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Economics Knowledge, Attitudes and Experience of Student Teachers in Scotland

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There is a move away from teaching Economics as a separate subject in Scotland. It is now mainly taught within Business Management courses in upper secondary school and is embedded within several subject areas in both primary and early secondary curricula, a move that is in step with broader curricular aims to break down artificial barriers among subjects. This writing discusses the need for clearly situated teaching and learning of economics, provided by teachers who have sufficient background knowledge to devise effective contexts for learning, whether or not it is taught as a discrete subject. The results of a survey of student teachers' levels of economic literacy are analysed and recommendations made for the preparation of teachers to deal effectively with embedded approaches to teaching about economics.

Introduction: the current situation for the teaching of economics in Scotland

Young people require to be supported in developing understanding of a range of economic issues that they will encounter both personally and socially.

It is vital that individuals are empowered to cope with the everyday economics of earning, consuming, borrowing and saving in a world that is increasingly economically complex. The ordinary citizen in Europe today needs to understand about interest rates, loans, credit and debit cards, share-holding, pension schemes, public and private funding arrangements, and so on. Those who fail to understand are disempowered, and may find themselves financially disadvantaged. (Hutchings *et al.*, 2002:1)

Despite being known as the birthplace of modern economics thanks to Adam Smith, the father of modern economics and author in 1776 of the famous and influential work *The Wealth of Nations* (Smith, 1991), the teaching of Economics as a discrete subject in Scottish schools is diminishing. In secondary schools the subject is now rarely offered as an option for study, with other subjects such as Modern Studies, Business Management, programmes for Personal and Social Education, and Religious and Moral Education addressing some of the traditional areas of study in Economics. This decline has been accelerated by a shift of emphasis within business studies programmes. In recent years business studies departments in secondary schools have offered separate courses in the subject areas of Office Administration, Accounting and Economics. New courses in Business Management have been developed which comprise elements from all three of the former topics. The economics element in Business Management now places a stronger emphasis on business-related aspects and less on the theoretical and statistical analyses previously taught in schools. Some of the teachers who were qualified to teach Economics

were located in social subjects departments and tended to concentrate on more social and political aspects affecting economic concepts. This route to the study of Economics in schools has virtually disappeared. In practice the reality has been, and still is, that only a few pupils have the opportunity to study economic concepts and applications as part of their programmes of study. The Standard course, available in years 3 and 4 of secondary education, was rarely offered. Some pupils in S5 and S6 (years 5 and 6 of secondary education) opted for Economics at Higher Level. Currently Business Management is available at Intermediate I and II as well as Higher (levels of the newer Higher Still awards), so it is still only taken by those pupils who opt into the subject, although it is proving to be a popular option and in some cases work on the Intermediate levels has been introduced with younger pupils than S5 in some schools¹.

The Faculty of Education at Glasgow University still offers a teaching qualification in Economics within its one year Professional Graduate Diploma in Education (PGDE) but this is as a second subject only and it is becoming increasingly difficult to locate school experience placements, even for the very small number who take up the course, because very few schools are offering Economics as an option choice to their students.

For the purposes of a general education that addresses preparation for the world of work, young people require sufficient economics education to ensure their economic socialisation. This refers to the level of understanding and development required to operate in the economic world. Teachers' levels of economic awareness should be sufficient to sustain their pupils' economic socialisation. Roland-Levy (2002) refers to this level of awareness as "naïve economics", the economics of non-specialists'. This should be a minimum requirement.

In primary and early secondary stages, it could be argued that many facets of economic awareness are embedded in the wider curriculum. Aspects of money and its use can be found in the Mathematics curriculum dealing with personal finance and further elements can be seen in Personal and Social Education. Issues such as the management of resources, dealing with scarcity and recycling for environmental concerns can be identified within Environmental Education. General aspects of business economics can be involved in projects within Enterprise Education as can a wide range of practical and personal economic issues relating to a work environment. Economic roles and responsibilities in the community can be addressed through Citizenship Education. In the first and second years of secondary school, most students would study Home Economics. The subject does include some economic education in relation to home and personal finance as the name implies but would generally be considered as one of the places where aspects of economic awareness are embedded in the wider curriculum. Although these and other aspects of economics can be identified in several curriculum areas in Scotland, this means their being embedded in wider contexts and addressed through guidelines rather than detailed prescription. The extent to which these economics aspects are given emphasis depends entirely on the background of knowledge and understanding of the teachers devising the contexts for learning. This in turn depends on teachers having had access to, and awareness of, economic concepts in their own studies or general background of experience. This approach could be satisfactory if it were not for concerns about the general lack of economic literacy of teachers who have not had the opportunity to study Economics or to develop sufficient economic awareness for themselves.

