

Part-time undergraduate study in civil engineering - students from the workplace

Davies, J.W.

Published version deposited in CURVE December 2009

Original citation & hyperlink:

Davies, J.W. (2008) Part-time undergraduate study in civil engineering - students from the workplace. *Engineering Education - Journal of the Higher Education Academy Engineering Subject Centre*, volume 3 (1): 21-29.

<http://www.engsc.ac.uk/journal/index.php/ee>

Copyright © and Moral Rights are retained by the author(s) and/ or other copyright owners. A copy can be downloaded for personal non-commercial research or study, without prior permission or charge. This item cannot be reproduced or quoted extensively from without first obtaining permission in writing from the copyright holder(s). The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the copyright holders.

CURVE is the Institutional Repository for Coventry University

<http://curve.coventry.ac.uk/open>

Part-time undergraduate study in civil engineering – students from the workplace

John Davies

Abstract

This is an investigation of part-time undergraduate degree study in civil engineering based at Coventry University. It aimed to answer the following four questions:

- 1. How do the experiences of part-time students of civil engineering compare with those for other subject areas reported in the literature?**
- 2. What is the difference in performance of part-time and full-time students?**
- 3. What are the reasons for the differences?**
- 4. What should we learn from this?**

The study incorporated three elements: scrutiny of data on student numbers, age and performance; a questionnaire to allow comparison of factual information on the circumstances of part-time and full-time students; and interviews with 21 part-time students (in groups of four or five) and three part-time graduates (individually).

The interviews gave insights into the experiences of part-time students of civil engineering and allowed comparison with those in other subject areas. A study of performance by part-time and full-time students for four academic years between 2002 and 2006 revealed that part-time students outperformed full-time students in terms of grade of honours and marks in modules (6.4 percentage marks on average in every module). The reasons for the better performance of part-time students were considered and it was concluded that the greatest advantage comes from the skills, attitudes, and motivation that part-time students have developed in the workplace. Recommendations are made in terms of better support for part-time students and ways of benefiting from the potential contributions they can make.

Introduction

Part-time undergraduate civil engineering degree students typically work in the industry as senior technicians and study by day-release. It is common for their fees to be paid by their employers and for their salary to cover the time they are at university (though this is not true for all). Employers see sponsorship of part-time study as a way of attracting new staff and having more graduates on the payroll.

It is widely assumed that part-time students, overall, outperform full-time students and, whilst not abundant, the existing research confirms this.

The overall aim of this study was to explore the performance, circumstances and attitudes of part-time undergraduate degree students in civil engineering, using those at Coventry University as an example, in order to explain differences in performance with full-time students and identify lessons to be learnt.

Literature review

Schuller et al. (1997) studied the motivation of part-time students in a range of subject areas and also the support they received from their employers. They found that student commitment and satisfaction were high but that employer support was variable.

Brennan et al. (1999) surveyed 6000 part-time students, including engineering students. The results suggested that there were substantial personal economic benefits to be gained from engaging in part-time study, with the majority of respondents able to obtain better jobs and salaries at the end of their courses than at the beginning.

Many recent studies of part-time students (in any subject) focus on the particular problems and challenges of part-time study without much consideration of the advantages (for example, Kember and Leung (2004), Leung and Kember (2005) and Yum, Kember and Siaw (2006), studying part-time students in a variety of

subject areas in Hong Kong, and Nicholl and Timmins (2005) studying nursing students in the UK). Kember and Leung (2004) studied the employment of 'coping mechanisms' by part-time students. Three coping mechanisms were identified: sacrifice, support and negotiation of arrangements, operating in four domains: self, family, work and social life. 'The notion of sacrifice was linked to the idea that something "has to give" in one's life for one's studies to be successful. Support referred to the notion that other people actively help the individual achieve study goals. Negotiation refers to the need to accommodate different goals, and find a balance between potentially competing demands.' (Kember and Leung, 2004: p346.)

The conclusions begin 'Part-time study can be very demanding. The adults who adopt this mode of study commonly have a full life with work and family responsibilities and an established social circle even before they enrol in a part-time course. Study is undertaken as an additional commitment.' (Kember and Leung, 2004: p354.) The analysis of the data showed that, of the three coping mechanisms (sacrifice, support and negotiation of arrangements), sacrifice was the most commonly adopted. 'Most young adults have full lives so taking on part-time study means that something else has to be given up. It is not normally possible to compromise on work and there is often limited leeway in sacrificing time with, and commitments to, immediate family members. Part-time study therefore normally involves some sacrifice of personal pleasure and a curtailment of social life.' (Kember and Leung, 2004: p354.)

