

# **SHOW ME THE MONEY: EVALUATING THE IMPACT OF AN ONLINE PROFESSIONAL DEVELOPMENT COURSE FOR MIDDLE AND SECONDARY CLASSROOM TEACHERS**

**Kimberly P. Clayton-Code, Northern Kentucky University**

## **ABSTRACT**

*An interactive, online professional development course titled, “Show Me the Money: Personal Finance for Middle and Secondary Classrooms” was recently developed as part of a collaboration between a regional metropolitan university and a state economic education organization. The course was designed to encourage middle and secondary educators to integrate personal finance concepts across the curriculum using materials from the Council for Economic Education resources and activities, and focused on teaching strategies to differentiate learning for all students. This case study presents the initial results of the collaborative professional development course in terms of teacher attitude towards economic education and student learning outcomes. Initial analysis of the results indicates a positive increase in teacher attitudes as well as a statistically significant increase in student knowledge of personal finance concepts.*

## **SHOW ME THE MONEY: EVALUATING THE IMPACT OF AN ONLINE PROFESSIONAL DEVELOPMENT COURSE FOR MIDDLE AND SECONDARY CLASSROOM TEACHERS**

*This has been an amazing course and I really find it hard to be able to express which resources are going to be most useful to me. I have thoroughly enjoyed each of them, even though I tend to like the interactive websites, games, and quizzes due to the attractiveness of this type of resource for students. I am posting my webliography and can't wait to see others' and add them to mine. I have seen such an increase in my students' understanding of the importance of personal finance just in these 8 weeks.*

A recent collaboration between a state economic education advocacy organization and metropolitan university resulted in the development and facilitation of an interactive, online professional development course, “Show Me the Money: Personal Finance for Middle and Secondary Classrooms”. The course was designed to encourage middle and secondary educators to integrate personal finance across the curriculum using materials from the Council for Economic Education resources and activities, and focused on teaching strategies to differentiate learning for all students. This case study presents the initial results of the collaborative professional development course in terms of teacher content knowledge, attitude towards economic education, and student learning outcomes.

## RESEARCH OVERVIEW

Consumers who function successfully in today's economy are confronted with economic and personal finance decisions on a daily basis. These decisions have become increasingly difficult due to the numerous goods and services available in the market and the free exchange of information via quickly changing technologies and the World Wide Web. Today's students need to learn how to make sound decisions by accessing and assessing consumer information and comparing and evaluating goods and services. The President's Advisory Council on Financial Literacy defines financial literacy as the "ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being" (2008 Annual Report to the President). Financial literacy includes skills like long-term vision and planning for the future along with the discipline to use those skills on a daily basis. Middle and secondary classrooms must include appropriate opportunities for students to be engaged in personal finance related activities that prepare them to make sound decisions throughout their lives.

A number of studies have shown the financial knowledge of today's middle and secondary students to be deficient (Lusardi, Mitchell & Curto, 2010; Loibl, 2010; and Spielhofer, Kerr, and Gardiner, 2010). A recent JumpStart Coalition survey indicated that the financial literacy of high school students had fallen to its lowest level ever. Furthermore, the Survey indicated that that 75 percent of young American adults are likely to lack the skills needed to make beneficial financial decisions. For example, only 16.8 percent of high school seniors and 19.2 percent of college students thought that stocks are likely to have higher average returns than savings bonds, savings accounts and checking accounts *over an 18 year period*. Only 27.3 percent of high school seniors realized that interest on a savings account is taxable if one's income is high enough. Only about 40 percent of high school seniors realize that their own health insurance could stop if their parents become unemployed (Mandell, 2008).

"Just as it was not possible to live in an industrialized society without print literacy—the ability to read and write—so it is not possible to live in today's world without being financially literate. To fully participate in society today, financial literacy is critical" (Council for Economic Education, 2011). The Council for Economic Education publishes a biennial report detailing the status of economic and financial education in the United States. The most recent report (2011) found that only 14 states required a course in personal finance to be offered. The report also found that less than 20 percent of teachers felt competent to teach personal finance topics.

In a report from Gutter, Copur, and Garrison (2010), the authors found that states where a financial education course was required had the highest reported financial knowledge and were more likely to display positive financial behaviors and dispositions. These students were more likely to save, less likely to max out credit cards, less likely to make late payments, more likely to pay off credit cards in full each month, less likely to be compulsive buyers, and more likely to be willing to take average financial risk.

