INCLUSIVE, ACCESSIBLE, ARCHAEOLOGY
(HEFCE FDTL5)

Phase 4b

FIELD TRIALS AT SILCHESTER:

ARCHIVE REPORT

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LAYOUT OF THE REPORT

INTRODUCTION

This archive report provides a summary of the Phase 4b Field Trials at the University of Reading's Silchester training excavation for the 'Inclusive, Accessible, Archaeology' project, funded by the Higher Education Funding Council for England (HEFCE FDTL5) for developments in teaching and learning. The project is directed by Professor Roberta Gilchrist of the Department of Archaeology at the University of Reading in partnership with the School of Conservation Sciences at Bournemouth University and in collaboration with the Research Group for Inclusive Environments (School of Construction Management) at Reading. The Council for British Archaeology (CBA) is involved in the dissemination of the project's results and the project also has the active support of the HE Academy Subject Centre for History, Classics and Archaeology; the Institute of Field Archaeologists (IFA); Oxford Archaeology; and English Heritage.

PROJECT SUMMARY

A. GOALS

The project aims to address the dual issues of disability and transferable skills in the teaching of archaeological fieldwork. It will:

- Increase awareness of disability issues in archaeology.
- Improve the integration of disability in fieldwork teaching.
- Improve all students' awareness of their development of transferable skills for the transition to employability through participating in archaeological fieldwork.

B. PROJECT OUTCOMES

- The integration of disabled students into archaeological fieldwork and related activities according to, and consistent with, the mandatory legal requirements of disability legislation.
- A change of emphasis from 'disability' to 'ability': rather than excluding or categorising individuals, all students will be engaged actively in evaluating their own skills. This will be achieved by developing a generic self-evaluation tool kit suitable for use by all students being taught fieldwork in archaeology and other fieldwork related subjects.
- Dissemination of the results through published guidelines, websites, workshops and conference presentations carried out in

association with the project's professional stakeholders (the Institute of Field Archaeologists, the Council for British Archaeology, English Heritage, and Oxford Archaeology).

C. PROGRAMME OF WORK

- Phase 1 – Assessment (February – July 2005, 6 months):

Evaluate through questionnaires the issues surrounding, and current practices relating to, disability and archaeological fieldwork.

- Phase 2 – Characterisation (August – December 2005, 5 months):

Develop a generic method of assessing physical and cognitive abilities of disabled/non-disabled people to participate in archaeological fieldwork training.

- Phase 3 – Controlled Testing (January – June 2006, 6 months):

Test and refine the characterisation of archaeological field activities and environments through real-world tests in controlled laboratory conditions; produce pro-forma of self-evaluation tool kit.

- Phase 4 – Field Trials (July – October 2006, 4 months):

Assess suitability of controlled tests and generic method of evaluation through field trials on archaeological excavations.

- Phase 5a – Evaluation (November 2006 – January 2007, 3 months):

Refine the project's deliverables.

- Phase 5b – Wider Dissemination (February – April 2007, 3 months):

Wider dissemination of project results.

- Phase 6 – Continuation After Funding Ends (May 2007 on):

Integrate awareness of disability into archaeological fieldwork in training, employment, and the development of transferable skills in conjunction with archaeology subject providers and professional bodies.

D. MODELS OF DISABILITY

Disability has been described and understood through a number of different models which attempt to define the experience of being disabled.

THE MEDICAL MODEL

This considers a disabled person as ‘ill’, a subject for treatment and cure. It does not address the social, economic and environmental experience of a disabled person.

THE CHARITABLE MODEL

This sees a disabled person as a tragic individual. They are an object of pity that needs to be cared for and protected from the rigours of everyday life.

THE SOCIAL MODEL

This shifts the emphasis of considering that there is something ‘wrong’ with the disabled person to the view that disabled people are often excluded from participating in everyday activities because of the physical, social, economic and attitudinal ‘barriers’ created by society.

This model is behind the spirit of the recent disability and access legislation (Disability and Discrimination Acts 1995 and 2005, Special Educational Needs and Disability Act 2001) and forms the basis for the ethos of inclusiveness.

In reality, it is unlikely that it will be possible to provide environments or develop activities where everyone can do everything, and this will certainly be the case with some tasks undertaken in archaeology. People, both disabled and non-disabled, will have different levels of ability to undertake tasks. For some, restrictions in their ability may preclude them from full participation. However, the criteria used to establish whether a person can take part in an activity should always be based on their individual abilities, not simply whether they are a ‘disabled’ or ‘non-disabled’ person.

Adopting the social model also requires us to examine the nature of the activity and determine if it is *how* the activity takes place that precludes involvement, and to ask whether the process be altered to facilitate greater inclusion. The fact that it has always been done in a particular way is not the answer, especially if the procedure could be altered so

that the number of people that can be included in the activity would be increased.

To determine the extent to which disabled and non-disabled people can effectively participate in the activities associated with archaeology, it is necessary to determine their individual abilities to undertake the typical tasks that comprise the ‘archaeology experience’. The self-evaluation tool kit that the project is developing will, therefore, be for use by all disabled and non-disabled students. In using it, all students will be able to evaluate their own developing archaeological and transferable skills.

Such self-evaluation by all students will ensure that the opportunity of full participation and inclusion is based on an ‘ability to do’ which is the driving force behind most disability and access legislation.

I METHODOLOGY

A. DEVISING THE METHODOLOGY

The purpose of the Field Trials carried out on the Silchester training excavation was to test the self-evaluation tool kit under real archaeological fieldwork conditions. The development of the tool kit relates directly to four previous reports produced by the project:

- Phase 1 – *Disability and Archaeological Fieldwork* (Phillips & Gilchrist 2005):
    - From the results of a questionnaire survey of the Archaeology subject providers, the skills and techniques being taught on archaeological fieldwork training were established.
- Phase 2 – *A Characterisation of Archaeological Field Techniques by Physical and Cognitive Demands* (Embleton et al 2006):
    - This provides a detailed analysis of the physical and cognitive abilities required to perform the archaeological fieldwork tasks identified in the Phase 1 Report; each task may require a number of different abilities to be used at the same time.
    - The report also provides details of the learning outcomes and the various skills (archaeological and transferable) that both the subject providers and the students themselves consider are acquired by participating in archaeological fieldwork training; gaining these skills is an integral part of archaeological fieldwork training.
    - It should be emphasised that, in many ways, the characterisation document is a theoretical piece of work, as it is based on observing a small number of able-bodied individuals performing certain tasks.
    - This does not mean that individuals with particular disabilities may not be able to accomplish these tasks; the same task could be satisfactorily completed, and the subsequent learning outcomes achieved, with varying degrees of adjustment and it may be that in some cases no adjustment at all will be necessary.