Concentrating on policy aspects, Fuller (2001) considers the growing importance of higher level qualifications for adults in the UK and highlights statistical trends in their take up of qualifications, particularly as a result of taking part-time courses in higher education. In-depth interviews with ten mature graduates (eight part-time) are reported. 'They felt that through developing their knowledge and proving their willingness to learn, they would improve their chances of retaining employment and would put themselves in a stronger position to take advantage of opportunities created in some sectors of the economy.' (Fuller, 2001: p243.)

Davies (1999) focuses on the opportunities of part-time study. 'Although in the wider debate there are references to part-time education –

there is a voice – it is largely a "negative voice": part-time education is usually a "half-empty" rather than a "half-full" version of the "real thing" which is full-time.' (Davies, 1999: p144.) Davies presents a study of policy documents and statistics. The conclusions include: 'An end to the segregation of full-time and part-time courses and students, which exists in most universities, would enrich the experience of all; a greater recognition and value accorded to the learning that goes on outside the university would contribute to a better understanding of the relationship between higher education and society.' (Davies, 1999: p154.)

Structure of study

It was felt that the circumstances of part-time students in a subject like civil engineering (where there is the potential for study material to be closely related to work experience) would be distinct from those of many of the students reported in the literature and that therefore a separate study of civil engineering students would be valuable. Such a study should include a comparison of the experiences of civil engineering students with those of others. As has been stated, it is commonly assumed that part-time students in civil engineering perform better than full-time students. It was felt therefore that the study should also investigate this, identify the main reasons for the difference and identify lessons that should be learnt.

Therefore four main research questions were identified for the study.

1. How do the experiences of part-time students of civil engineering compare with those for other subject areas reported in the literature?
2. What is the difference in performance of part-time and full-time civil engineering students?
3. What are the reasons for the differences?
4. What should we learn from this?

The study consisted of three main elements:

1. Analysis of data from Coventry University's student data system on student numbers, age and performance at the level of the whole cohort.
2. A questionnaire to allow comparison of factual information on the circumstances of part-time and full-time students.
3. Interviews with part-time students and graduates.

These elements are described below with some justification of the approaches and a summary of the findings.

Data on student numbers, age and performance

Table 1 gives numbers of students that were studying full-time and part-time on undergraduate degree courses in civil engineering at Coventry University in 2005/06. This is a combination of students on courses accredited at Chartered Engineer level (CEng) and at Incorporated Engineer level (IEng). Because of the intake of part-time students at level 2 (entering, in particular, with Higher National Certificate qualifications) there is a contrast between the proportions of full-time and part-time students at level 1 compared with levels 2 and 3. Comparative numbers in level 2 and level 3 depend on the progress of large (or small) part-time cohorts through the years of the course. In this context 'level 2' is used for academic year 2 of a three-year Bachelor's degree. It is not referred to as 'Year 2' since part-time students take six years to complete a full Bachelor's programme.

In 2005/06 the mean ages of students at levels 2 and 3 (in the July before entering the relevant level) were 23.4 years for full-time students and 26.4 for part-time students. A greater proportion of part-time students (compared with full-time students) were over 30, but the difference was not particularly great. At levels 2 and 3 in 2005/06, ten out of 73 full-time students (14%) were over 30, compared with 16 out of 81 part-time students (20%).

Because of the relatively small part-time numbers at level 1, this study concentrated on levels 2 and 3. Performance was considered in terms of final degree classification and average mark in level 2 modules across four academic years from 2002/03 to 2005/06 inclusive.

Considering grade of honours achieved, part-time civil engineering students at Coventry outperformed full-time students over the four

academic years between 2002/03 and 2005/06. Whereas 67% of full-time CEng graduates obtained 'good' degrees (1st or 2.1) the figure was considerably higher for part-time students at 96%. These figures are simply intended to provide a comparison between full-time and part-time performance. The numbers of part-time IEng students graduating in these years were not sufficient to make similar comparisons for IEng students.

Performance in individual modules was also studied: specifically all modules at level 2, in four academic years between 2005/06, 2004/05, 2003/04 and 2002/03. The reason for considering modules only at level 2 was simply that part-time numbers on level 3 modules in the early years of this period were low. Numbers of part-time students at level 1 have been comparatively very low throughout. Modules are delivered to part-time and full-time students together. All aspects of module delivery, including coursework submission requirements, are identical for the two groups of students.