In addition to students' lack of personal financial knowledge, middle and secondary teachers have also indicated their unease with teaching personal finance and economic concepts. Way and Holden (2009) found that 89 percent of K-12 teachers agree that students should take a financial education course or pass a competency test for personal finance before graduating from high school, relatively few teachers believe they are adequately prepared to teach such topics. Their research also found that teachers were open to the idea of integrating personal finance into their curriculum, but needed assistance with integrating the concepts into their discipline.

Walstad (2001) and Walstad and Rebeck (2000) found that infusing economics and personal finance into existing content courses do not provide effective economics education. In addition, social studies teachers may not have adequate training in economics and personal finance leading to the need for specialized training in order to equip teachers with knowledge to integrate economics and personal finance into their teaching.

The good news is that there is a body of work showing that student learning increases as the economic training of their teachers increase (Watts, 2006; Schober, 1984; and Staubs, 2008). In a pilot program by Cargill, Jurosky, and Wendel (2008), the researchers found that skilled teachers were able to achieve significant improvements by working with formally trained economists in a less-than-full-college-course environment. Their approach included a brief teacher training coupled with integrated discussions of economic content and teaching strategies, and the teachers were provided funding to design and implement modules themselves.

In terms of the types of training preferred by teachers, Becker, Greene, and Rosen (1990) found that teachers prefer pragmatic training that includes strategies and lesson plans for introducing content to their students. It was in response to this body of research, that the *Show Me the Money* online professional development course was developed to determine if a six-week online professional development course for teachers could have an impact not only on teachers' understanding of personal finance concepts, but more importantly on the knowledge of their students.

### **PROFESSIONAL DEVELOPMENT COURSE**

The "Show Me The Money: Personal Finance for Middle and Secondary Classrooms" online professional development course was designed to encourage middle and secondary educators to integrate personal finance across the curriculum using materials from the National Council for Economic Education resources and activities, and focused on teaching strategies to differentiate learning for all students. (The course development and assessment were conducted with the financial support from a Council on Economic Education Excellence in Economic Education grant.)

The course was developed as a partnership between a state economic education advocacy organization, a metropolitan university, and the state department of education's e-learning branch. For this project, the state economic education advocacy organization provided the content specialists for the course design, a team of reviewers, development of the course, resources to support the course, collection of the student assessments, and evaluation of the effectiveness of the online professional development course. The state department of education's e-learning branch's mission is to assist educators by "providing high quality, facilitated, media-rich and interactive online professional development and training thus helping to improve P-12 education" (e-Learning Kentucky, 2009). This department provided training for the course design team, the team of reviewers, a course facilitator, registration and hosting of the course, surveys of the teachers, and resources to supplement the online professional development course. The online professional development courses offered were available online 24 hours a day, 7 days a week, allowing the participating teachers access to the course at their convenience. Finally, the researcher served as the course designer and facilitator as well as conducted the evaluation of the course assessments.

The course explored personal finance concepts included in JumpStart Coalition's National Standards for Personal Finance Education and state curriculum content standards

through interactive, hands-on lessons, activities, and resources that could be immediately integrated into participating teachers' middle and secondary classroom instruction. The goals for the course included the opportunity for participating teachers to:

1. *Explore developmentally appropriate personal finance concepts and principles for middle and high school students;*
2. *Examine personal finance content standards at both state and national levels;*
3. *Learn about theory and best practice in teaching personal finance concepts to middle and high school students;*
4. *Explore and analyze web sites and other technology for use in learning personal finance content and develop a list of technology resources appropriate for teaching personal finance content to middle and high school students;*
5. *Create instruction that will incorporate technology and will facilitate students' learning of personal finance concepts;*
6. *and Reflect on classroom practices.*
7. *As a final product participants will develop and share an integrated, interactive webliography that can be integrated into their classroom instruction.*