Since there is an expectation that Education for Work² will be addressed across the curriculum, there is a consequent need for the provision of support for all Scottish teachers in economic awareness and understanding. This should be part of both initial teacher education for student teachers and continuing professional development for serving teachers. If funding cannot be obtained for this from the Scottish Executive Education Department (SEED), this would be a worthy area for support from the generous grants which are being made to education by Scottish entrepreneurs. This would benefit school pupils indirectly but significantly. In fact SEED have confirmed their commitment to supporting teachers in work-related learning in their review of the impact of the most recent document on Enterprise Education entitled *Determined to Succeed* (SEED, 2004).

Different approaches to teaching about economics

There are examples of efforts to raise standards of economic literacy in other countries that provide interesting ideas and models of practice and two are offered here. There has been a Campaign for Economic Literacy in the USA, organised by the National Council for Economic Education (NCEE, 2002), the results of which are now being used to promote awareness-raising and learning activities. The Council supports economics education in schools and provides a broad range of very supportive resources for the teaching of economics. This is a good example of an effective awareness-raising campaign and the resources available are of high quality. Care should be exercised however by Scottish teachers to recognise the differences in the economic contexts and indeed cultures of the USA and the UK and the different curriculum approaches adopted. The campaign is organised by teachers who are trained in, and focussed on, economic education and it is only in more recent times that NCEE members have been locating economic literacy along with social and civic educational requirements. Generally the approach is more narrowly focussed on matters relating to personal finance, consumer action and free market economics. There is an interesting approach to promoting economic literacy to be found in a resource produced for Irish school students called the Economic Literacy Activity Pack (Kawano, 2002) which provides a course of study on some basic aspects of economics with an emphasis on the economic knowledge necessary for both national and international development. Economic concepts are explored in this resource but the contexts are more inclusive of other areas of the curriculum and have a strong values element running through the examples selected for the student activities. This kind of material would not be unfamiliar to some Scottish teachers developing enterprise themes within values and religious education settings. Many of the charitable and development agencies based in the UK have developed resource packs for schools that support the teaching of economic literacy and awareness within these interconnected dimensions.

The research study on economic background and literacy

It was decided to survey the economics background and to try to gauge the level of economic literacy of a group of student teachers studying in the Faculty of Education of the University of Glasgow as a forerunner to a planned larger study of serving teachers' economic knowledge and awareness. The Faculty is one of seven within universities in Scotland that provide teacher education programmes and student teachers are prepared there to enter an all graduate teaching profession within the Scottish education system.

All school education in Scotland is overseen by the Scottish Executive Education Department (SEED) in a system that is distinct from those in other parts of the UK. All programmes for student teachers are accredited by the General Teaching Council for Scotland (GTCS) which is the professional body that regulates and controls the standards of the profession in Scotland. The phrase 'teacher education' is used in preference to that of 'teacher training' because of a strong emphasis on students' developing professional identities that are self-reflective and critically analytical and an intention to avoid mechanistic or purely skills-based approaches that may lead to technicist attitudes to the processes of learning and teaching.

A survey of student teachers

The writer decided to seek information about the economic backgrounds of student teachers and designed a survey that would indicate how much exposure they had had to economics education, whether this varied with background factors and to test how they would perform on a recognised survey of economic literacy. The survey consisted of a questionnaire designed in two parts. The first part sought information on the students' backgrounds and levels of involvement with economics in school and beyond, and their perceived awareness of, and personal interest in, economic matters. The second part of the questionnaire was designed to test whether the students would be able to answer questions on common topics within economics thus giving some indication of the level of their general economic literacy. The on-line version of the National Council for Economic Education's survey used to 'test your economic literacy' was thought to be ideal for this purpose. NCEE was contacted and permission sought and received to make use of the survey in this way. The questions had to be amended to suit the economic context in Scotland but the basic knowledge being tested was considered entirely suitable for this small-scale survey. The Faculty of Education adheres to principles set out by the University of Glasgow for the ethical conduct of research and so the survey was presented to and approved by the Faculty's Ethics Committee. The questions used in the questionnaire can be seen in the totals report in Appendix 1.