In level 2 modules the mean of all the part-time average marks was found to be 6.4 percentage marks higher than the mean for all full-time average marks. The difference in performance varies for different subjects. From the data considered, part-time students are less likely to out-perform full-time students in more mathematical subjects. There is also a variation between CEng and IEng students. IEng part-time students are less likely than CEng part-time students to perform better than their full-time counterparts, especially in mathematical subjects.

Questionnaire to compare circumstances of part-time and full-time students

The questionnaire was structured, closed and numerical. There was no attempt to include less structured, open and word-based questions. This was because it was felt that more open questions would be best handled via interviews.

Table 1. Numbers of full-time and part-time students on undergraduate degree courses in civil engineering at Coventry University in 2005/06

	Total	FT	PT
Level 1	66	59 (89%)	7 (11%)
Levels 2 and 3	154	73 (47%)	81 (53%)

The questionnaire is reproduced as Appendix 1. The questionnaires were distributed and collected in classes to level 2 and level 3 students. There were 79 responses: 42 from part-time students and 37 from full-time students (**Q1** on the questionnaire).

In the sample, significantly fewer part-time students than full-time students had A-level maths (**Q2**). Seven out of the 42 part-time students surveyed using the questionnaire had A-level maths (17%). The number of full-time students with A-level maths (or equivalent) on entry was 22 out of 32 who responded (69%).

Part-time students responded that they were in paid employment for an average of 35.5 hours per week, compared with 9.1 for full-time students (**Q3**). Part-time students responded that they studied for a mean of 10.7 hours per week, compared with 18.9 for full-time students (**Q4**). Since part-time students study half the number of modules studied by full-time students in a particular year, these are comparable figures, though part-time students would appear to have less time *available* for studying, purely on the basis of work commitments.

The problems of making time available for study are not helped by the long distances part-time students travelled to attend classes (**Q5** and **Q6**). The average one-way distance in the survey was 45 miles (average travelling time 1.2 hours) compared with 7 miles for full-time students (average travelling time 0.4 hours).

Q7, 'Roughly how many Civil Engineering students at Coventry University would you describe as 'friends' (or 'colleagues')?', gave mean responses of 5.1 for part-time, and 9.8 for full-time. **Q8**, 'Roughly how many students of any other subject (outside Civil Engineering) at Coventry University would you describe as 'friends' (or 'colleagues')?', gave 0.8 for part-time and 12.6 for full-time. Each student would have defined 'friend' or 'colleague' differently and so the response to these two

questions is likely to be highly subjective. But it is noticeable that 35 out of 42 part-time students (83%) stated that they had no 'friends' at the University outside the course, whereas just one out of 37 full-time students (3%) made this response. Only two part-time students (5%) stated that they had more friends at the University outside civil engineering than they had on the course, whereas 23 out of 37 full-time students (62%) either had more friends outside civil engineering than they had on the course or had the same number.

Both part-time and full-time students were positive about a career in civil engineering. Responses to **Q9** are in Table 2.

Interviews with part-time students and graduates

Five group interviews (group size four or five) with 21 part-time students and individual interviews with three part-time graduates were carried out. It was decided at an early stage that the interviews with graduates would be individual interviews rather than group interviews. This was for two reasons. The first was that it would be logistically difficult to get numbers of working professionals, geographically dispersed, together at the same time in the same place. The second reason was that it was felt that each graduate would have a different story to tell and that individual interviews would provide the best opportunity to explore this. It was, however, decided that the interviews with the students would be conducted as group interviews to encourage interaction between interviewees. The interviews were carried out by the lead researcher who was known to the students as a lecturer.

Cohen et al. (2000: p287) consider that the advantages of group interviews 'include the potential for discussions to develop, thus yielding a wide range of responses.' They make the point that 'group interviews of children might also be less intimidating for them than individual interviews.' This obviously does

Table 2. Responses to 'How likely is it that you will pursue (or continue to pursue) a career in civil engineering after you graduate – for a few years at least?'

	Very likely	Quite likely	Quite unlikely	Very unlikely
Part-time (42)	86% (36)	12% (5)	2% (1)	-
Full-time (37)	73% (27)	24% (9)	3% (1)	-

not have a *direct* relevance to this study, but could perhaps be paraphrased to suggest that if students are interviewed by one of their lecturers then group interviews (compared with individual interviews) should reduce any possible pressure on the students to say what they think the lecturer wants to hear. Certainly many of the responses had a frankness that suggested that no such pressure was felt.