- Phase 3 – *Controlled Testing: Archive Report* (Phillips et al 2006a):

    - The theory inherent in the Phase 2 Report needed to be tested under practical conditions with a variety of disabled and non-disabled subjects.
    - A series of everyday tasks was devised and tested to ensure that they replicated the actual archaeological activities.
    - From these, the pro forma of the self-evaluation tool kit was developed.

- Phase 4a – *Field Trials at East Holton: Archive Report* (Phillips et al 2006b):

    - Having developed the self-evaluation tool kit through a series of controlled tests, an earlier version of the draft document was tested on an actual archaeological training excavations.
    - The first of these Field Trials was held on Bournemouth University's excavation at East Holton, Dorset.

Phases 1 and 2 of the project provided the information from which the self-evaluation tool kit could be designed. Phases 3 and 4a provided contexts in which the tool kit could be developed.

B. THE PHASE 4b METHODOLOGY

The draft self-evaluation tool kit used on the Silchester excavations was divided into four parts:

PART 1 – SELF-EVALUATION OF ABILITIES

This was completed before participating in fieldwork training. It consisted of a series of questions about everyday activities designed to identify an individual's abilities in relation to particular archaeological tasks, transferable skills, and physical and cognitive abilities. Each question was divided into three parts (A, B, C). If an individual replied negatively to the first part of a question, the other parts would help to identify if the activity could be successfully done in another way.

PART 2 – ABILITIES AND TASKS: PRE-TESTING CHECKLIST

This was completed before participating in fieldwork training. Through comparison with the questions successfully answered in Part 1, the individual was given an idea of their 'potential' abilities to participate in particular archaeological activities, their transferable skills, and physical and cognitive abilities on an A, B, C scale.

PART 3 – ABILITIES AND TASKS: POST-TESTING CHECKLIST

This was completed after participating in fieldwork training. With this document the individual could evaluate their 'actual' abilities on an A, B, C scale and compare them to their 'potential' abilities identified in Part 2.

PART 4 – SELF-EVALUATION OF SKILLS

This was completed after participating in fieldwork training. With this document the participants could evaluate how well they had performed at particular tasks and their gaining of transferable skills.

DIFFERENCES FROM THE PHASE 3 AND 4a TOOL KIT

There were a number of important differences between the version of the self-evaluation used in Phases 3 and 4a, and the version used in Phase 4b. These differences arose from the experience of testing the draft tool kit, the feedback given by earlier participants in the project and the comments of the Project's Evaluators:

- The wording of some of the questions in the Part 1 document were clarified after the comments made by previous participants and on the advice of the project's evaluators, as were the nature of some of the everyday activities on the basis of the results of the Phase 3 controlled testing and the Phase 4a Field Trials.

- A major problem identified with the earlier version of the tool kit was that there was no mechanism for users to track the development of their abilities. The Part 2 and Part 3 documents were standardised with a corresponding A, B, C scale in each document for each task/ability. This would allow an individual to use the tool kit after subsequent episodes of archaeological fieldwork training and compare the results with previous self-evaluation.

- The Part 4 document was added to the tool kit after one of the project's evaluators pointed out that there is a fundamental difference between having the ability to do something and actually doing it well. As with the Part 3 document, this was designed to be used again after subsequent periods of fieldwork training so that users could track the development of their skills.

C. USING THE METHODOLOGY

1. THE SELF-EVALUATION TOOL KIT

The participants were asked to complete the Part 1 document (self-evaluation of abilities). From this information, the project team then completed the Part 2 document (pre-testing checklist). After they had completed their time on the training excavation, the participants were asked to complete the Part 3 and Part 4 documents in the light of their performance and experiences.

A. Part 1 Questionnaire:

This consisted of a series of questions about the ability to perform a number of everyday tasks that could be related to doing a particular archaeological activity, having a certain transferable skill or a physical or cognitive ability. For each numbered question there were three possible alternative questions that could be answered in declining order of difficulty (A, B, C). The subjects were instructed to attempt the 'A' question first and, if they answered 'yes', to move on to the next numbered question. If they answered 'no' to the 'A' question, they were instructed to move to the 'B' question and, if necessary, the 'C' question before moving on to the next numbered question (**Example 1**). To judge the ability to see colours and textures visual tests were included.

Example 1 A sample question from the Part 1 Questionnaire

	Question	**Y**	**N**
A	I can push a spade into the ground		B
B	I can push a sharp pole into the ground		C
C	I can push a garden trowel into the ground		

B. Part 2 Potential Abilities

Each of the questions in the Part 1 Questionnaire related to one or more specific archaeological task, transferable skill or physical/cognitive ability. If a subject answered 'yes' at any point in a numbered question (A, B or C), they were deemed to be potentially able to do that activity at a different level:

- A – can do this activity with no adjustments necessary
- B – can do this activity, but may need minor adjustments/assistance
- C – can do this activity, but may need substantial adjustments/ assistance.

The archaeological tasks listed in the Part 2 document were those that the subject providers teach and assess in archaeological fieldwork training (Phillips and Gilchrist 2005) and the transferable skills those that they deem students gain through participating in archaeological fieldwork (Embleton et al 2006). To these were added the physical and cognitive abilities that the project's 'Characterisation of Archaeological Field Activities' (ibid) had suggested were necessary to participate in archaeological fieldwork. The tasks and abilities in the Part 2 document are listed in **Table 1**.