Part one of the survey consisted of questions on four areas of the respondents' backgrounds. The first asked about age, gender, the programme being studied in the Faculty and the year of study if not on a one-year programme. The second sought evidence of economic activity through employment by asking if the respondents were currently employed while studying, and if so the nature of the employment, and if they had been employed on another career before study, and if so the type of career. The third area asked about economics education background, namely whether economics had been studied at school, either as a separate subject or as part of another subject, or if economics had formed part of any previous degree level study. The fourth area contained rather more subjective questions but was designed in that way to seek the respondents' personally perceived levels of interest in economic issues and on how they would describe their own levels of competence in dealing with personal finance.

Part Two of the survey contained twenty multiple choice questions based on those used in the NCEE on-line survey with the contexts adapted where necessary. The topics addressed in this survey include supply and demand, business production, money, rates and inflation, personal income, economics and the consumer, government and trade, price comparison, international trade, price ceilings, determinants of production, rental

agreements, cost/benefit analysis, government expenditure and investing. There were four choices for each answer including a 'Don't know' option to allow participants to answer quickly and not agonise over questions where they may have spent time trying to work out an answer due to not having enough knowledge to make an informed selection.

On completion of the questionnaires, of which 220 were returned, collation and recording of results was assisted by a package for the Mackintosh computer named Macsurvey (Compstat, 1994). This package enabled survey totals reports to be compiled as well as crosstab analyses based on different subject questions which provided insight into underlying connections across the responses to different questions. The questions that sought a sentence or comment were analysed manually by listing and collating responses.

Results of the questionnaire

The totals report of the results of the questionnaire can be seen in Appendix 1.

The following are general observations that can be made as a result of Part One of the questionnaire. More than half of the sample of 220 was in the age range 20 to 24. This is typical for the later years of the four-year programmes of Bachelor of Education (BEd), Bachelor of Education with Music (BEd Mus) and Bachelor of Technological Education (BTech Ed) that students often start at age 17, and also for the Postgraduate Certificate in Education (PGCE) secondary and primary, as these students have already completed a three- or four-year degree. 22.4% were aged 30 or over reflecting a trend for mature students entering teacher education programmes. More than three quarters of the sample were female (76.8%) which reflects a long established trend in Scotland, repeated elsewhere in the UK, where there is increasing feminisation of the teaching workforce. Almost half of the sample was in the BEd programme which is numerically the largest teacher education programme in the Faculty. 32.7% were in year 4 of a four-year degree and 35% in a one-year programme, so 67.5% of the respondents were only a few months away from finishing their studies and moving to probationer teaching posts.

In relation to employment background it was discovered that 58.6% were in employment while studying. This is not unexpected as most students have to fund their own upkeep while studying since the cessation of government grants to support study, although 80.8% of those employed while studying were in the under-20 age group, so the greatest proportion of young students found it necessary to work. It may be more accepted by under-20s that working while studying is the done thing because they have had no other expectation, unlike many of the more mature students may have had from previous days when grants were available. The types of employment were fairly standard with most in the service/hospitality industries (52.3%) and sales (37.1%) and the rest in administrative work (7.6%) or trades, either skilled or unskilled (3.0%). Slightly more than half (55%) had another career before studying, which implies a significant number of mature students choosing to change careers and join the teaching profession. These previous careers were mostly in the service sector (33.3%), trades/industry (20.2%), sales (15.2%), business/administration (12.1%), finance/insurance (11.1%) and 8.1% coming from academic/research work.

