
Personal Financial Literacy among High School Students in New Zealand, Japan and the USA

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ABSTRACT Personal financial literacy is becoming increasingly important in the modern world, especially for young people. In this article, the authors compare the financial literacy of high school students in Hamilton, New Zealand, with samples from Japan and the USA. The authors compare not only overall financial literacy, but also literacy across five dimensions (or 'themes') of financial literacy and across three cognitive levels. They find that financial literacy is poor overall in all three countries, but is substantially worse in New Zealand and the USA than in Japan. The performance is similar across themes and cognitive levels for US and New Zealand students, but Japanese students perform better mostly in terms of their greater knowledge of terminology and definitions, rather than better comprehension and ability to apply their knowledge. This suggests that all three countries should work harder to develop the financial literacy of their high school students.

Introduction

The nature of people's engagement in personal finance has changed considerably in recent years with a broadening range of more complex financial products and services on the market, and greater accessibility to credit and, consequently, debt. With the advent of an ageing population, personal savings have increased in importance, while the negative effects of the global financial crisis have shown that people are exposed to significant volatility from the markets. In particular, young people are increasingly involved in their own money management and confronted with opportunities to borrow funds and access credit, putting them at risk of making poor financial decisions that can have lasting, costly effects (Roberts & Jones, 2001; Lusardi et al, 2010).

Young people's financial literacy, which has been defined as 'a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial wellbeing' (Atkinson & Messy, 2012, p. 14), has become a recent focus of policy efforts in many countries. For instance, the Organisation for Economic Co-operation and Development's (2005, p. 4) *Recommendation on Principles and Good Practices for Financial Education and Awareness* explicitly notes that 'financial education should start at school. People should be educated about financial matters as early as possible in their lives'. This recommendation was underpinned not only by the importance of focusing on youth, but also the relative efficiency of providing education during the years of compulsory schooling (Organisation for Economic Co-

operation and Development, 2012). Moreover, appropriately targeted financial education has the potential to empower youth, enhancing their personal development and increasing their long-term well-being (Fox et al, 2005; Bowen & Jones, 2006). Thus, financial education may be considered to have wider benefits for young people. Given the policy focus on financial education among youth, it is important to understand their level of financial literacy, both within each country and comparatively, in order to inform strategies for financial education provision. Indeed, the need for improved comparative data was one of the key reasons underlying the recent Programme for International Student Assessment Financial Literacy Assessment, the results of which will become available in 2014 (Organisation for Economic Co-operation and Development, 2012).

Despite there being no commonly accepted standard definition of financial literacy (Huston, 2010), there is consensus among prior studies that the level of financial literacy amongst teenagers is poor (see the literature review below), although it should be noted that no prior study has specifically investigated the financial literacy of high school students in New Zealand. Despite the dearth of research in this area, the New Zealand government is committed to improving financial literacy, as highlighted by the National Strategy for Financial Literacy (New Zealand Network for Financial Literacy, 2010). In this article, we evaluate the financial literacy of high school students in New Zealand and compare their performance with that of students from Japan and the USA. We find that Japanese students perform somewhat better than those from the USA and New Zealand, whose results were quite similar. Overall, though, the results illustrate an inadequacy of average financial literacy levels in all three countries.

Literature Review

The subject of financial literacy has recently come to prominence, largely as a result of many compounding changes in the nature of personal finance opportunities and responsibilities. Increasing global competition and market deregulations have allowed for greater private access to financial products (Marcolin & Abraham, 2006; Borodich et al, 2010), while rapid and continuous technological and marketing developments have led to a myriad of financial products and services becoming available (Marcolin & Abraham, 2006; Worthington, 2006). Furthermore, as developed economies, including New Zealand, face the fiscal challenge presented by an ageing population, individual financial responsibility has been prioritised, and the need to undertake financial planning is increasingly crucial (Marcolin & Abraham, 2006). In New Zealand, approximately one-third of the funds in the compulsory KiwiSaver scheme – a national initiative to promote individual retirement saving and help relieve the country's persistent current account deficit – is held in the default fund options (Morningstar, 2012). This demonstrates that many New Zealanders continue to avoid making long-term decisions about retirement saving, despite the government's intentions. Being financially literate provides the best chance of making effective financial decisions and minimising the likelihood of being misled and facing financial problems (Marcolin & Abraham, 2006). Such literacy has been noted as a core consumer skill (Atkinson & Messy, 2012) and is particularly important in difficult times, when people are more vulnerable to getting themselves into monetary troubles (Borodich et al, 2010). Not only does poor financial literacy impact adversely on personal financial affairs, but it has been cited as one of the aggravating factors associated with the global financial crisis (see, for example, Gerardi et al, 2010).