Table 1 Archaeological tasks, transferable skills, and physical and cognitive abilities in the Part 2 document

- Site Records (all activities):
  - Comprehending site records
  - Completing site records – description
  - Completing site records – numerical data
  - Reading and understanding maps accurately
  - Reading and understanding plans
- Excavation:
  - Cutting turf
  - Lifting turf
  - Excavating – large tools (pick axe, mattock and draw hoe)
  - Excavating – light tools (trowelling)
  - Excavating – brushing
  - Excavating – secateurs
  - Clearing waste material – on a spade, by hand
  - Clearing waste material – in a wheelbarrow, in a bucket
  - Disposing of waste material – in a wheelbarrow, in a bucket
  - Disposing of waste material – empty wheelbarrow, empty bucket
  - Dry sieving
  - Using a sprayer
  - Discerning stratigraphy – tactile, vision, colour, texture
  - Opening and closing finds bags
  - Writing labels
- Planning:
  - Laying a tape measure
  - Reading a tape measure accurately
  - Seeing area to be planned
  - Handling and manipulating drawing frame
  - Drawing – ability, use graph paper

- Processing of Artefacts:
  - Handling finds
  - Washing finds
  - Sorting finds
  - Identifying finds – tactile, vision, colour, texture
  - Opening and closing finds bags
  - Marking finds
- Environmental Sampling:
  - Taking bulk samples
  - Wet sieving
  - Sorting samples
  - Sorting samples – tactile, vision, colour, texture
  - Opening and closing finds bags
  - Marking sample trays/boxes
- Surveying:
  - Laying a tape measure
  - Reading a tape measure accurately
  - Ranging poles – holding
  - Ranging poles – lining up
- Instrument Survey:
  - Measuring staff – holding
  - Measuring staff – extending
  - Level/Total Station – setting up tripod
  - Level/Total Station – attaching instrument to tripod
  - Level/Total Station – using visually
  - Level/Total Station – manual focussing
  - Level – reading measurements
  - Total Station – attaching prism to staff
  - Total Station – reading measurements on digital display
  - Total Station – hearing audible signals
  - Prismatic compass – using
  - Optical square –using
- Surface Survey:
  - Field walking/survey – traversing
  - Field walking – identifying material
  - Field walking – picking up material
  - Field survey – identifying surface features
  - Opening and closing finds bags
  - Writing labels
- Geophysical Survey:
  - Identifying walking line
  - Magnetometry – using instrument
  - Magnetometry – hearing audible signals
  - Resistivity – using instrument

- Carrying Equipment:
  - Carrying equipment on back
  - Carrying equipment in hands
- Physical Ability:
  - Climbing in and out of trenches
  - Climbing over upstanding features
  - Strength
  - Physical stamina
  - Squatting
  - Kneeling
  - Sitting
  - Sitting with legs pulled up to chest
  - Sitting with legs to one side
  - Lying down
- Cognitive Ability:
  - Vision – colour, texture, physical details, physical features, printed details, close and distant
  - Hearing
  - Touch
  - Balance
  - Spatial awareness
  - Hand/eye co-ordination
  - Comprehension – written material, drawings, verbal information
  - Organisation/categorisation
  - Short-, long-term memory
  - Recognition
  - Mental stamina
- Transferable Skills:
  - Communication – conveying, understanding information
  - Communication – at a distance
  - Independent working
  - Team working
  - Time management
  - Adapting to a new environment
  - Analysing qualitative data
  - Analysing quantitative data
  - Problem solving
  - Decision making
  - Social skills

C. Part 3 Actual Abilities:

The Part 3 document comprised exactly the same list as Part 2, as well as boxes for A, B, and C. Using this document, the participants could evaluate their abilities with the following scale:

- A – able to do this activity with no adjustments necessary
- B – able to do this activity, but may need minor adjustments/assistance
- C – able to do this activity, but may need substantial adjustments/ assistance.

This could then be compared with the Part 2 document and any future uses of the tool kit when participating in fieldwork training.

D. Part 4 Evaluation of Skills:

The Part 4 document listed the key archaeological and transferable skills to be gained through participation in fieldwork training, and a 7-point scale for self-evaluation:

1 – very low
2 – low
3 – below average
4 – average
5 – above average
6 – high
7 – very high
NA – Not Applicable

The archaeological and transferable skills included in the document are listed in **Table 2**.

Table 2 Key archaeological and transferable skills in the Part 4 document

1. Archaeological Skills

- Site Records (all activities):
  - Comprehending site records
  - Completing site records – descriptions
  - Completing site records – numerical data
  - Reading and understanding maps and plans accurately
  - Understanding of what is involved in compiling site records and the overall outcomes

- Excavation:
  - Cutting turf
  - Lifting turf
  - Excavating with large tools
  - Excavating with small tools
  - Discerning stratigraphy
  - Using a sprayer
  - Disposing of spoil
  - Understanding of what is involved in the process of excavation and the overall outcomes
- Planning:
  - Drawing an archaeological plan
  - Section drawing
  - Taking off-sets
  - Understanding of what is involved in the process of site planning and the overall outcomes
- Processing of Artefacts:
  - Washing artefacts
  - Sorting artefacts
  - Identifying artefacts
  - Understanding of what is involved in the processing of artefacts and the overall outcomes
- Environmental Sampling:
  - Flotation and wet sieving
  - Sorting material
  - Understanding of what is involved in the process of environmental sampling and the overall outcomes
- Surveying:
  - Using tape measures
  - Using ranging poles
  - Accurate recording of measurements
  - Understanding of what is involved in the process of surveying and the overall outcomes
- Instrument Survey:
  - Using a level
  - Using a Total Station
  - Using a prismatic compass
  - Using an optical square
  - Accurate recording of measurements
  - Understanding of what is involved in the process of instrument survey and the overall outcomes
- Surface Survey:
  - Field walking
  - Field survey
  - Understanding of what is involved in the process of surface survey and the overall outcomes

- Geophysical Survey:
  - Using a magnetometer
  - Using a resistance meter
  - Understanding of what is involved in the process of geophysical survey and the overall outcomes

2. Transferable Skills
- Communication
- Independent working
- Team working
- Time management
- Adapting to a new environment
- Problem solving
- Decision making
- Social skills
- Analysing qualitative data
- Analysing quantitative data
- Analysing digital data
- Physical stamina
- Mental stamina
- An appreciation of site Health and Safety
- Understanding of the importance and applications of transferable skills

2. SUPPLEMENTARY DATA COLLECTION

A. Tracking Participants

Each of the participants involved in the Field Trials was individually 'tracked' in order to understand how they were progressing during their time on the excavation. The tracking involved a simple 'tick-box' form with a 7-point scale for each category:

1 – very low
2 – low
3 – below average
4 – average
5 – above average
6 – high
7 – very high
NA – Not Applicable

The categories included on the tracking document are listed in **Table 3**.