There is very little evidence of the study of economics as a separate subject while in school with only 4.5% indicating a course of study. Only 6.8% had come across economics as part of other subjects namely Business Management at various levels (54.8% of this

sub-group), Accounts (19.4%) and Modern Studies (16.1%). (Modern Studies is a subject in the school curriculum in Scotland that deals with contemporary aspects of social studies). Only 6.8% had had any experience of economics in a former degree programme and of these only three respondents mentioned pure economics. All of the others were related modules and units within degree studies in other subjects.

Questions 10 and 11 asked the respondents about their perception of their economics interest and abilities. More than half (52.7%) claimed to have no interest in economic issues as they arise in current affairs such as the budget or the state of the national economy, and the biggest proportion of those not interested was in the under-25 age range. 39.5% indicated some interest but only 7.7% claimed to be strongly interested. This proportion of student teachers showing disinterest in economic concerns is in interesting juxtaposition to the numbers having to work while studying as a matter of economic necessity, although Question 11 indicates that 43.2% considered themselves to have average levels of ability in managing their personal finances. Only 10.5% felt that their ability was high, while a total of 25% admitted to little or poor ability.

In Part Two of the questionnaire there was a survey section of 20 questions on economic issues, based on an NCEE survey as already described. The results are again indicated in Appendix 1 and are investigated here question by question indicating the proportion of correct responses and whether the respondents' belonging to any of the categories identified in Part One appeared to influence the level of success in correctly answering the Part Two questions.

Question 1 (Competition and supply and demand)

Only 33.6% got the correct answer although the further 54.5% who selected option B, the most frequently chosen response, were half correct in agreeing that competition would lower prices but incorrect about lowering quality. Scotland has an increasing number of fast-food restaurants and there are several in the vicinity of the Faculty but the quality is not generally perceived to be particularly high, possibly influencing thinking about the effects of competition in this particular context. Significantly, above the average proportion of correct responses came from the over-45s (66.7%), from those employed while studying (58.1%), with a career before studying (56.8%) or with degree-level economics study (53.3%)

Question 2 (Producer of a new product)

96.8% knew this to be an entrepreneur. Everyone aged 25 or above got this one right. The answer to this question seems to be common knowledge and not dependant upon background or experience of economics. Entrepreneurs in Scotland currently have a high media profile, particularly the small group of entrepreneurs who are currently funding educational initiatives connected to entrepreneurship and enterprise education in schools. Student teachers should be aware of this and therefore could be expected to respond correctly.

Question 3 (The impact of a bank interest rate rise)

67.3% gave the correct answer to this item on the topic of Money, Rates and Inflation. Most correct answers (90.5%) came from 35-39 year-olds, those who studied economics at school (90.0%) or who had economics in a degree (93.3%). The level of correct response is disappointing here as most of these students would have come across interest rates calculations in school level mathematics if not within their personal finances.

Question 4 (Personal income)

This item had a 98.6 % correct response rate. Clearly, whether anything is known about personal income from other sources, it is realised that most people depend upon a wage or salary to a greater extent than other potential sources of financial income.

Question 5 (The impact of changes in gross domestic product)

This was poorly answered with only a 39.8% correct response rate. 35-39 year-olds performed better than average on this question (66.7%), students with economics in a degree (66.7%) and those with a high perceived ability in economic matters (60.9%) supporting better rates of correct answers. This topic is not tackled in school outside economics or related classes and since it is not required for basic personal finance matters is likely only to be considered by specialists or those with an interest in economic affairs, although arguably all teachers should be aware of its importance to national economic matters.

Question 6 (Price comparison and its impact on buying habits)

This item had a high correct response rate of 86.8%. Background and economic experience had little impact on the responses here with only PGCE (Secondary) doing slightly better with 93.7% correct responses.

Question 7 (The effect of limiting trade between countries)

The correct response rate here was 88.2%. Male respondents did better than average with 92.2% but 100% of year 3 students and 100% of those with a high interest in following economic matters got the right answer.

Question 8 (The effect of a price ceiling on supply)

This item used a maximum on council rates as an example and only 55% correctly identified the outcome of fewer apartments being available to rent. The 40-45 year-old age group was the most successful (81.8%) with males (74.5%) and those with degrees in economics (73.3%) doing much better than the average. Those with a career before studying and having studied economics in school did fairly well with 70.7% and 70.0% correct responses respectively so all other respondents did very poorly on this question to pull down the average so significantly. A better overall response could reasonably have been expected for this question given the first-hand knowledge that so many students have with rented accommodation in Glasgow but clearly factors impacting on availability are not highly significant to these respondents.