As noted above, financial literacy among the young is increasingly important. Young people especially are exposed to the changes being made in the financial sector as they are increasingly confronted with opportunities for overdrafts and credit, interest-free payment options, and student and automobile debt (Lusardi et al, 2010). Getting into debt early on can constrain potential wealth accumulation over the lifetime and prove very costly (Lusardi et al, 2010). With the increasing uncertainty of how societies will finance ageing populations, young people should start preparing for their futures now (Marcolin & Abraham, 2006). These potential problems place high priority on undertaking research to ascertain what young people do and do not know about personal finance, what their attitudes to debt are, and to what extent they are forward-thinking when making financial decisions (Lusardi et al, 2010). Mandell (2006) cites the senior high school years as critical for the development of financial literacy, being closest to the time when many important financial

decisions will need to be made, and where an obvious opportunity to provide students with financial literacy skills and guidance exists.

Teenage financial literacy studies have been almost exclusively undertaken in the USA. Notably, there seem to be no such studies considering either New Zealand, Australian or British performance (Worthington, 2006). Of the studies that have been conducted, one result is clear: understanding of personal financial literacy is uniformly poor. For instance, Borodich et al (2010), using the Financial Fitness for Life – High School (FFFL-HS) test, found mean scores of 45.5%, 44.7% and 57.3% for high-school-attending youth in Belarus, the USA and Japan, respectively. On reviewing the need for financial education in the USA, the Office of Investor Education and Assistance, US Securities and Exchange Commission (1999, p. 2) declared the country to be facing ‘a financial literacy crisis’ and was ‘alarmed’ at how few high school students could pass a basic financial literacy test. This is consistent with the literature on high school students’ financial literacy reviewed here (see, for example, Bowen, 2002), and there are few signs of any improvement. Mandell (2008a) found that financial literacy levels appear to be worsening with time. The results of the initial Jump\$tart survey of 1997 were considered appalling, returning an average score of 57.3%. However, the following four biennial test means were between 50.2% and 52.4% (Mandell, 2008a), and, by 2008, the average score had fallen to 48.3%, meaning the test averages have never made the 60% designated as acceptable (Mandell, 2008b).

Bowen (2002) considered 70% to be the minimum correct answer rate for any one question in her research in order to conclude that teens were ‘knowledgeable’ on the topic. Only two questions – one on net incomes and the other on endorsing cheques – qualified as such. Generally, it has been found that high school students answer questions on income best (Bowen, 2002; Mandell, 2008b; Borodich et al, 2010), while answering questions regarding saving least well (Mandell, 2008b; Borodich et al, 2010). Our study disaggregates results across five dimensions (or ‘themes’) of financial literacy and at three cognitive levels, comparing students from New Zealand with students from Japan and the USA.

Data and Methods

We surveyed high school students in schools in and around Hamilton, an inland city in the central North Island of New Zealand, in September and October 2012. Eleven high schools were approached and five agreed to participate in the research project. The schools ranged from decile 4 to decile 10, with an average decile of 7.8, and were geographically dispersed throughout the Hamilton subregion. The sampling frame comprised students in NCEA (National Certificate of Educational Achievement) Level 1 mathematics classes. Mathematics was selected because NCEA Level 1 mathematics is compulsory for all students. Almost all students in NCEA Level 1 will be in Year 11 – i.e. 15 years old – which matches the ages of the comparator samples from Japan and the USA. The students were given 50 minutes to complete the financial literacy test, a short demographic questionnaire and a survey instrument designed to measure financial risk tolerance. The combined test and survey instrument was pre-tested for suitability and length among first-year university economics students before data collection began. Student participation in the research was incentivised through a random draw for prizes undertaken after all the students had participated. The research was given ethical approval by the Waikato Management School Ethics Committee.