The main interview questions are given in Appendix 2. Robson (2002: p270) classifies different types of interviews as structured, semi-structured and unstructured. In semi-structured interviews, interviewers 'have their shopping list of topics and want to get responses to them, but they have considerable freedom in the sequencing of questions, in their exact wording, and in the amount of attention given to different topics.' Within his definitions, the approach in this study can be seen as being at the relatively structured end of 'semi-structured.'

Only part-time students and graduates were interviewed. However, a follow-on study (Davies, 2008) has included full-time students.

Responses are analysed under the following headings, some of which relate to specific interview questions and some to more than one question.

- Routes to part-time education
- Links between study and work
- Attitude to study
- Problems with mathematics
- Regret about missing full-time education
- Interaction with full-time students
- Impact of part-time study on life

Routes to part-time education

It was clear from the interview responses that many part-time students had arrived in higher education by a route that was not straightforward and where the complications along that route were often more to do with work than education. It is noteworthy that nearly all of the interviewees initially chose civil engineering as a *job* and not as an academic subject. That points to a very significant difference in focus and motivation for part-time students, compared with a typical full-time student. The individual stories of part-time students and graduates showed clearly the high levels of *commitment* developed by these interviewees during their (sometimes arduous) journeys to degree studies.

Links between study and work

Analysis of comments on links between study and work suggests that this is potentially of significant advantage to part-time students.

- ... *I could see that the work I was doing at university was directly related to what I was then doing the next day in the workplace for real ...*

Graduate 1

However there was some debate about the *certainty* of this linkage, with some students much less confident that such direct links could be claimed.

- *I think if I'm honest a lot of the stuff that you do learn at university I'm not sure how much you do use in industry. In my job I might use some of the structures, some of the geotechnics ...*

Student, Group 2

There was general agreement that working in civil engineering provided them with knowledge that they could use within the course, and also that work colleagues provided them with a resource that supported their study.

- *You've also got an invaluable resource at work. I've got structural engineers, geotechnology, hydraulics, loads of people, materials, got loads of people I can ask and I often do, to help out, explain things, so that side of being a part-time student is great.*

Student, Group 2

Attitude to study

Analysis of the comments on part-time students' attitude to study points to an area of particular importance which may give part-time students their greatest advantage. They adopt a 'workplace attitude' to study. This often includes a clearer understanding of the career benefits of gaining a degree and therefore a correlation between study ambitions and work ambitions. Since employers are generally paying fees (and often the time spent at university), success in studying generates employer esteem. Their motivation in studying becomes comparable to that of the workplace. They apply themselves to study for the same reasons that they apply themselves at work: to further their ambitions and improve their own, and their families', lives.

- *Part-timers are not seeing it as training to get a job – they've got a job. They're training to progress and improve their way of life. I hate*

bringing it back to money but usually that's what ... [agreement]

- That's what drives most people: 'I want to better myself ...'

- ... to improve your quality of life

Students, Group 3

Being in professional employment provides significant motivational stimulus to part-time students, though the nature of this differs between individuals. The key is that they are, in every respect, *students from the workplace*.

Problems with mathematics

Some of the interviewees described problems with mathematics on the course, though this was usually related to pure maths content, not mathematical aspects of engineering subjects. It was clear that much of the concern about the pure maths content resulted from the fact that they could not see a practical application of the material, rather than that they didn't understand it.

Regret about missing full-time education

A balance of feelings emerged. Most could see that they had missed a particular life experience: social life, meeting people and (the most cited) living away from home. For one or two it was a genuine regret, but most were content with the route they had taken.

But, in spite of the advantages in terms of potential academic performance, part-time study does not suit everyone. Two interviewees (out of 24) expressed definite regret about the choice of the part-time route.

- ... all the social life you miss out on, all the friends you make [as a full-time student], moving away from home. ... what have you gained from university [as a part-time student]? Just your degree. You haven't gained what full-timers gain.

Student, Group 4

Interaction with full-time students

The interviewees identified strongly with other part-time students and had very little interaction with full-time students. In principle, mixed groups of part-time and full-time students would be possible, in design projects for example, but it was clear from the interviews

that this would be unpopular with the part-time students if it were imposed.

Impact of part-time study on life

Comments on the impact of part-time study on life are considered in the next section.

Discussion

The discussion of the findings of the study is presented in the form of responses to the four research questions.

How do the experiences of part-time students of civil engineering compare with those for other subject areas reported in the literature?