The structure of the course itself consisted of six sessions—an orientation session and six content sessions. The sessions were offered online through the Blackboard course management system. Each session lasted for one week, beginning on a Wednesday and ending on the following Tuesday. During each session, each participating teacher completed an assignment that included readings, activities, and online discussions. Surveys were also required at the beginning and upon completion of the course. The estimated time for completing each weekly session or module was 2-4 hours. The outline for the individual sessions was as follows:

|             |   |
|-------------|---|
| Orientation | During the Orientation Session, you will have an opportunity to explore the course website, to experiment with the course tools and to introduce yourself to your facilitator and fellow participants. Orientation takes place during the first week.   |
| Session 1   | Financial Responsibility and Decision Making—This session introduces ways that students can apply reliable information and use economic decision making resulting in personal finance decisions. Participants will begin to explore resources for integrating personal finance into their classroom instruction. They will also begin developing a plan that includes resources and how they might integrate them into their own classroom.   |
| Session 2   | Income and Careers—This session explores ways that middle and high school students can use a career plan to develop their personal income potential. Lessons presented in this session will explore career options, identify sources of income and examine factors that affect one's income and career.   |
| Session 3   | Planning and Management—This session presents ways in which students can organize their personal finances and use a budget to manage cash flow. Ideas and lessons for developing a person financial plan, charitable giving, and systems for keeping and using financial records will be presented.   |
| Session 4   | Credit and Debt—This session will explore ways in which one can maintain creditworthiness, borrow at favorable terms, and manage debt. Ideas for presenting the costs and benefits of various types of credit, developing a strong credit history, ways to avoid debt problems, and consumer credit laws will be presented. In addition, lessons that focus on the topic of identity theft will be provided.                                  |
| Session 5   | Saving and Investing—This session presents the case for developing middle and high school students' understanding of saving and investing in terms of implementing a diversified investment strategy that is compatible with personal goals. Participants' personal finance concepts webliography and plans for integrating personal finance concepts into their own classrooms should be finalized and final surveys will also be completed. |

As a final product, participants created an economics and personal finance webliography. This webliography was a compilation of website resources that were woven throughout the course. The idea was for the participating teachers to leave the course with multiple online resources for their teaching. For each concept listed, the teachers researched and found three resources that could be used to teach the concept. The template included the name of the website, the URL, a description of how the website could be used in the classroom setting, and the personal finance concepts taught.

In order to successfully complete the course, the following criteria were used for evaluating successful participation in and completion of the course:

|                        |   |
|------------------------|---|
| Course Activities      | Participants were expected to complete the required course readings and activities as posted in each of the session assignment pages.<br>Participants were expected to post reflections about the assigned readings and the completed activities in the online course discussion.   |
| Discussion Postings    | Participants were expected to respond to the discussion prompt(s) in each of the sessions with an original posting that includes information from readings and activities.<br>Participants were expected to respond thoughtfully to the postings of other course participants in each session, possibly referencing readings, etc.<br>Guidelines for original discussion postings and responses were available in the course orientation. |
| Participant Assessment | Participants were expected to complete the final product and post their work as directed during the final course session.<br>Participants completing team products were expected to work collaboratively with their team and include the names of all team members on the final product posting within the course.  |
| Course Surveys         | Participants were expected to complete all course surveys within one week of the assignment.  |

Each participating teacher completed three surveys—a demographic survey, a course pre/post assessment, and an overall course evaluation. They also conducted pre and post-test assessments with the students in their individual classrooms. The purpose of these assessments was to evaluate the effectiveness of the course in terms of the impact on teacher knowledge and integration of personal finance concepts into classroom teaching. In addition, the goal of the assessment was to evaluate the impact of the teacher participation in the online professional development economics course on student knowledge of personal finance concepts.

### **EVIDENCE OF DOCUMENTED STUDENT ACHIEVEMENT CHANGES**

Three thousand, one hundred, twenty-four students from 56 middle and secondary classrooms participated in this initial assessment of the *Show Me the Money* online professional development course. The student data was analyzed using a t-test with a pooled estimate of population standard deviation to determine the significance of the difference between the mean pretest and posttest scores. The t-test was used to determine if the difference in the sample means for knowledge (pretest scores and posttest scores) can be attributed to the influence of the

teachers' participation in the *Show Me the Money* online professional development course, or if the difference could have happened by chance. Because the pre- and post-test sample sizes varied, the t-test statistic was computed using a pooled estimate of population standard deviation. The following t-statistic which compensates for uneven samples was used to test the hypothesis about two means:

$$t = \frac{(\bar{X}_1 - \bar{X}_2) - (u_1 - u_2)}{s^* \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}, \quad \text{where } s^* = \sqrt{\frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}},$$

where  $\bar{X}$  is the pre/post-test mean,  $u_1$  is the pretest population mean,  $u_2$  is the post-test population mean,  $s_1$  is the pretest variance,  $s_2$  is the post-test variance,  $n_1$  is the pretest population size, and  $n_2$  is the post-test population size. The  $n$  for the pre-and post tests were different as some classes experienced growth whereas others experience attrition. This test was used to test the hypothesis that there was no significant difference between the pre- and post-test student means for each question on the instrument.