Table 3 Categories on the participant tracking form

- Technical skills
- Analytical skills
- Inter-personal skills
- Understanding
- Attitude
- Confidence
- Enjoyment

The participants were asked to complete the tracking forms twice a week and also invited to make any comments on their progress during the fieldwork training. They were not allowed to look at any previous documents that they had completed. The purpose of this was to try and ensure that they would not record increasing ratings as the excavation progressed because they thought that they should be improving.

B. Complementary Data

To complement the data being provided by the participants involved in the Field Trials, information was also collected from the fieldwork supervisors. This involved two aspects of the data being gathered:

- Tracking forms completed twice a week
- The Part 4 document (Evaluation of Skills) when each participant had completed their time on the training excavation.

The purpose of this was to discover if the participants were under- or over-estimating their abilities and skills.

C. Interviews

The student participants were interviewed after they had completed their fieldwork training.

D. Outside Participants

Five outside participants who had been involved in the Phase 3 controlled testing were invited to attend the excavation for one or two days. These included individuals with disabilities not represented amongst the participants involved n the Field Trials. The objective was to see how these outside volunteers managed on an actual excavation and to investigate the use of a ‘buddy’ system, as one of the students had been asked to work alongside them. Their experiences on the site were observed and recorded and the ‘buddy’ was interviewed.

II THE SILCHESTER TRAINING EXCAVATION

The Archaeology Department at the University of Reading runs a training excavation for its students every summer at the Roman town site of Silchester (Calleva Atrebatum). Silchester is located in the north of Hampshire, roughly midway between the modern towns of Basingstoke and Reading. The excavation normally runs between the beginning of July and the middle of August: all single honours archaeology students are required to attend for 4 weeks and all joint honours students for two.

The excavation is a large open area and, although much of the this is level, there are some deeper features being excavated such as wells and large pits. As a training excavation it provides students with an experience of field archaeology in which a basic knowledge of archaeological field techniques and site recording methods are acquired. In the course of the training excavation they are expected to attain basic excavation, site recording and surveying skills; learn how to sort and categorise artefacts and ecofacts; participate in an environmental sampling programme and geophysical survey. They are also taught to take responsibility for the excavation and recording of their own area and learn to work as part of a team, under the guidance of a site supervisor, so that they can work towards a critical and objective analysis of their data and its interpretation. They are expected to participate fully in the working life of this large excavation, including camping at the excavation site, and being involved with all the domestic activities, day-to-day maintenance and communal cooking. This provides another context within which a number of transferable skills can be identified and developed.

The Silchester training excavation involves nearly all the key archaeological skills identified in the self-evaluation tool kit, as well as placing an emphasis on the transferable skills that are gained through participating in archaeological fieldwork. This was considered a suitable context in which the tool kit could be tested as it involved the two main factors on which the tool kit is based.

Views across the site at Silchester, the upright wooden planking is the shoring for a deep well

III THE SAMPLE OF PARTICIPANTS

Twenty volunteers were recruited for the Phase 4a Field Trials from amongst the students participating in the training excavation. These included disabled and non-disabled students (**Table 4**).

Table 4 Participants in the Phase 4a Field Trials

No	Name*	Age	Sex	Disability
1	Julian**	45-54	M	Heart Condition
2	Freddie	18-24	M	Asperger's Syndrome Dyslexia
3	Rachel	18-24	F	Hidden
4	Lesley	18-24	F	Dyslexia
5	Catherine	18-24	F	Hidden
6	Evelyn	18-24	F	Dyslexia Heart Condition
7	Sharon	18-24	F	Dyslexia
8	Margaret**	18-24	F	Dyspraxia Dyslexia
9	Sarah	18-24	F	SLD
10	Hannah	18-24	F	SLD
11	Geoff**	18-24	M	Non-Disabled
12	Angie	55-64	F	Non-Disabled
13	Linda	18-24	F	ME Claustrophobia
14	Steven	18-24	M	Non-Disabled
15	Bill	18-24	M	Dyslexia Hard of Hearing
16	Carol	18-24	F	Dyscalculia IBS
17	Neville	35-44	M	Mobility
18	Kevin	18-24	M	Heart Condition
19	Trevor	18-24	M	Dyslexia/Dyspraxia
20	Andrew**	18-24	M	Back Problems

*Individual names have been changed to preserve anonymity
**Also participated in the Phase 3 controlled testing

The five outside participants involved in the Phase 4a Field Trials are listed in **Table 5**. These had all been involved in the Phase 3 controlled testing.

Table 5 Outside participants in the Phase 4a Field Trials

No	Name*	Age	Sex	Disability
1	Joseph	55-64	M	Visual Impairment
2	James	35-44	M	Brain Tumour
3	Karen	25-34	F	Blind Diabetes
4	Martin	55-64	M	Visual Impairment
5	Ben	65-74	M	Wheelchair

*Individual names have been changed to preserve anonymity

IV LIMITATIONS TO THE FIELD TRIALS

There were a number of limitations to the Field Trials. These were due to scale and nature of the training excavation:

- Not all the participants in the Field Trials took part in every archaeological activity. The number of people working on the site, up to 170 at times, precluded some of the subjects participating in geophysical survey, environmental sampling, and the processing of finds. In the areas that the individuals worked on, they did not always carry out every excavation or surveying technique. This is normal for any excavation where not every individual has the opportunity to participate in every activity.

- Not all the archaeological activities listed in the self-evaluation tool kit were carried out on the site. The major tasks not represented were cutting and lifting turf, and surface survey.

- The fieldwork supervisors were not always able to provide a complete list of comparative data for the Part 4 document. This involved specialist activities such as geophysical survey, the processing of finds and environmental sampling.