The students’ financial literacy was evaluated using the FFFL-HS test (Walstad & Rebeck, 2005). The FFFL-HS test was designed by the National Council on Economic Education to provide an up-to-date assessment tool that ‘measure[s] understanding of personal finance among high school students’ (Walstad & Rebeck, 2005, p. 20), as part of its endeavour to provide the best possible economic and financial education to high school students. The test has been used widely (see, for example, Harter & Harter, 2007; Butt et al, 2008; Borodich et al, 2010). The test has high content validity, having been based on the major personal finance teaching courses and developed by subject experts (Walstad & Rebeck, 2005). It thus represents a test of what high school students ought to know about personal finance. The FFFL-HS test comprises 10 multiple-choice questions on each of five themes:

1. The Economic Way of Thinking – economic reasoning and the way decision making affects incomes and standard of living.
2. Earning Income – aspects of finding work and one’s own job creation, and reasons why incomes vary between various jobs.
3. Saving – the costs and benefits of saving and various aspects of investment.
4. Spending and Using Credit – the use of credit and the nature of interest payments.
5. Money Management – budgeting, banking and insurance.

The questions in the test are also classified into three cognitive levels: knowledge, comprehension and application. There are 14 questions pertaining to ‘knowledge’, which emphasise the ability to recognise and recall facts. The 25 ‘comprehension’ questions require some understanding of information and the skill of explaining it in various ways. The other 11 questions (‘application’) involve the use of information in different scenarios. The questions from the US version of the FFFL-HS test were adapted for the New Zealand context by the New Zealand-based authors. This involved minor alterations to individual questions to account for differences in local financial and tax laws. The final version of the New Zealand test is included in the Appendix, while the corresponding test in Japanese is available in Yamaoka et al (2005).

In all, 352 New Zealand students participated in the research. We omitted from the analysis 17 students who scored less than 25% in the test (we assume these students were answering the test questions randomly) or who failed to attempt five or more of the questions. Thus, the analysis in this article is based on the test results from the remaining 335 students. The results of the financial literacy test were then compared with two other samples: (1) the norming sample of US high school students who had not completed a personal financial literacy course from the FFFL-HS manual (Walstad & Rebeck, 2005), and (2) a sample of 762 high school students from four high schools in Japan. The results of this comparative analysis are presented in the following section. In assessing the adequacy of financial literacy, we use as a benchmark the 60% that is applied in the Jump\$Start programme (Mandell, 2008b). An analysis of the demographic and other factors associated with personal financial literacy within the New Zealand sample is reported elsewhere (Cameron et al, 2013).

Results and Discussion

The overall financial literacy test results are summarised in Table I. New Zealand students’ mean score of 45.3% was 0.5 percentage points higher than that of US students, but 11.4 percentage points lower than that of Japanese students, who clearly performed better in the test. Notwithstanding the Japanese students’ better performance, the students in all three countries have poor overall performance – i.e. below the 60% benchmark.

	New Zealand	Japan	USA
Number of high schools	5	4	14
Number of students	335	762	335
Mean score	22.6	28.4	22.4
Mean percent correct	45.3	56.7	44.8

Table I. Aggregate statistics for the FFFL-HS test.

Table II breaks the financial literacy results down by individual question. Japanese students had a higher rate of correct response for most questions, but the size of the difference in correct response rates varied greatly. New Zealand students had the highest correct response rates for 10 of the 50 questions, five of which were from ‘The Economic Way of Thinking’ theme. Over these questions, US students’ scores were 6.8 percentage points lower than New Zealand students on average, and for Japanese students the discrepancy was almost twice as large. Overall, there was a close correlation between New Zealand and US students in terms of their question-specific performance (Pearson’s correlation coefficient of 0.843), and much less correlation between either of those groups of students and the Japanese students (Pearson’s correlation coefficient of 0.547 between the Japanese and New Zealand results, and 0.558 between the Japanese and US results). The most severe divergence in correct response rates occurred in Question 33, where 11.6% of New Zealand

students, 16.0% of US students and 88.6% of Japanese students answered correctly. Japanese students performed more than 40 percentage points better than US and New Zealand students on average in Questions 5, 12, 18, 33 and 43. These significant differences relate most to differences in the questions between the Japanese, US and New Zealand versions of the FFFL-HS test. The Japanese version of Question 33 is arguably easier, since the incorrect Option D replaces ‘income sources’ with ‘hobby’, and makes it much less likely for a student to choose that option. Question 12 is completely different between the Japanese and other versions of the test. The other three questions, though, are similar between the three versions. Thus, the difference in results between the Japanese and New Zealand/US students is unlikely to have arisen entirely due to differences between the tests.