The study by Kember and Leung (2004) of coping mechanisms concludes that because part-time students would find it hard to "borrow time" from their family or work commitments, part-time study 'normally involves some sacrifice of personal pleasure and a curtailment of social life.'

These aspects were strongly echoed by the civil engineering students interviewed in this study. They described competition with work for time, and how work must prevail.

- A job I used to have used to involve winter maintenance on out-of-hours call, and it made it especially difficult to plan when you could actually do the work you were expected to.

Student, Group 5

They made it clear also that family commitments squeeze the available time.

- It fills up your life, because I've got wife and kids, and a job, so with studying, especially coming up to Easter when all the coursework comes in, it's very hectic, and you put your life on hold.

Student, Group 3

Sacrifice of personal pleasure and a curtailment of social life were described frequently by the interviewees in a number of ways. It was an ever-present anxiety:

- It's quite hard, very demanding actually, it takes your social life up, and the thing I find is that it's always on your mind. You feel (that's the worse thing I think), you feel when you're not doing it, that you should be doing it.

Student, Group 1

The motivation of part-time students to improve their career opportunities identified by Schuller et al. (1997), Brennan et al. (1999) and Fuller (2001) is certainly shared by the civil engineering students interviewed in this study.

- I think it was probably the money that motivated me. One of the reasons I wanted to do a degree was because in the workplace I was quite frustrated because I was told you can't do this, you can't do that, until you've got your degree. Then you can start moving on to bigger and better things. So I was quite determined to prove a point.

Graduate 2

What is the difference in performance of part-time and full-time civil engineering students?

In summary, a comparison of performance by part-time and full-time students for four academic years between 2002/3 and 2005/6 has revealed that part-time students outperform full-time students. In this period 67% of full-time graduates on Chartered Engineer courses obtained 'good' degrees (1st or 2.1), whereas for part-time students the figure is considerably higher at 96%. In level 2 modules the mean of all the part-time average marks is 6.4 percentage marks higher than the mean for all full-time average marks.

What are the reasons for the differences?

From the student data and the questionnaire and interview responses an overall picture can be built up. The reasons for the better overall performance by part-time students are *not* found in entry qualifications, and certainly not in mathematical qualifications, since part-time students generally have lower qualifications. Age (maturity) *may* be a factor. Part-time students surveyed were older than full-time students by three years on average, though not all full-time students have come straight from school. Variety of life experience may also be a factor that gives part-time students an advantage in terms of developing focus and determination.

Some part-time students and graduates describe great benefits from being able to link the taught material to experience in the workplace, but this is rare for some other part-time students. Part-time students certainly tend to have high levels of commitment to their studies which arise partly from the fact that

most chose civil engineering as a *job* before they chose it as an academic subject. However, the consensus from the interviews is that the greatest advantage comes from the skills, attitudes and motivation that part-time students have developed in the workplace – from the fact that they are *students from the workplace*.

What should we learn from this?

Part-time students should be appreciated as a *resource*.

A good way of evaluating the effectiveness of education is to ask graduates some years later how useful their education has proved to be. With part-time students, and their capacity to relate the material they are taught to a practical context, we can effectively do that immediately. We can test our product, to a significant extent, without going outside our current student population. For these reasons *we must listen to part-time students*. Yet this requires conscious effort because part-time students, with their short and busy periods of attendance, tend not to be 'course reps', and also tend to cope with problems in their own way (as they would at work perhaps) rather than raise them with academic staff.

It is easy to see that full-time students have something to learn from part-time students – at the very least some knowledge of what it is like to work in civil engineering. Unfortunately contact between the two groups is limited. This is partly because of the structure of the course, with part-time and full-time students moving through the course at different rates and therefore never being in the same cohort for long. As has been pointed out, the interviewees identified strongly with other part-time students and had very little interaction with full-time students. The questionnaire reveals that they typically know few Coventry students outside civil engineering. In principle, mixed groups of part-time and full-time students would be possible, in design projects for example, but it is clear from the interviews that this would be unpopular with the part-time students if it were imposed. Approaches that might lead to greater interaction between the two groups would yield dividends, and an example of an initiative with this aim is described by Davis and Davies (2008).

Course teams must be careful to consider the particular needs of part-time students in course delivery. This study confirms that part-time

students of civil engineering, in common with those of other subjects, must make personal sacrifices to succeed in their studies. Also, problems in accessing facilities, such as the library, are mentioned by several interviewees. Another issue relates to coursework deadlines – there were several comments that lecturers do not give sufficient consideration to the time constraints experienced by part-time students.