- Not all the participants completed the field trials:

    - 7. Sharon (Dyslexia) – withdrew from the project
    - 9. Sarah (SLD) – was employed in dealing with members of the public visiting the site
    - 13. Linda (ME) – withdrew from field work after a few days due to illness, but was interviewed afterwards
    - 17. Neville (Mobility) – withdrew from field work before it started due to illness
    - 20. Andrew (Back Problems) – withdrew from the project.

- Not all the outside volunteers were able to participate in actual fieldwork:

    - 5. Ben (Wheelchair-user) – major site photography using a ‘cherry-picker’ was being carried out on the day of his visit and there were no excavation activities taking place.

- Despite these limitations, it was possible to give the draft self-evaluation tool kit a thorough field trial on the Silchester excavations.

V STATISTICAL COMPARISON OF THE PART 2 AND PART 3 DOCUMENTS

The full results of the statistical comparison can be found in **Appendix I**.

A. METHOD

The Part 2 document as completed by the subjects lists the key archaeological tasks that they should be potentially ‘able’ or ‘unable’ to do as derived from the answers given to the Part 1 questionnaire. The Part 3 document corresponds to the same set of key archaeological tasks. Depending whether the participants answered a particular question in Part 1 as A, B or C, they were considered to have different potential levels of ability:

- A – Able with no adjustments
- B – Able with minor adjustments
- C – Able with substantial adjustments
- N/A – Not applicable.

The Part 2 document was completed by the project team from the information provided by the participants. The Part 3 document was completed by the volunteers when they had completed their time on the Silchester excavation. The level of ability before performing the activities (Part 2) and the level of ability after performing them (Part 3) were compared using the Wilcoxon test. This is a nonparametric test that compares two paired groups. It calculates the difference between each set of pairs, and analyzes the differences. Each task was tested individually. The level of ability was ranked according to the following scale:

- 1 – Able with no adjustments
- 2 – Able with minor adjustments
- 3 – Able with substantial adjustments.

In cases where a participant had not undertaken a particular activity, this was categorised as ‘Not Applicable’. These responses were excluded from the analysis.

The Wilcoxon test first computes the differences between each set of pairs, and ranks the absolute values of the differences from low to high. It then totals the ranks of the differences where column A is higher (positive ranks) and totals the ranks where column B is higher (it calls these negative ranks). If the two totals of ranks are very different, the P

value will be small and the level of ability will be significantly different before (Part 2) and after (Part 3) performing a particular activity. The P value associated with the Wilcoxon test provides the answer to the question: 'If the median difference in the entire population is zero (ie the level of ability remains the same before and after performing the task), what is the chance that random sampling would result in a median as far from zero (or further) as observed between the Part 2 answer and the Part 3 answer. If the P value is small (less than 0.05, 95% confidence level), the hypothesis that the difference is a coincidence is rejected, and the conclusion drawn from the analysis is that the two sets of levels of ability have different medians. If the P value is large (more than 0.05), then the overall medians do not differ. This is not the same as saying that the rank averages are the same, but there is no compelling evidence that they are significantly different. A cross tabulation analysis was performed for each task to display the number of participants in each of the three levels of ability before and after performing the activities. The sample was composed of 15 disabled and non-disabled participants (**Table 6**).

Table 6 Disabled and non-disabled participants in the Phase 4b Field Trials

DISABILITY	NO. OF SUBJECTS
Dyslexia/Dyscalculia	6
Unseen Disability	4
Learning Difficulty	1
Asperger's Syndrome	1
Non-disabled	3
Total	15

Example 2 summarises the results for the activity 'comprehending site records' from the Part 2 document (potential ability) and the Part 3 document (actual ability). Having two identical sets of tasks, it was possible to make a statistical comparison between the categorical answers 'Able with no adjustments', 'Able with minor adjustments' and 'Able with substantial adjustments'. This was carried out by comparing the predicted data obtained in Part 2 with the data obtained during the fieldwork at Silchester in Part 3 across the whole sample (15 participants). The intention was to establish if the self-evaluation toolkit will predict the tasks an individual would be able to achieve without adjustments or assistance and the tasks that might cause them difficulties.

Example 2 Results for 'Comprehending site records'

	Able with no adjustments	Able with minor adjustments	Able with substantial adjustments	Not applicable
Able with no adjustments	10	3	1	0
Able with minor adjustments	1	0	0	0
Able with substantial adjustments	0	0	0	0
Not applicable	0	0	0	0

The Wilcoxon test was run comparing the results between Part 2 and Part 3. This test is designed for non-parametric data when the 2 variables to be compared (Task Ability Level in Part 2 and Task Ability Level in Part 3) are categorical and related. This means that the answers obtained for each task in Part 2 and Part 3 come from the same individuals. Each task was considered to be a variable. For two categorical variables, 16 combinations of the categories (answers) are possible. If the 'Not applicable' answers are extracted from the analysis (indicated in dark grey in **Example 2**), then the number of combinations will be 3 x 3 = 9 combinations.

The number in each cell corresponds to the number of participants. A perfect prediction of 'Task Ability Level' would be to find all the participants in the diagonal (top left to bottom right, indicated in mid grey). This would indicate that all the participants who were potentially able to do a specific task at a particular ability level, as indicated by the Part 2 document, were able to do it at the same ability level in the field trials as indicated by the Part 3 document. In **Example 2** there were 10 participants who were predicted to be able to do the task with no adjustments in the Part 2 document. The same number of participants was able to achieve this with no adjustments in the field trials as indicated in the Part 3 document.

The numbers recorded in the cells above and below the diagonal indicate the number of participants that gave different responses on the Part 2 and Part 3 documents. The number of participants above the diagonal correspond to people requiring additional adjustments or assistance that were not anticipated in the Part 2 document. In **Example 2**, three participants who were predicted to be able to do the task with no difficulties were only able to do so with minor adjustments or assistance during the actual fieldwork. One participant who was predicted to be able to do the task with no difficulties was only able to do so with substantial adjustments or assistance during the actual

fieldwork. The number of participants below the diagonal corresponds to the participants requiring fewer adjustments or less assistance than anticipated in the Part 2 document.