Question	New Zealand	Japan	USA	Question	New Zealand	Japan	USA
1	29.9	19.2	17.0	26	33.4	18.8	30.0
2	84.2	81.8	88.0	27	54.0	66.1	51.0
3	21.2	8.5	14.0	28	26.6	34.2	20.0
4	78.2	84.5	80.0	29	31.3	39.9	48.0
5	31.6	67.2	31.0	30	60.9	70.2	54.0
6	85.1	68.9	83.0	31	63.6	87.7	61.0
7	60.3	88.8	78.0	32	47.5	22.0	51.0
8	57.0	48.7	56.0	33	11.6	88.6	16.0
9	57.0	80.9	38.0	34	24.5	35.1	27.0
10	55.2	30.3	48.0	35	55.8	48.2	57.0
11	58.2	91.6	68.0	36	37.6	49.7	44.0
12	44.2	94.1	39.0	37	43.3	40.7	36.0
13	65.7	76.1	46.0	38	32.8	18.0	16.0
14	76.4	82.8	76.0	39	53.1	77.7	48.0
15	45.1	68.0	42.0	40	32.5	49.3	24.0
16	37.9	54.2	49.0	41	36.7	37.0	37.0
17	49.3	86.5	57.0	42	41.2	64.8	34.0
18	36.1	77.8	42.0	43	34.6	83.4	44.0
19	22.1	50.5	37.0	44	29.9	26.9	51.0
20	67.2	79.5	66.0	45	66.9	70.0	59.0
21	27.8	36.3	23.0	46	48.7	66.8	57.0
22	30.1	36.2	23.0	47	40.9	23.0	37.0
23	44.8	47.7	32.0	48	37.3	34.6	56.0
24	25.4	23.1	25.0	49	46.9	59.5	25.0
25	52.8	77.8	48.0	50	33.1	63.3	49.0

Table II. Percentages of correct responses by item.

Table III categorises the question-specific results by theme. Japanese students had higher average scores in every theme, and in particular in the ‘Earning Income’ theme. The difference between the three samples was smallest in ‘The Economic Way of Thinking’ theme, which was also one of only two themes where the average in all three countries was above 50% (the other was the ‘Earning Income’ theme). New Zealand and US students performed similarly in each theme, which is consistent with the high correlation between student performances by question shown in Table II. Within each theme, the relative ranking of questions was similar for each country – that is, the most difficult questions (in terms of fewer students correctly answering them) were similar across the three countries.

Table IV summarises the question-specific results by theme and cognitive level. Japanese students obtained the highest scores at all three cognitive levels. The difference between Japanese and New Zealand and US students was greatest in the ‘knowledge’ questions, demonstrating that Japanese students have a better ability to recognise and deal with jargon and personal finance terminology. This was also the cognitive level where Japanese students performed best of the three, in contrast to New Zealand and US students, who both performed worst in ‘knowledge’ and best in ‘comprehension’ (though the difference between ‘comprehension’ and ‘application’ scores

was very small and not significant). This suggests that New Zealand and US students are better at interpreting financial information. However, their ‘comprehension’ and ‘application’ scores were still both lower than those of Japanese students.

Themes		Range of per cent correct										Mean (%)		
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	NZ	Jpn	USA
<i>The Economic Way of Thinking</i>	NZ			1, 3	5		8, 9, 10	7	4	2, 6		56.0		
	Jpn	3	1		10	8		5, 6		2, 4, 7, 9			57.9	
	USA		1, 3		5, 9	10	8		7	2, 4, 6				53.3
<i>Earning Income</i>	NZ			19	16, 18	12, 15, 17	11	13, 20	14			50.2		
	Jpn						16, 19	15	13, 18, 20	14, 17	11, 12		76.1	
	USA				12, 19	13, 15, 16	17	11, 20	14					52.2
<i>Saving</i>	NZ			21, 24, 28	22, 26, 29	23	25, 27	30				38.7		
	Jpn		26	24	21, 22, 28, 29	23		27	25, 30				45.0	
	USA			21, 22, 24	23, 26	25, 29	27, 30							35.4
<i>Spending and Using Credit</i>	NZ		33	34	36, 38, 40	32, 37	35, 39	31				40.2		
	Jpn		38	32	34	35, 36, 37, 40			39	31, 33			51.7	
	USA		33, 38	34, 40	37	36, 39	32, 35	31						38.0
<i>Money Management</i>	NZ			44	41, 43, 48	42, 46, 47		45				41.6		
	Jpn			44, 47	41, 48		49	42, 46, 50	45	43			52.9	
	USA			49	41, 42, 47	43, 50	44, 45, 46							44.9

