needs and desires for goods and services.

Managing the monthly routine expenditure is the most important thing for arranging the overall finance. To utilize the limited source of money to reach the optimum effort of the finance management that effective and efficient will be needed. Although finance management will not guarantee the source of money will be enough to provide the need and desire however management can help decide the use of limited resources for priority and approved by all the family, this matter is supported by Karov (2010) which reveals that shopping is accordance to capability and needs.

According to Theng (1999) insisted that spending is the usable income of an individual within a given period of time. As a person who has economic literacy is ideally able to create expenditure budget for a certain period of time. It should be noted also that the needs and desires of service goods from time to time are always changing and tend to continue to grow.

### **5** CONCLUSIONS

Considering the result of research and data analysis conducted, it can be concluded that the level of education, work experience and budget expenditure can increase the economic literacy of high school teachers in Bandung these results are based on cross tabulation and t test. This research provides implications on the importance of growing and developing economic literacy through economic education. The need of economic education both through formal education in school and college like using learning model based on economic literacy and centered to student activities (student center), creative learning technique inovative and also through informal education in the family as the example for self establishment for remembering the importance of growing and developing economic literacy from the beginning. Especially, teachers are supposed to take initiative to improve economic literacy in many ways for example by print or electronic media.

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