The results of the t-test analyses presented in Table 1 show that the middle and secondary students scored significantly higher on all 25 of the 25 questions related to knowledge of personal finance concepts. In fact, the student scores for all of the questions with the exception of one (question #15) were statistically significant at the 99% level.

Table 1: Statistical Analysis of Student Assessment

|                 | Question 1 | 2      | 3      | 4     | 5      | 6     | 7     | 8      | 9      | 10     |
|-----------------|------------|--------|--------|-------|--------|-------|-------|--------|--------|--------|
| <b>PreMean</b>  | 0.19       | 0.82   | 0.63   | 0.81  | 0.76   | 0.37  | 0.66  | 0.37   | 0.55   | 0.66   |
| <b>PostMean</b> | 0.58       | 0.91   | 0.81   | 0.84  | 0.87   | 0.46  | 0.73  | 0.59   | 0.75   | 0.82   |
| <b>T-Test</b>   | -39.83     | -14.22 | -17.27 | -3.45 | -12.63 | -6.59 | -6.03 | -16.93 | -16.03 | -15.48 |
| <b>Sig.</b>     | **         | **     | **     | **    | **     | **    | **    | **     | **     | **     |

|                 | Question 11 | 12     | 13     | 14     | 15    | 16     | 17     | 18     | 19    | 20     |
|-----------------|-------------|--------|--------|--------|-------|--------|--------|--------|-------|--------|
| <b>PreMean</b>  | 0.63        | 0.34   | 0.32   | 0.60   | 0.22  | 0.26   | 0.53   | 0.53   | 0.48  | 0.13   |
| <b>PostMean</b> | 0.77        | 0.56   | 0.47   | 0.75   | 0.25  | 0.42   | 0.66   | 0.66   | 0.53  | 0.29   |
| <b>T-Test</b>   | -12.80      | -13.56 | -12.85 | -13.12 | -1.88 | -15.05 | -10.51 | -10.87 | -3.08 | -19.56 |
| <b>Sig.</b>     | **          | **     | **     | **     | *     | **     | **     | **     | **    | **     |

|                 | Question 21 | 22     | 23    | 24     | 25     |
|-----------------|-------------|--------|-------|--------|--------|
| <b>PreMean</b>  | 0.28        | 0.21   | 0.35  | 0.45   | 0.51   |
| <b>PostMean</b> | 0.41        | 0.42   | 0.41  | 0.64   | 0.73   |
| <b>T-Test</b>   | -11.61      | -20.07 | -4.09 | -14.44 | -18.24 |
| <b>Sig.</b>     | **          | **     | **    | **     | **     |

## EVIDENCE OF TEACHER ATTITUDINAL CHANGES

Each of the 56 participating teachers completed course surveys to evaluate the impact of the course on their attitudes toward and knowledge of economic concepts. In terms of demographic information, the participating teachers all taught in middle and secondary schools throughout the state and included grades five through twelve. In terms of their teaching experience, 8% had taught between one to four years, 34% had taught between five to ten years, 50% had taught between 11-20 years and 8% had taught 21 years or more. Their educational levels included 8% with at least a bachelor's degree, 42% with master's degrees, and 50% with Rank I degrees. (A Rank I degree is a graduate degree consisting of at least 30 graduate credit hours focused on a particular area of study.)

The course teacher survey instruments included attitudinal and demographic questions. Questions number five through twelve were designed using a bi-polar adjective format which is a variant of the semantic differential test design. These eight questions addressed teacher attitude towards personal finance and attitudes toward personal finance teaching and curriculum materials.

Because the pre- and post-test teacher sample sizes varied, the t-test statistic was computed using a pooled estimate of population standard deviation. This test was used to test the hypothesis that there was no significant difference between the pre- and post-course means for each question on the instrument. The results of the statistical analysis are shown in Table 2.