Question 9 (The determinants of production)

The correct response rate was 69.5%. Age seems to be a factor here as 81.8% of 40-45 year-olds and 100% of over-45s succeeded. A degree in economics (86.7%) and having done economics in school (80.0%) were significant but other categories did much less well in this topic which is perhaps not of much appeal to those with little interest in or knowledge of economic matters.

Question 10 (International trade)

67.3% got the correct answer to this item. There was no pattern to the more successful than average groups who got this one right with 25-29 year-olds (81.5%) and over-45s (100%) both doing well. B Ed Music students were also successful on this question with 86.7% correct.

Question 11 (Resources used in production)

60.5% got the right answer with the 40-45 age group 100% correct and those with a perceived high ability managing 83.0%.

Question 12 (Supply and demand)

This item related economics to the consumer and asked about the likely impact on price of a limit on supply. 78.6% got the right answer with the over-40s managing 100% correct. Well above average numbers of correct answers were also achieved by those with economics in a degree (93.3%) and those with a high level of interest in economic matters (94.1%).

Question 13 (The role of the stock market in our economy)

Only 56.4% were able to answer correctly. The strongest responses were from PGCE (Primary) and those with a high interest in economics with 75.0% and 76.5% respectively. It is surprising that those with qualifications or perceived high ability in economics didn't do better because economics classes are the only place where the stock market is likely to be explained in the school curriculum.

Question 14 (Economics relating to the consumer)

This item asked who benefits from a rental arrangement and the correct answer was achieved by 62.7%, with those with a degree being right 80.8% of the time and a high proportion correct (87.8%) from those with perceived high ability.

Question 15 (Purchasing decisions based on cost/benefit analysis)

83.6% of respondents got the right answer and there was little significant deviation from this level of response.

Question 16 (Those likely to benefit from inflation)

There was a poor response to this question with only 44.5% managing to get the right answer. Those with economics in a degree had the much higher right answer rate of 86.7% while those with high levels of interest in economics managed 82.4%.

Question 17 (Government products and services)

Only 50.0% selected the right answer. Considerably better results came from the 40-45 age group who managed 81.8% and those who have economics in a degree with 80.0%.

Question 18 (Government expenditure deficits or surpluses)

The correct answer was selected by only 55.9%. This is an area that would generally be expected to require some specialist input in school or particular interest in budgetary matters but the highest level of correct response was again from 40-45 year-olds at 100%. The next nearest successful group was those with a high perceived ability at 78.3%.

Question 19 (Aspects of production)

This item requires awareness of the value to industry of research and development. 74% were able to answer correctly with the best performance rates (90.0%) among those who had studied economics in school. All other groups were close to, or just below, the overall response rate.

Question 20 (The function of money)

This item was different from all of the others by asking for identification of the one wrong statement in the list within the general area of Money, Rates and Inflation. Only 27% managed to select the correct answer but it is difficult to gauge the economic

significance of the poor response since the item was in the first instance a test of whether the respondents had read the question correctly. Also being the last question of a fairly lengthy survey it may not have received sufficient attention to offset the change of question style. The best rate of correct results (44.1%) was found in the group who had studied economics within a subject in school and, in keeping with the anomalous style of the question, this is the only instance where this group did any better than average on a question.

Viewing the Part Two results from the perspective of the Part One questions and responses the following observations can be made. The older students were more successful in the economics survey with the 35s and over doing significantly better on most questions. Males did significantly better on 11 of the 20 questions with females only significantly outperforming males on the last question which was the only one to use a negative aspect. The one-year PGCE students did better overall with the year of study for the other programmes having little significance. Being employed while studying generally made little significant difference to responses apart from PGCE (Secondary) who did a little better on all questions, but having had a career before studying did have some positive impact on all questions. Having studied economics as a subject in school corresponded in most cases with getting right answers but the number in this category is rather too small to make significant observations and economics within other subjects at school has not helped at all. In fact these latter respondents had less than average right answers in every question except Question 20, the only one to be posed negatively. Having economics as part of a degree, however, made a significant difference to most of the questions. Those who expressed strong interest in current affairs in economics did well in several questions that were otherwise poorly answered and high or fairly high perceived level of ability also corresponded to strong correct responses in those same poorly answered questions.