Finally, course teams (and the students themselves) should fully appreciate the

important role played by part-time students' employers. The best of these have clearly helped several of these interviewees enormously by supporting and encouraging their studies. It seems probable that several interviewees (and presumably an even greater number of part-time students on the course as a whole) would not have entered degree studies, and perhaps not started on the route to becoming professionally-qualified civil engineers, without the encouragement of their employer. ■

References

- Brennan, J., Mills, J., Shah, T. and Woodley A. (1999) *Part-time students and employment: a report of a survey of students, graduates and diplomats*. Department for Education and Employment.
- Cohen, L., Manion, L. and Morrison, K. (2000) *Research methods in education*. (5th edition) RoutledgeFalmer: London, UK.
- Davies, J.W. (2008) The experience of part-time students in civil engineering compared with those of full-time students. *Engineering Education 2008 – International conference on innovation, good practice and research in engineering education*, 14-16 July 2008, Loughborough, UK.
- Davies, P. (1999) Half full, not half empty: a positive look at part-time higher education. *Higher Education Quarterly*, **53** (2), 141-155.
- Davis, T.J. and Davies, J.W. (2008) Using part-time students to enhance the student experience. *Engineering Education 2008 – International conference on innovation, good practice and research in engineering education*, 14-16 July 2008, Loughborough, UK.
- Fuller, A. (2001) Credentialism, adults and part-time higher education in the United Kingdom: an account of rising up take and some implications for policy. *Journal of Education Policy*, **16** (3), 233-248.
- Kember, D. and Leung, D.Y.P. (2004) Relationship between the employment of coping mechanisms and a sense of belonging for part-time students. *Educational Psychology*, **24** (3), 345-357.
- Leung, D.Y.P. and Kember, D. (2005) The influence of the part time study experience on the development of generic capabilities. *Journal of Further and Higher Education*, **29** (2), 91-101.
- Nicholl, H. and Timmins, F. (2005) Programme-related stressors among part-time undergraduate nursing students. *Journal of Advanced Nursing*, **50** (1), 93-100.
- Robson, C. (2002) *Real world research: a resource for social scientists and practitioner researchers*. (2nd edition) Blackwell: Oxford, UK.
- Schuller, T., Raffe, D. and Clark, I. (1997) Part-time higher education and the student-employer relationship. *Journal of Education and Work*, **10** (3), 225-236.
- Yum, J.C.K., Kember, D. and Siaw, I. (2005) Coping mechanisms of part-time students. *International Journal of Lifelong Education*, **24** (4), 303-317.

About the author

Dr John W. Davies MSc, MA, PhD, CEng, FICE, FHEA, Head of Built Environment, Coventry University, Priory Street, Coventry, CV1 5FB.
Tel: 024 7688 8095 Email: J.W.Davies@coventry.ac.uk

Appendix 1

Questionnaire to compare circumstances of part-time and full-time students

1. Are you full-time or part-time?
please tick: full-time part-time
2. What was your highest qualification in maths when you started the course?
3. How many hours a week (on average) are you in paid employment of any sort, during term time?
4. Outside classes, how many hours a week on average do you spend studying for the course (at this time of year – early March)?
5. How long does it take you to travel between where you live and the university (one way – average)?
6. How many miles is it (one way)?
7. Roughly how many Civil Engineering students at Coventry University would you describe as 'friends' (or 'colleagues')?
8. Roughly how many students of any other subject (outside Civil Engineering) at Coventry University would you describe as 'friends' (or 'colleagues')?
9. How likely is it that you will pursue (or continue to pursue) a career in civil engineering after you graduate – for a few years at least?
please tick: very likely quite likely quite unlikely very unlikely

Appendix 2

Interview questions for part-time students and graduates

1. How did you all come to study part-time?
2. How do you find it – personally and academically?
3. Do you find maths a problem?
4. If you'd been a full-time student do you think you'd have done as well, better, or not as well?
5. Do you ever regret not being a full-time student?
6. I've compared full-time and part-time students' results in level 2 modules for the last 3 years, and the average of the module averages for one group is 6% higher than the other group. Do you think it's full-time or part-time students who have the higher average?
7. What do you think are the reasons?
8. With part-time and full-time students taught together, do you think either group loses out in this arrangement? Is there anything realistically we could do to encourage more interaction, to allow the groups to learn more from each other? Can you learn anything from full-time students?
9. How do you find the overall arrangements at Coventry for part-time students?