Table III. Distribution of percentages (%) of correct responses by theme.

While it is difficult to draw strong conclusions at each cognitive level within individual themes due to the small number of questions, Japanese students’ advantage in ‘knowledge’ over New Zealand and US students appears to mainly arise due to Japanese students’ greater knowledge in the ‘Earning Income’, ‘Spending and Using Credit’ and ‘Money Management’ themes. In particular, New Zealand and US students did extremely poorly in the ‘knowledge’ questions in the ‘Spending

and Using Credit' theme, which relate to creditworthiness and the role of credit reporting agencies. This highlights an overall lack of understanding of how credit works among young people in New Zealand and the USA.

Differences between Japanese and other students were less substantial in other cognitive level-theme combinations. The only areas where New Zealand or US students outperformed Japanese students were 'knowledge' questions in 'The Economic Way of Thinking' theme (both New Zealand and US students) and 'application' questions in the 'Money Management' theme (US students). However, those differences are based on only one and two questions, respectively.

Themes and items	Cognitive level								
	Knowledge			Comprehension			Application		
	New Zealand	Japan	USA	New Zealand	Japan	USA	New Zealand	Japan	USA
<i>The Economic Way of Thinking</i>									
1. Becoming a millionaire				29.9	19.2	17.0			
2. Financial success				84.2	81.8	88.0			
3. Opportunity cost							21.2	8.5	14.0
4. Cost and benefit							78.2	84.5	80.0
5. A free lunch				31.6	67.2	31.0			
6. Choice				85.1	68.9	83.0			
7. Opportunity cost							60.3	88.8	78.0
8. Scarcity				57.0	48.7	56.0			
9. Human resource				57.0	80.9	38.0			
10. Decision-making process	55.2	30.3	48.0						
Mean per cent correct	55.2	30.3	48.0	57.5	61.1	52.2	53.2	60.6	57.3
<i>Earning Income</i>									
11. Getting a job				58.2	91.6	68.0			
12. Looking for a job	44.2	94.1	39.0						
13. Job interview				65.7	76.1	46.0			
14. Entrepreneur				76.4	82.8	76.0			
15. Human capital	45.1	68.0	42.0						
16. Competitive job market							37.9	54.2	49.0
17. Lifetime income	49.3	86.5	57.0						
18. Net pay	36.1	77.8	42.0						
19. Social security contributions	22.1	50.5	37.0						
20. Deductions and net pay							67.2	79.5	66.0
Mean per cent correct	39.3	75.4	43.4	66.8	83.5	63.3	52.5	66.9	57.5
<i>Saving</i>									
21. Opportunity cost of compound interest				27.8	36.3	23.0			
22. The power of compound interest							30.1	36.2	23.0
23. The power of compound interest				44.8	47.7	32.0			
24. The rule of 72							25.4	23.1	25.0
25. Market price risk				52.8	77.8	48.0			
26. Liquidity risk				33.4	18.8	30.0			
27. Risk and reward				54.0	66.1	51.0			
28. The real and nominal rate of return	26.6	34.2	20.0						
29. Common stock				31.3	39.9	48.0			
30. Criteria of investment	60.9	70.2	54.0						
Mean per cent (%) correct	43.7	52.2	37.0	40.7	47.8	38.7	27.8	29.7	24.0
<i>Spending and Using Credit</i>									