The twenty questions in Part Two of the survey, relating to economic contexts, could be categorised under the four broad headings of Personal Finance (Questions 3, 4, 8 and 20), Government or National Economic Policy (Questions 5, 7, 9, 17 and 18), Business Related Economics (Questions 3, 12, 13, 16 and 19) and Economic Issues for Consumers (Questions 1, 6, 10, 11, 14 and 15). These categories were considered to try to gauge if any of them were handled any better or worse by the sample of student teachers. In fact, within each of the four categories, the levels of percentage response rate were widely spread across the questions so that there was none of these four group categories that could be said to have been dealt with any better or worse than the others. Even within Personal Finance, where general knowledge and practical experience may have been expected to improve comparative response rates, the percentages of correct responses ranged from 27% to 99%.

Conclusions

If teachers in primary or secondary schools wish to teach economic literacy and raise economic awareness among their pupils, provided they possess such literacy and awareness themselves, they can address the concepts through many aspects of the curriculum. It has already been indicated where this might be done through rather obviously connected curricular areas but other means may also be used to explore economic concepts in schools in some less obviously related curricular areas. An interesting study has been made by Michael Watts (2003), exploring a range of literature, which provides examples of economic concepts in a variety of contexts. It is shown that, through the study of literature, and with the help of teachers who can make the relevant

connections for pupils, the impact of economic factors can be powerfully illustrated. It is this cross-curricular and embedded approach to economics teaching that is being favoured in the curriculum in Scotland. One of the aims of the new curriculum that is currently being developed in Scotland³ is to consider learning outcomes across curricular areas in order to ease the rigid subject demarcations currently present, particularly in the secondary sector (SEED, 2002). The broad aims of this curriculum are to support young people in becoming successful learners, confident individuals, responsible citizens and effective contributors. This will require the expertise of teachers who can deal with such broad aims across curricular areas regardless of their subject specialism and will make all teachers responsible for embedding cross-curricular themes. The work-related purposes of the curriculum, specified within Enterprise Education, but in effect present in all curricular areas, will need to be addressed by all teachers. There is a danger that we assume that aspects of the curriculum are embedded without being sure that teachers have the necessary background and awareness to be able to devise contexts for learning that do actually give sufficient emphasis to the required outcomes. Embedded aspects such as enterprise education, entrepreneurship education and education for work can be expected to be better understood and more creatively managed by teachers who have some background of economic awareness (Fagan, 2006). The study discussed in this writing exposes a significant lack of awareness of economic contexts and dearth of economic literacy among the student teachers questioned. There is a clear need for the inclusion of economic awareness in all teacher education programmes, perhaps most usefully related to enterprise education courses along with discussion of the importance of emphasising the economic purposes of general education (Winch, 2000). This could make a difference for those teachers who are yet to qualify but something also needs to be done to support serving teachers. CPD opportunities could be provided as part of the current broadening of access to such development for all teachers in Scotland. It would make good sense to include economic literacy in the programmes being devised to support the delivery of the current enterprise education initiative of *Determined to Succeed* (SEED, 2002). Serious consideration of the breadth of economic knowledge and skills necessary to set realistic contexts for learning in cross-curricular or embedded approaches is necessary. Teachers and student teachers require the support of the teacher education institutions in acquiring this background and exercising the professional judgement required to apply it effectively in support of economic literacy.

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Notes

1. For an explanation of the courses and levels of Scottish Qualifications and the nomenclature for school years, see www.scotland.gov.uk/Topics/Education/School.
2. Education for Work is the phrase used for enterprise education in the title of the curriculum document issued in 1999 on education/industry links (see SCCC, 1999).
3. A Curriculum for Excellence (ACE) is the new curriculum currently being developed in Scotland. See www.acurriculumforexcellencescotland.gov.uk/index.asp.