Table 2: Teacher Attitudinal Questions

| Question   | Mean Score<br>Pre/ Post-Training |
|--|----------------------------------|
| 1. I would describe my attitude towards personal finance as being _____.<br>VERY FAVORABLE 1 --- 2 --- 3 --- 4 --- 5 --- 6 --- 7 VERY UNFAVORABLE                                      | pre: 2.00<br>post: 1.47          |
| 4. To the best of my knowledge, quality curriculum materials for teaching personal finance are _____.<br>READILY AVAILABLE 1 --- 2 --- 3 --- 4 --- 5 --- 6 --- 7 DIFFICULT TO FIND     | pre: 3.12<br>post: 1.53          |
| 5. I am _____ with internet or web site locations regarding personal finance.<br>UNFAMILIAR 1 --- 2 --- 3 --- 4 --- 5 --- 6 --- 7 VERY FAMILIAR  | pre: 2.71<br>post: 4.65          |
| 6. At the current time, I feel _____ my ability to find quality curriculum materials on personal finance.<br>CONFIDENT OF 1 -- 2 -- 3 -- 4 -- 5 -- 6 -- 7 GENERALLY UNCOMFORTABLE WITH | pre: 3.00<br>post: 1.41          |
| 7. I feel that I am currently _____ to teach personal finance curriculum.<br>HIGHLY QUALIFIED 1 -- 2 -- 3 -- 4 -- 5 -- 6 -- 7 GENERALLY UNQUALIFIED                                    | pre: 3.00<br>post: 1.65          |
| 8. Given my current training, I _____ teaching a unit(s) on economics.<br>DREAD 1 --- 2 --- 3 --- 4 --- 5 --- 6 --- 7 LOOK FORWARD TO  | pre: 3.53<br>post: 4.82          |

The results for the attitudinal questions, shown in Table 2, focused on teacher perceptions of personal finance, teachers' perceptions of the availability of materials, curriculum and websites to teach personal finance, and teachers' perceptions of their abilities to teach personal finance. The responses to question one were very favorable initially—so much so that significant improvement may have been difficult to achieve. Even so, the mean scores

improved, although the improvement was not statistically significant. Overall, the t-test statistic indicated that—as a result of the professional development training—teachers felt significantly more confident about their ability to deliver financial education. Specifically, the scores indicate that teachers felt much more confident about the availability, and of their efforts to find personal finance education materials. Additionally, the teachers felt more qualified to teach personal finance curricula, and that they looked forward to teaching a unit on personal finance concepts.

Specific anecdotal feedback from teachers that further supported their positive attitudes as a result of the course. This course feedback included comments such as:

*“I have learned so much from this course! I have gathered so many valuable economic resources to use with my students and to share with my colleagues! Thanks a million!”*

*“I have learned so much from this class. ... I have gathered all the websites and books and lessons that have been posted and I’m going to share them with the teachers at my school. They are always grateful to have resources sent to them. I feel a lot more comfortable teaching personal finance, especially since I have never taught it before! I know now websites to find ideas and I’m sending the webliography links to my media specialist so she can post them to our website. Thanks for a great class.”*

Other anecdotal feedback included: 100% of the teachers indicated that they found the discussion board topics to be beneficial; 71% rated the overall quality of the workshop to be excellent with 29% rating it very good; 100% found the webliography to be an effective and usable project; 100% found the content of the workshop to be easily transferable to the classroom; and 94% felt knowledgeable about teaching personal finance in their own classrooms as a result of participating in the course.

Most importantly however, the results of the student assessments indicate that the online professional development course did, in fact, improve middle and secondary students’ knowledge of key personal finance concepts—which was the preferred outcome of the course. Students who understand basic personal finance concepts are more able to make sound everyday financial decisions throughout their lives.

## CONCLUSIONS

The use of professional development courses to assist teachers in their instruction of personal finance concepts to middle and secondary students is not a new concept. However, the advent of online instruction has presented a new opportunity for teachers to develop their pedagogical and content knowledge in the content area of personal finance. This study investigated the effects of a six week online professional development course, *Show Me the Money*, targeted specifically to middle and secondary teachers for the purpose of enabling them to increase their students’ knowledge and understanding of basic personal finance concepts. Participating teachers completed pre-course and post-course assessment surveys and conducted pretest and posttest assessments of basic personal finance concepts with their students. The results of the initial offering of the online professional development course offer a positive, affirming impact of the course on teachers and most importantly on the content knowledge of their students.