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31. The advantage of using credit				63.6	87.7	61.0			
32. Loan transaction				47.5	22.0	51.0			
33. Judging creditworthiness	11.6	88.6	16.0						
34. A credit bureau	24.5	35.1	27.0						
35. Paying back a loan				55.8	48.2	57.0			
36. Risk of loan default				37.6	49.7	44.0			
37. The cost of a loan				43.3	40.7	36.0			
38. Unauthorised use of a credit card							32.8	18.0	16.0
39. A pyramid scheme							53.1	77.7	48.0
40. A payday loan company				32.5	49.3	24.0			
Mean per cent (%) correct	18.1	61.9	21.5	46.7	49.6	45.5	43.0	47.9	32.0
Money Management									
41. Disposable income	36.7	37.0	37.0						
42. Net worth	41.2	64.8	34.0						
43. Pay yourself first	34.6	83.4	44.0						
44. A debit card				29.9	26.9	51.0			
45. Balance at a bank							66.9	70.0	59.0
46. A type of insurance	48.7	66.8	57.0						
47. A type of insurance for autos				40.9	23.0	37.0			
48. A deductible							37.3	34.6	56.0
49. Another type of insurance for autos				46.9	59.5	25.0			
50. Life insurance				33.1	63.3	49.0			
Mean per cent (%) correct	40.3	63.0	43.0	37.7	43.2	40.5	52.1	52.3	57.5
Total mean per cent (%) correct	38.3	63.4	39.6	48.8	55.0	46.8	46.4	52.3	46.7

Table IV. FFFL-HS test results (%) by cognitive level.

Conclusion

The financial literacy of high school students in New Zealand is similar to that in the USA, but much lower than that in Japan. However, students in all three countries performed poorly in the financial literacy test, both overall and in each of the five themes investigated. This low overall level of financial literacy among young people should be of concern, particularly given the profound impact financial literacy has on individuals’ ability to manage their money and maintain financial well-being.

Japanese students’ advantage in terms of higher economic literacy largely arises because of their greater knowledge of the terminology and definitions used in personal finance, and much less from better comprehension or greater ability to apply their personal finance knowledge. While it is not clear to what extent financial literacy is obtained through formal schooling already, the governments and education providers in New Zealand and the USA could potentially learn much from Japan in terms of how young people engage with personal financial terms and how they interpret their meaning. However, in order to meet the benchmark standard, all three countries should work harder on developing an appropriate curriculum to support young people’s personal financial literacy, particularly in the areas of comprehension and application.

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APPENDIX

FFFL-HS Theme Tests

(2012 New Zealand version, adapted from the US version by M.P. Cameron, S. Lim and R. Calderwood)

Theme 1

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. Jarred values three goods in this order: (1) an MP3 player, (2) a computer game and (3) a sweatshirt. Each item costs \$60. Jarred bought the MP3 player, which he wanted the most. His opportunity cost is the:
 - a. sweatshirt.
 - b. MP3 player.
 - c. computer game.**
 - d. sweatshirt and the computer game.
4. If Jessica chooses to buy more motor vehicle insurance this year than she bought last year, then Jessica has probably decided that:
 - a. the benefits of more motor vehicle insurance are greater than the costs.**
 - b. more motor vehicle 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.
5. The expression 'there is no such thing as a free lunch' means:
 - a. free lunches are a scam but cannot be avoided.
 - b. scarce resources are rare and therefore expensive.
 - c. individuals, but not society, suffer from a lack of resources.
 - d. resources used for one purpose could have been used for another purpose.**
6. Which of the following is typically true?
 - a. Correct choices have no costs.
 - b. People do not respond to incentives.
 - c. Voluntary trade between a willing buyer and a seller must cause winners and losers.
 - d. People's choices have consequences for the future.**
7. Some people choose to stop attending high school before completing NCEA Level 3. What is the 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 cost to the government of the Youth Guarantee scheme for that individual.