Appendix 1*Totals Report for Questionnaire: Part One*

1 Age	Totals	%	6 Career before programme	Totals	%
A Under 20	26	11.9	A Yes		
B 20-24	117	53.4	B No	99	45.0
C 25-29	27	12.3		121	55.0
D 30-34	14	6.4	7 Economics as school subject		
E 35-39	21	9.6	A Yes	10	4.5
F 40-45	11	5.0	B No	210	95.5
G Over 45	3	1.4			
			8 Economics within school subject		
2 Gender			A Yes	34	15.5
A Female	169	76.8	B No	186	84.5
B Male	51	23.2			
			9 Economics in degree		
3 Programme in Faculty			A Yes	15	6.8
A B Tech Ed	24	10.9	B No	205	93.2
B B Ed Mus	15	6.8			
C MA Theol	0	0.0	10 Follow economic issues		
D B Ed	103	46.8	A Yes with interest	17	7.7
E PG SEC	48	21.8	B Yes some interest	87	39.5
F PG PRI	30	13.6	C No not interested	116	52.7
4 Year of Study			11 Perceived level of ability in personal finance		
A 1	27	12.3	A High	23	10.5
B 2	24	10.9	B Quite high	47	21.4
C 3	20	9.1	C Good	95	43.2
D 4	72	32.7	D A little	23	10.5
E N/A	77	35.0	E Poor	32	14.5
5 Employed while studying					
A Yes	129	58.6			
B No	91	41.4			

Part Two

- 1 A large increase in the number of fast food restaurants in a community is most likely to result in:
- A Lower prices and higher quality
 - B Lower prices and lower quality
 - C Higher prices and higher quality
 - D Don't know
- 74 got right answer A (33.6%)*
- 2 A person who starts a business to produce a new product is known as:
- A A manager
 - B A bureaucrat
 - C An entrepreneur
 - D Don't know
- 213 got right answer C (96.8%)*
- 3 An increase from 5% to 8% in the interest rates charged by banks would most likely encourage:
- A Businesses to invest
 - B People to purchase housing
 - C People to save money
 - D Don't know
- 148 got right answer C (67.3%)*
- 4 For most people, the largest portion of their personal income comes from:
- A Wages and salaries from their jobs
 - B Interest from stocks and shares they own
 - C Rent paid to them from property they own
 - D Don't know
- 217 got the right answer A (98.6%)*
- 5 If the gross domestic product of the United Kingdom has increased, but the production of goods has remained the same, then the production of services has:
- A Increased
 - B Decreased
 - C Remained the same
 - D Don't know
- 86 got the right answer A (39.1%)*
- 6 If the price of beef doubled and the price of poultry stayed the same, people would most likely buy:
- A More poultry and less beef
 - B Less poultry and more beef
 - C The same amount of poultry and beef
 - D Don't know
- 191 got the right answer A (86.8%)*
- 7 If the United Kingdom stopped importing new cars from Country X, who would be most likely to benefit?
- A Car manufacturers in Country X
 - B Consumers in the United Kingdom
 - C Car manufacturers in the United Kingdom
 - D Don't know
- 194 got the right answer C (88.2%)*
- 8 If your Council sets a maximum amount that owners can charge in rent for their properties, what is the most likely result?
- A There will be more apartments available than people want to rent
 - B There will be fewer apartments available than people want to rent
 - C The number of apartments available will be equal to the number of people that want to rent
 - D Don't know
- 121 got the right answer B (55.0%)*
- 9 In the United Kingdom, who determines what goods and services should be produced?
- A Producers and Government
 - B Consumers and government
 - C Producers, consumers and government
 - D Don't know
- 153 got the right answer C (69.5%)*