If the predictive model represented in Parts 1 and 2 of the self-evaluation tool kit was effective, then the results would show a majority of subjects recording the same level of ability for each task both before and after participating in archaeological fieldwork. For each subject falling 'out of the diagonal', the Wilcoxon test indicates if the differences between the average positive and negative ranks compensate each other. If this is the case, the probability of the test would be high (above the cut-off value 0.05, 95% confidence level). Any probability below the 0.05 value would show a lack of accuracy in predicting the ability level, either by overestimating the need for additional adjustments or assistance in order to perform a specific task (ie participants recorded below the diagonal) or by underestimating the necessity of extra arrangements (i.e. participants recorded above the diagonal).

For participants who recorded a different level of ability the corresponding disability code has been tabulated as shown below in **Example 3**.

Example 3 Tabulation of different levels of ability with corresponding disability codes

	No adj	**Minor adj**	**Sub adj**	**Not Applicable**
No adj		2D, 1UD	1D	
Minor adj	1A			
Sub adj				

CODE	**DISABILITY**	**NO. OF SUBJECTS**
D	Dyslexia/Dyscalculia	6
UD	Unseen Disability	4
LD	Learning Difficulties	1
A	Asperger's Syndrome	1
ND	Non-disabled	3
	Total	15

In the following section the results are given for activities with a P value of less than 0.20 (80% confidence level) and 0.05 (95% confidence level). This will allow for wider comparisons with the results of the controlled tests (Phase 3) and the other field Trials (Phases 4a and 4b).

B. RESULTS

Table 7 lists the activities where the ability level in the Part 2 document was over-estimated with a probability value of less than 0.20, a confidence level of over 80%, in comparison with the self-evaluation recorded in the Part 3 document. These tend to be mostly a variety of the archaeological activities, a couple of the cognitive abilities and physical stamina.

Table 7 Activities where the ability level was over-estimated with a confidence level of higher than 80%

- Archaeological activities:
  - Site records – numerical data P = 0.025
  - Manipulating planning frame P = 0.046
  - Drawing – use graph paper P = 0.063
  - Lay tape measure (planning) P = 0.083
  - See area to be planned P = 0.083
  - Comprehending site records P = 0.157
  - Excavation – large tools P = 0.157
  - Discerning stratigraphy – vision P = 0.157
  - Drawing – ability P = 0.157
  - Sorting environmental samples P = 0.157
  - Level – manual focussing P = 0.157
  - Total Station – readings on screen P = 0.157
  - Total Station – attach prism P = 0.157
  - Gradiometry – identify walking line P = 0.157
  - Resistivity – identify walking line P = 0.157
  - Level – set up tripod P = 0.180
- Physical abilities:
  - Physical stamina P = 0.157
- Cognitive abilities:
  - Hearing P = 0.083
  - Balance P = 0.157

Table 8 lists the activities where the ability level in the Part 2 document was under-estimated with a probability value of less than 0.200, a confidence level of over 80%, in comparison with the self-evaluation recorded in the Part 3 document. These are mainly cognitive abilities, several of the transferable skills and a few of the archaeological activities.

Table 8 Activities where the ability level was under-estimated with a confidence level of higher than 80%

- Archaeological activities:
  - Write labels (excavation) P = 0.083
  - Marking finds P = 0.157
  - Mark sample trays/boxes P = 0.157
  - Read tape measure (surveying) P = 0.157
- Cognitive abilities:
  - Spatial awareness P = 0.035
  - Hand/eye co-ordination P = 0.053
  - Comprehension – verbal information P = 0.157
  - Recognition P = 0.157
  - Long-term memory P = 0.180
- Transferable skills:
  - Analysing quantitative data P = 0.035
  - Communication – conveying information P = 0.046
  - Social skills P = 0.046
  - Team working P = 0.083
  - Communication – understanding info P = 0.157
  - Problem solving P = 0.157
  - Adapting to a new environment P = 0.180

The activities that show the greatest chance of being wrongly predicted can be isolated by tabulating those with a probability value of less than 0.050, a confidence level of over 95% (**Table 9**).

Table 9 Activities where the ability level was over- or under-estimated with a confidence level of higher than 95%

- Archaeological activities:
  - Completing site records, numerical data – over-estimated
  - Manipulating a planning frame – over-estimated
- Cognitive abilities:
  - Spatial awareness – under-estimated
- Transferable skills:
  - Communication – conveying information – under-estimated
  - Analysing quantitative data – under-estimated
  - Social skills – under-estimated

These results would appear to suggest that aspects of the questions in the Part 1 document that relate to these activities may require changes or adjustments. However, there is one factor unaccounted for that cannot be measured accurately: the extent to which the participants themselves may have over- or under-estimated their individual ability.

To more accurately identify the aspects of the self-evaluation tool kit that may need adjusting, these results need to be compared with the results of the Phase 3 Controlled Tests (Phillips et al 2006a) and the Phase 4a Field Trials at East Holton (Phillips et al 2006b). This information is provided in **Table 10** below.

Table 10 Activities where the ability level was over-or under-estimated in the Phase 3 Controlled Tests, the Phase 4a Field Trials and the Phase 4b Field Trials

Activity/Ability	Ph 3	Ph 4a	Ph 4b
Comprehending site records	U	O	O*
Drawing – ability	U	U	O*
Physical stamina		O	O*
Spatial awareness	U		U**
Long-term memory	U	U	U*

O – over-estimated ability
U – under-estimated ability
* 80-94% confidence level
** >95% confidence level

Direct comparisons between the Phase 3 controlled tests, the Phase 4a field trials and the Phase 4b field trials are difficult to make as the nature of the work was different and an earlier version of the tool kit was used in Phase 3 and Phase 4a which was analysed by different methods. In these phases the over- and under-estimated aspects were identified by comparing raw figures, whilst in Phase 4b the aspects listed were identified by statistical comparisons. Not all the activities/abilities could be tested for in Phase 3, especially cognitive abilities and transferable skills, and only a limited range of archaeological activities were carried out in the Phase 4a field work. The tool kit was also adjusted in the light of the results of the Phase 3 testing. However, these results can be used to identify parts of the tool kit that may need refining. This especially relates to the questions about everyday activities in the Part 1 document.

VI PART 4 SELF-EVALUATION OF SKILLS

A. METHOD FOR THE STATISTICAL COMPARISON OF THE PART 4 DOCUMENT

The full results of the statistical comparison between the student and supervisor evaluation of skills can be found in **Appendix II** and a summary of the results in **Appendix III**.