8. One consequence of scarcity is that:
- a. there is full employment of resources.
 - b. the production of goods and services is constant.
 - c. people have to make choices among alternatives.**
 - d. products which are plentiful have relatively high prices.
9. Which would be considered a human resource?
- a. Office building.
 - b. Factory worker.**
 - c. Phone book.
 - d. Electricity.
10. The first three steps of economic decision making are to:
- a. draw a conclusion, construct a model and make a generalisation.
 - b. identify assumptions, make a policy and evaluate the policy.
 - c. gather facts, form a theory and conduct a simulation.
 - d. define the problem, list alternatives and state goals.**

Theme 2

11. Which is most likely to improve a person's chances of getting a job?
- a. Supplying a neat and accurate application.**
 - b. Preparing a résumé (CV) only if an employer requests one.
 - c. Avoiding classified job advertisements in newspapers.
 - d. Dressing for an interview in a manner that is provocative.
12. 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.**
13. 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 this job?**
 - d. What is your date of birth/age?
14. 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.
15. Human capital consists of:
- a. stocks and bonds.
 - b. knowledge and skills.**
 - c. plant and equipment.
 - d. savings and investments.
16. Which will result from an increase in the demand for software programmers?
- a. A decrease in the price of software.
 - b. A decrease in the supply of software.
 - c. An increase in the wage of software programmers.**
 - d. An increase in unemployed software programmers.

17. *Statistics New Zealand* statistics reveal that the fastest-growing jobs over the last 10 years are among workers with which level of education?
- a. **A completed tertiary qualification.**
 - b. High school qualifications only.
 - c. No qualifications at all.
 - d. Work experience in a related occupation.
18. What is the difference between gross and net pay?
- a. Net pay is gross pay minus savings.
 - b. Gross pay is net pay minus savings.
 - c. Gross pay is net pay minus deductions.
 - d. **Net pay is gross pay minus deductions.**
19. Emily works full-time at a computer company. Who pays the Accident Compensation Corporation (ACC) levies on Emily's wages?
- a. Emily only.
 - b. Her employer only.
 - c. **Emily and her employer.**
 - d. The government.
20. An employee works for 40 hours per week at \$20 per hour. The deductions per week are \$50 in income taxes, \$20 in student loan repayments and \$30 in Kiwisaver contributions. What is the net pay for the week?
- a. **\$700**
 - b. \$730
 - c. \$750
 - d. \$800

Theme 3

21. 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.
22. Charlie opens a savings account and deposits \$500. If the savings account has a fixed annual interest rate of 5%, and he makes no additional deposits or withdrawals, what amount will Charlie have in his savings account at the end of two years?
- a. Exactly \$505.
 - b. Exactly \$550.
 - c. Less than \$550.
 - d. **More than \$550.**
23. 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 favour by earning interest on interest.**

24. About how many years would it take for \$1000 to become \$2000 if \$1000 is deposited in a savings account with an interest rate of 7.2%?
- a. 7.2
 - b. 10.0**
 - c. 14.4
 - d. 20.0
25. When making an investment, 'market price risk' refers to which possibility?
- a. The difficulty of converting one's investment into cash.
 - b. The value of the investment could decrease over time.**
 - c. The inability to get any money back from the investment.
 - d. The interest earned might be greater than the rate of inflation.
26. *Liquidity* risk is highest for which type of investment?
- a. Real estate.**
 - b. Mutual fund.
 - c. Savings account.
 - d. Individual stocks.
27. 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.
28. How do you calculate the real rate of return on an investment?
- a. Subtract the rate of inflation from the nominal rate of return.**
 - b. Subtract the nominal rate of return from the rate of inflation.
 - c. Subtract the nominal rate of return from the annual rate of return.
 - d. Subtract the annual rate of return from the nominal rate of return.
29. Common stock provides the shareholder with:
- a. ownership in a company.**
 - b. a set interest rate per year.
 - c. guaranteed annual dividends.
 - d. insured protection on investment.
30. What are the three most important criteria to consider when investing?
- a. Size, insurance, taxes.
 - b. Leverage, margins, credit.
 - c. Risk, rate of return, liquidity.**
 - d. Collateral, access to accounts, dividends.

Theme 4

31. One advantage of credit is that it can help people:
- a. sell assets.
 - b. immediately increase their net worth.
 - c. reduce risk when investing in stocks.
 - d. buy a good or service today and pay for it later.**
32. 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.