- 10 Mexico grows fruit and vegetables and Argentina produces beef. If Mexico voluntarily trades fruit and vegetables in exchange for Argentinean beef,
A Both Mexico and Argentina benefit from the trade
B Both Mexico and Argentina lose from the trade
C Mexico benefits and Argentina loses from the trade
D Don't know *148 got the right answer A (67.3%)*
- 11 The resources used in the production of goods and services are limited, so society must:
A Make choices about how to use resources
B Try to obtain additional resources
C Reduce their uses of resources
D Don't know *133 got the right answer A (60.5%)*
- 12 The manufacturers of XYZ winter sportswear have their manufacturing plants running night and day, but they are unable to produce enough sportswear to satisfy demand. If XYZ manufacturers cannot increase production and demand continues to increase, the price of XYZ sportswear will:
A Increase
B Decrease
C Stay the same
D Don't know *173 got the right answer A (78.6%)*
- 13 The stock market is an example of an institution within our economy that exists to help people achieve their economic goals. The existence of this institution:
A Results in an increase in the price of stocks
B Brings people who want to buy stocks together with those who want to sell stocks.
C Helps predict stock earnings
D Don't know *124 got the right answer B (56.4%)*
- 14 When a person rents an apartment, who benefits from the transaction?
A Only the person renting the apartment
B Only the landlord
C Both the person renting the apartment and the landlord
D Don't know *138 got the right answer C (62.7%)*
- 15 When deciding which of two items to purchase, one should always:
A Choose the item that costs less
B Choose the item with the greatest benefits
C Choose an item after comparing the costs and benefits of both items
D Don't know *184 got the right answer C (83.6%)*
- 16 Which of the following are most likely to be helped by inflation?
A People living on a fixed income
B Banks that loaned money at a fixed rate of interest
C People who borrowed money at a fixed rate of interest
D Don't know *98 got the right answer C (44.5%)*
- 17 When governments supply products and services, these products and services usually benefit:
A More than one person at a time whether they have paid for it or not
B Only the people who pay for these products and services
C Business at the expense of consumers.
D Don't know *110 got the right answer A (50.0%)*
- 18 When the governments expenditures for a year are greater than its revenue for that year, the difference is known as:
A The national debt
B A budget deficit
C A budget surplus
D Don't know *123 got the right answer B (55.9%)*

- 19 Which of the following would be most likely to accelerate innovation in the computer industry?
- A Placing a tax on all new inventions in the computer industry
 - B Increasing government regulation of the computer industry
 - C Investing in more research and development in the computer industry
 - D Don't know
- 162 got the right answer C (73.6%)
- 20 Which one of the following statements about the function of money is wrong?
- A Money makes it easier to save
 - B Money makes trading goods and services easier
 - C Money holds its value well in times of inflation
 - D Don't know
- 59 got the right answer C (26.8%)

References

- Compstat, (1994) *Macsurvey: A Survey Analysis Programme for the Mackintosh*. Compstat Software.
- De Rooy, J. (1995) *Economic Literacy: What Everyone Needs to Know*. New York: Three Rivers Press.
- Fagan, C. (2006) Three Es for teachers: Economics, enterprise and entrepreneurship. *Teacher Development* 10 (3), 275-291.
- Hutchings, M., Fulop, M. and Van den Dries, A. (2002) Introduction. In M. Hutchings, M. Fulop and A. Van den Fries (eds.) *Young People's Understanding of Economic Issues in Europe*. Stoke-on-Trent: Trentham Books.
- Kawano, E. (2002) *Economic Literacy Activity Pack*. Ireland: Debt and Development Coalition. <www.debtireland.org/resources/economic-literacy/intro.htm> [Accessed 23 January 2004].
- NCEE (2002) *Campaign for Economic Literacy*. National Council on Economic Education. See <www.ncee.net/cel>.
- Roland-Levy, C. (2002) Economic socialisation: How does one develop an understanding of the economic world? In M. Hutchings, M. Fulop and A. Van den Fries (eds.) *Young People's Understanding of Economic Issues in Europe*. Stoke-on-Trent: Trentham Books.
- SCCC (1999) *Education for Work. Education Industry Links in Scotland: A National Framework*. Dundee: SCCC.
- SEED (2002) *Determined to Succeed: A Review of Enterprise in Education*. Edinburgh: The Stationery Office Bookshop.
- Smith, A. (1991) *An Enquiry into the Nature and Causes of the Wealth of Nations* (Everyman Library). Originally published in 1776. New York: Alfred A Knopf.
- Watts, M. (ed.) (2003) *The Literary Book of Economics, Including Readings from Literature and Drama on Economic Concepts, Issues and Themes*. Delaware: ISI Books.
- Winch, C. (2002) The Economic Aims of Education. *Journal of Philosophy of Education* 36 (1), 101-117.)