## REFERENCES

- Becker, W., W. Greene, & S. Rosen. (1990). Research on high school economic education. *American Economic Review* 80 (May): 14-22.
- Cargill, T.F., J. Jurosky, & J. Wendel. (2008). Implementing economics standards: A pilot transition program. *Journal of Economic Education* 39 (Spring): 126-134.
- Council for Economic Education. (2011). Survey of the states: Economic and personal finance education in our Nation's Schools 2011. Retrieved June 30, 2012, from <http://www.councilforeconed.org/wp/wp-content/uploads/2011/11/2011-Survey-of-the-States.pdf>.
- Gutter, M., Copur, Z., & Garrison, S. (2010). Financial capabilities of college students from states with varying financial education policies. Denver, CO: National Endowment for Financial Education.
- Goetz, J., B.J. Cude, R.B. Nielson, S. Chatterjee, & Y. Mimura. (2011). College-based personal finance education: Student interest in three delivery methods. *Journal of Financial Counseling and Planning* 22(1): 27-42.
- Harris Interactive Inc. (2012). The 2012 consumer financial literacy survey. The National Foundation for Credit Counseling and The Network Branded Prepaid Card Association. Retrieved June 22, 2012, from <http://www.nfcc.org/newsroom/FinancialLiteracy/files2012/FLS2012FINALREPORT0402late.pdf>.
- Loibl, C. (2010). A look inside: Teacher information search for personal finance instruction. *International Journal of Consumer Studies* 34: 287-297.
- Lusardi, A., O.S. Mitchell, & V. Curto. (2010). Financial literacy among the young. *The Journal of Consumer Affairs* 44 (2): 358-380.
- Mandell, L. (2008). The financial literacy of young American adults: Results of the 2008 national Jump\$tart Coalition survey of high school seniors and college students. Jump\$tart Coalition.
- Odom, M.O. (2008). *Economics education: Attitudes and practices of elementary and middle grade teacher candidates*. Dissertation Abstracts International Section A: Humanities and Social Sciences, Vol 68(10-A). University of Alabama.
- Schober, H.M. (1984). The effects of inservice training on participating teachers and students in their economic classes. *Journal of Economic Education* 15 (4): 282-295.
- Spielhofer, T., D. Kerr, & C. Gardiner. (2010). Personal finance education: Effective practice guide for schools. National Foundation for Educational Research.
- Walstad, W. B. (2001). The status of economics in the high school curriculum. *Journal of Economic Perspectives* 15(Summer): 195-210.
- Walstad, W.B. (2000). The status of economics in the high school curriculum. *Journal of Economic Education* 31 (Winter): 95-102.
- Way, W.L. & K.C. Holden. (2009). Teachers' background and capacity to teach personal finance. National Endowment for Financial Education. Retrieved July 5, 2012, from: [http://www.afcpe.org/assets/pdf/vol20\\_2way\\_holden.pdf](http://www.afcpe.org/assets/pdf/vol20_2way_holden.pdf).

**APPENDIX : SHOW ME THE MONEY STUDENT ASSESSMENT**

1. Which is true about most millionaires?
  - a) They inherit most of their wealth.
  - b) They work more than 40 hours a week.
  - c) They work in glamorous jobs like sports or entertainment.
  - d) They avoid investing in the stock market due to its riskiness.
2. Which strategy is most likely to improve most people's financial situation over a lifetime?
  - a) using credit to spend more than a person earns
  - b) making financial decisions quickly based on intuition
  - c) saving early in life when a person begins earning an income
  - d) gaining work experience early instead of continuing in school
3. If Jessica chooses to buy more auto insurance this year than she bought last year, then Jessica has probably decided that:
  - a) the benefits of more auto insurance are greater than the costs.
  - b) more auto insurance will reduce her risk of an accident.
  - c) this added insurance will help her savings grow faster.
  - d) she will drive more safely in the future.
4. Which of the following is typically true?
  - a) Correct choices have no costs.
  - b) People do not respond to incentives.
  - c) Voluntary trade causes winners and losers.
  - d) People's choices have consequences for the future.
5. Some people choose to stop attending high school before graduation. What is the opportunity cost to the individual of dropping out of high school?
  - a) The lower income earned in the job market.
  - b) The lower interest rates one is charged for credit.
  - c) The higher taxes one pays for leaving school early.
  - d) The payments made to companies hiring drop-outs.
6. The first three steps of economic decision-making are to:
  - a) draw a conclusion, construct a model, and make a generalization.
  - b) identify assumptions, make a policy, evaluate the policy.
  - c) gather facts, form a theory, and conduct a simulation.
  - d) define the problem, list alternatives, and state criteria.
7. Which is most likely to improve a person's chances of getting a job?
  - a) supplying a neat and accurate application
  - b) preparing a resume only if an employer requests one
  - c) avoiding classified job advertisements in newspapers
  - d) dressing for an interview in a manner that is provocative
8. An approach to finding out about job opportunities that consists of contact with friends and family members who might be able to connect you to a potential employer is called
  - a) logrolling.
  - b) recruiting.
  - c) connecting.
  - d) networking.
9. Which question are employers allowed to ask job applicants during a job interview?
  - a) Are you married?
  - b) Do you attend a place of worship?