33. 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, capacity.**
 - c. Length of loan, credibility, commissions.
 - d. Occupation, connections, income sources.
34. What does a credit reporting agency (such as Veda Advantage in New Zealand) do?
- a. Extend credit to qualified buyers.
 - b. Provide advice on how to use credit.
 - c. Track the bill-paying habits of consumers.**
 - d. Send warnings to people in credit trouble.
35. If a borrower chooses to pay back a loan over a longer period of time, the monthly payment is:
- a. lower and the interest paid is higher.**
 - b. higher and the interest paid is higher.
 - c. lower and the interest paid is lower.
 - d. higher and the interest paid is lower.
36. What is the relationship between the interest rate charged to an individual and a person's risk of non-payment of a loan?
- a. A relationship exists, but it can be either direct or indirect.
 - b. The lower the risk of non-payment, the higher the interest rate.
 - c. The higher the risk of non-payment, the higher the interest rate.**
 - d. No relationship exists between interest rate and risk of non-payment.
37. The best indicator of the cost of a loan is the:
- a. amount of down payment.
 - b. annual percentage interest rate.**
 - c. number of payments.
 - d. monthly payment.
38. A thief takes your credit card. You report the card missing as soon as you realise it is missing, but the thief has already run up \$2000 in bills. How much of the \$2000 are you responsible for?
- a. Your liability is limited to \$50.
 - b. Your liability depends on whether the unauthorised card user is caught.
 - c. You are not liable for any of the \$2000 because you reported the card stolen within a reasonable time.**
 - d. You are liable for the entire \$2000 because the card was issued in your name.
39. A company calls you and offers an investment opportunity with very high returns. All you have to do is recruit some of your friends who will also invest and soon your cheques will start rolling in. This is a description of which type of investment fraud?
- a. Identity theft.
 - b. A loan scam.
 - c. A credit repair scam.
 - d. A pyramid scheme.**
40. Which type of financial institution typically charges the highest interest rates for loans?
- a. Credit unions.
 - b. Commercial banks.
 - c. Foreign-owned banks.
 - d. Personal finance companies.**

Theme 5

41. Disposable income is the money that is:
- a. deducted from your pay cheque.
 - b. budgeted for variable expenses.
 - c. spent or saved after deductions.**
 - d. saved and invested each month.
42. A positive net worth means that:
- a. income is less than saving.
 - b. assets are less than liabilities.
 - c. income is greater than saving.
 - d. assets are greater than liabilities.**
43. '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 do not have as income.
44. Using a debit card to purchase a good is most similar to using a:
- a. loan.
 - b. cheque.**
 - c. credit card.
 - d. money market account.
45. This is Marie's cheque account register:

Cheque number	Date	Item description	Deposit	Withdrawal	Balance
	14 May 2003	Beginning balance			\$500.00
500	15 May 2003	Century Auto Parts		\$100.00	
	31 May 2003	Pay cheque	\$200.00		
501	2 June 2003	Best Clothes			

If Marie writes a cheque for \$50 at Best Clothes, what is her new balance?

- a. \$450
 - b. \$500
 - c. \$550**
 - d. \$600
46. Which type of insurance protects a person from loss from lawsuits?
- a. Liability.**
 - b. Casualty.
 - c. Term life.
 - d. Accident.

47. Which is the best description of third party property damage coverage in a motor vehicle insurance policy?

- a. It provides income when the policyholder is unable to work after an accident.
- b. It covers the cost of damage to a motor vehicle as a result of fire, theft or storms.
- c. It covers only the cost of property damage to others caused by the policyholder.**
- d. It provides for the repair and replacement of the policyholder's motor vehicle if it is damaged in an accident.

48. Suzy backs her car into a metal fence, causing \$500 of damage to her car. Suzy has a motor vehicle insurance policy with a \$200 excess. To get her car fixed, how much will her motor vehicle insurance company pay?

- a. \$0
- b. \$200
- c. \$300**
- d. \$500

49. Which is the best description of comprehensive coverage in a motor vehicle insurance policy?

- a. It provides income when the policyholder is unable to work after an accident.
- b. It covers only the cost of damage to a motor vehicle as a result of fire, theft or storms.
- c. It covers only the cost of property damage to others caused by the policyholder.
- d. It covers the cost of damage to a motor vehicle as a result of fire, theft or storms, and the cost of property damage to others caused by the policyholder.**

50. A whole-of-life insurance policy offers protection:

- a. for income when the policyholder is unable to work.
- b. during the lifetime of the insured and builds cash value.**
- c. for a specified period of time and does not build cash value.
- d. that is based on the policyholder following a healthy lifestyle.

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