CROSS TABULATION

The cross tabulation table is the basic technique for examining the relationship between two categorical variables, in this case student scores and supervisor scores. The scores were rated on a scale from 1 to 7 to measure the student skill level. A cross tabulation analysis was performed for each task to display the number of participants across the 7 skill levels/scores described. These had been evaluated by both the students (in the table rows) and their respective supervisors (in the table columns). **Example 4a** shows the results for the task 'comprehending site records'.

Example 4a Results for 'comprehending site records'

		Comprehending site records – Supervisor Scores							
		1	2	3	4	5	6	7	NA
Comprehending site records – Student Scores	1								
	2								
	3								
	4				2	2			
	5			1	2				
	6				2	3	2		
	7								
	NA								

The diagonal highlighted in grey in the table represents the participants that have the same scores on both variables: student scores and supervisor scores. This indicates that these participants have evaluated their skill at the same level as the supervisor. The scores below the diagonal are the participants who rated themselves higher than their supervisor. The scores above the diagonal are the participants that

underrated themselves: the supervisor rate was higher than the student rate for this task.

WILCOXON SIGNED-RANK TEST

From the cross tabulation alone, it is impossible to tell whether these score differences are real or due to chance variation. To ensure that the score differences indicated in the areas above and below the diagonal reflect a significant difference between the student and supervisor scores, a series of Wilcoxon signed-rank tests was performed for each task. The aim was to identify any skill level over-estimation or under-estimation by the students. This test is a non-parametric test designed to compare 2 categorical variables where the responses (student scores versus supervisor scores) need to be paired as the responses relate to the same participants for any given skill.

The absolute differences between the variables were ranked and these ranks were split into three groups:

- Negative ranks contain the participants for whom the score of the second variable (students' scores) exceeds the score of the first variable (supervisors' scores). In **Example 4a** this relates to the number of students below the diagonal: 1+2+2+3 = 8 students who over-rated their skill level in comparison to the supervisors' evaluation for 'comprehending site records'.

- Positive ranks contain those participants for whom the score of the first variable (supervisors' scores) exceeds the score of the second variable (students' scores). This relates to the number of students above the diagonal. In **Example 4a** this relates to students who under-rated their skills level in comparison to the supervisors' evaluation for 'comprehending site records'.

- Ties contain participants for whom the two variables are equal. In **Example 4a** there are 2+2 = 4 students who rated their skills level the same as their respective supervisors.

If the two variables do not differ, the sum of the positive ranks will approximately equal the sum of the negative ranks. The sum of the ranks for the less frequent sign is the statistic used in the Wilcoxon test, referred to as Z in **Example 4b**.

Example 4b Test statistics 'comprehending site records'

Test Statistics(b)

	Comprehending site records - supervisor - Comprehending site records - student
Z	-2.070(a)
Asymp. Sig. (2-tailed)	.038

a Based on positive ranks.
b Wilcoxon Signed Ranks Test

The Wilcoxon Signed-Rank test detects differences in the distributions of two related variables (student scores and supervisor scores). The sum of the ranks for the less frequent sign is standardized. Small significance values (<.05) indicate that the two variables differ significantly in distribution. In **Example 4b** the significance value is less than .05 (P-Value=0.038). Therefore the student scores are significantly higher than the supervisors' scores.

SPEARMAN CORRELATION

The Spearman correlation coefficient measures the association between 2 ordinal variables (student scores and supervisor scores). The skill levels are measured at interval levels on a 7 point scale which orderly rates from score1 being very low skilled to score 7 being very highly skilled. This is a non-parametric version of the Pearson correlation based on the ranks of the data, rather than the actual values. The values of the correlation coefficient range from -1 to 1. The absolute value of the correlation coefficient indicates the strength of the relationship between the two variables, larger absolute values indicating the stronger relationships. A correlation coefficient equal to 0 indicates no linear relationship at all. In general terms, if the correlation coefficients are:

- up to 0.33 they are considered to indicate weak relationships
- between 0.34 and 0.66 they indicate medium strength relationships
- over 0.67 they indicate strong relationships (i.e. likely to be regarded as significant)

The sign of the correlation coefficient indicates the direction of the relationship (positive or negative). A negative correlation coefficient for a given task means that as the students' scores increase, the supervisor scores decrease. This means that the higher the rating the participants give themselves the more likely it is that their respective supervisors would rate the participants' skills severely. A positive correlation coefficient for a given task means that as the students' scores increase, the supervisor scores also increase. The higher the rating the participants give themselves the more likely it is that their respective supervisors would also rate highly the participants' skills.

A Spearman correlation was performed for each task between student scores and supervisor scores. In **Example 4c** the Spearman correlations table displays the correlation coefficients, significance values, and the number of cases (N) with non-missing values.

Example 4c Correlation for 'comprehending site records'

			Comprehending site records - student	Comprehending site records - supervisor
Spearman's rho	Comprehending site records - student	Correlation Coefficient	1.000	.362
		Sig.	.	.102
		N	14	14
	Comprehending site records - supervisor	Correlation Coefficient	.362	1.000
		Sig.	.102	.
		N	14	14

The correlation coefficients on the main diagonal are always 1 because each variable has a perfect positive linear relationship with itself. Correlations above the main diagonal are a mirror image of those below. If the significance level is very small (less than 0.05) then the correlation is significant and the two variables are linearly related. If the significance level is relatively large (for example, 0.50) then the correlation is not significant and the two variables are not linearly related.

In **Example 4c** the Spearman correlation coefficient for 'comprehending site records' is 0.362, and the probability associated with the coefficient is 0.102. This indicates that among the 14 participants in this sample, the student scores and the supervisor scores do not follow a significant linear relationship.

B. RESULTS OF THE STATISTICAL COMPARISON OF THE PART 4 DOCUMENTS

STUDENT RESPONSES

For most of the tasks, the majority of responses given by the students to measure their skill levels were rated as ‘average’ (4), ‘above average’ (5) and ‘high’ (6) on the 1 to 7 point scale. A few students rated themselves ‘low’ (2) for the accurate recording of measurements, time management and adapting to a new environment. None of the students rated themselves as ‘very low’ (1) for any of the tasks.