- c) What do you feel are your weaknesses as they pertain to the job?  
d) Do you have any disabilities that might affect your job performance?
10. A typical characteristic of entrepreneurs is that they  
a) like to work part-time.  
b) are willing to take risks.  
c) would rather save than invest.  
d) enjoy working under supervision.
11. The U.S. Bureau of Labor Statistics reveals that the fastest growing jobs will require which level of educational training?  
a) an associate's degree or higher  
b) postsecondary vocational training  
c) no more than a high school diploma  
d) work experience in a related occupation
12. What is the difference between gross and net pay?  
a) Net pay is gross pay minus saving.  
b) Gross pay is net pay minus saving.  
c) Gross pay is net pay minus deductions.  
d) Net pay is gross pay minus deductions.
13. Emily works full-time at Handy Dandy Hardware. Who pays the FICA (Social Security) contribution on Emily's wages?  
a) Emily only  
b) her employer only  
c) Emily and her employer  
d) the federal government
14. An employee works for 40 hours per week at \$10 per hour. The deductions per week are \$50 in federal income taxes, \$20 in state income taxes, and \$30 in Social Security taxes. What is the net pay for the week?  
a) \$300  
b) \$330  
c) \$350  
d) \$400
15. What is the opportunity cost of letting your interest compound in your savings account instead of withdrawing the interest as it is earned?  
a) lower taxes in the current year  
b) increased risk of losing savings  
c) less money for current purchases  
d) more interest on the savings account
16. Beginning to save while you are young is recommended by financial experts because it:  
a) is easier to save when you first begin earning income.  
b) is hard to save later in life when you have more income to spend.  
c) allows you to lock in higher interest rates when you buy on credit.  
d) lets compound interest work in your favor by earning interest on interest.
17. What is the general relationship between risk and reward?  
a) the higher the risk, the lower the potential reward  
b) the higher the risk, the higher the potential reward  
c) the amount of risk does not influence potential reward  
d) there is a relationship, but it is uncertain

18. A key advantage of getting credit is that it can help people:
- a) sell assets
  - b) increase their net worth.
  - c) reduce risk when investing in stocks.
  - d) buy a good or service today and pay for it later.
19. Who generally benefits from a loan transaction?
- a) the lender only
  - b) the borrower only
  - c) both the borrower and the lender
  - d) neither the borrower nor the lender
20. Which three things do creditors consider to be most important when judging a person's creditworthiness to buy a house or car?
- a) marital status, gender, location
  - b) character, collateral, and capacity
  - c) length of loan, credibility, commissions
  - d) occupation, connections, income sources
21. What does a credit bureau do?
- a) extends credit to qualified buyers
  - b) provides advice on how to use credit
  - c) tracks the bill-paying habits of consumers
  - d) sends warnings to people in credit trouble
22. Which type of financial institution typically charges the highest interest rates for loans?
- a) credit unions
  - b) commercial banks
  - c) savings and loans
  - d) payday loan companies
23. Disposable income is the money that is:
- a) deducted from your paycheck.
  - b) budgeted for variable expenses.
  - c) spent or saved after deductions.
  - d) saved and invested each month.
24. "Pay Yourself First" means that:
- a) all bills get paid before any saving.
  - b) money is set aside for savings before spending.
  - c) fixed expenses are paid before flexible expenses.
  - d) credit cards pay for what you don't have as income.
25. Using a debit card to purchase a good is most similar to using a
- a) loan.
  - b) check.
  - c) credit card.
  - d) money market account.