The tasks having the lowest average ratings (4.75 – 4.92) among the students were:

- Time management 4.92
- Physical stamina 4.92
- Using a Total Station 4.80
- Using a prismatic compass 4.75
- Using an optical square 4.75
- Taking off-sets 4.75

The tasks having the highest average ratings (5.80 – 6.23) among the students were:

- Using a sprayer 5.80
- Independent working 5.85
- Excavation with small tools 5.86
- Washing artefacts 5.92
- Understanding of the importance and applications of transferable skills 5.92
- An appreciation of site Health and Safety 6.23

The activities with the lowest average ratings included the use of technical equipment and a couple of the transferable skills. The activities with the highest average ratings included a number of archaeological activities, but there was an emphasis on the understanding of transferable skills.

SUPERVISOR RESPONSES

For most tasks, the majority of responses given by the supervisors for the students' skill levels were also rated as 'average' (4), 'above average' (5) and 'high' (6) on the 1 to 7 point scale. A few supervisors rated some tasks as 'low' (2):

- Understanding of what is involved in putting together site records
- Discerning stratigraphy
- Section drawing
- Team working.

No supervisor used the rating 'very low' for any of the tasks.

The tasks having the lowest average scores (4.43 – 4.57) among the supervisors were:

- Decision making 4.43
- Problem solving 4.50
- Completing site records – numerical data 4.54
- Comprehending site records 4.57
- Completing site records – descriptions 4.57
- Understanding of what is involved in putting together site records 4.57

The tasks having the highest average ratings amongst the supervisors (5.10 – 5.30) were:

- Excavation – large tools 5.10
- Using a Total Station 5.17
- Using tape measures 5.22
- Accurate recording of measurements (surveying) 5.22
- Using a level 5.25
- Accurate recording of measurements (instrument survey) 5.30

The activities with the lowest average ratings emphasised difficulties with site recording and aspects of self-confidence. The activities with the highest average ratings were all archaeological tasks, with an emphasis on site and instrument survey.

COMPARISON BETWEEN THE STUDENT AND THE SUPERVISOR RATINGS

The Wilcoxon test indicates that there was no significant difference between the student and supervisor ratings for the following tasks:

- Completing site records – descriptions
- Read and understand maps and plans accurately
- Excavation – large tools (pick, mattock, draw hoe)
- Drawing an archaeological plan
- Section Drawing
- Taking off-sets
- Using tape measures
- Accurate recording of measurements (surveying)
- Understanding of what is involved in the process of surveying
- Using a level
- Accurate recording of measurements (instrument survey)
- Understanding of what is involved in the process of instrument survey
- Communication
- Team working
- Time management
- Adapting to a new environment
- Social skills
- Analysing qualitative data
- Analysing quantitative data
- Physical stamina.

The Wilcoxon test revealed that there were some significant differences between the ratings given by the students and the ratings given by the supervisors for some tasks (see Table of summary results). Generally, the students tended to rate themselves higher than the supervisors' evaluation of their skill level.

Student rating higher and significantly different to the supervisors' rating at a confidence level of over 95%, P-value<0.05 (noted as (***) in **Appendix III**):

- Comprehending site records
- Using a sprayer
- Understanding of what is involved in the process of planning
- Problem solving
- An appreciation of site Health and Safety.

Student rating higher and significantly different to the supervisors' rating at a confidence level of 90% - 94%, P-value<0.1 (noted as (**) in **Appendix III**):

- Excavation - small tools (trowelling)
- Understanding of what is involved in putting together site records
- Understanding of what is involved in the process of excavation
- Independent working
- Understanding of the importance and applications of transferable skills.

Student rating higher and significantly different to the supervisors' rating at a confidence level of 80% - 89%, P-value<0.2 (noted as (*) in **Appendix III**):

- Completing site records – numerical data
- Discerning stratigraphy
- Disposal of spoil
- Identifying artefacts
- Understanding of what is involved in the processing of artefacts
- Decision making
- Mental stamina.

Only one task was rated higher by the supervisors than by the students. This significantly different at a confidence level of 80% - 89%, P-value<0.2 (noted as (*) in **Appendix III**):

- Using a Total Station.

Other tasks included in the self-evaluation tool kit have not been assessed either because these tasks were not carried out during the fieldwork at Silchester, or the sample of student and/or supervisor responses was too low:

- Cutting turf
- Lifting turf
- Dry sieving
- Washing artefacts
- Sorting artefacts
- Flotation and wet sieving
- Sorting material
- Understanding of what is involved in the process of environmental sampling
- Using ranging poles
- Using prismatic compass

- Using an optical square
- Field walking
- Field survey
- Understanding of what is involved in the process of field survey
- Using a magnetometer
- Using a resistance meter
- Understanding of what is involved in the process of geophysical survey
- Analysing digital data.

Correlation analyses (Spearman) were performed to investigate whether there were any linear relationships between the student and supervisors ratings. A negative correlation for a given task (noted (**-**) in the **Appendix III**) indicates that as the students' ratings increase, the supervisors' ratings decrease. This means that the higher the rating the participants gave themselves the more likely it is that their respective supervisors would rate the participants' skills lower. This relates to the following tasks:

- Excavation (small tools)
- Disposal of spoil
- Understanding of what is involved in the process of excavation
- Section drawing
- Taking off-sets
- Understanding of what is involved in the processing of artefacts
- Accurate recording of measurements (surveying)
- Understanding of what is involved in the process of surveying
- Using a level
- Accurate recording of measurements (Instrument survey)
- Problem solving
- Physical stamina.

A positive correlation for a given task (noted (**+**) in **Appendix III**) indicates that as the students' scores increase, the supervisor scores also increase. The higher the rating the participants gave themselves the more likely it was that their respective supervisors would also rate the participants' skills highly. This relates to the following tasks:

- Comprehending site records
- Drawing an archaeological plan
- Using a Total Station
- Independent working
- An appreciation of site Health and Safety.

The absolute value of the correlation coefficient indicates the strength of the correlation and ranges from 0 to 1, with the larger absolute values indicating stronger relationships (see **Appendix III**):

- 0 – 0.20 indicates that there is no linear relationship at all
- 0.20 – 0.33 indicates a weak-strength relationship
- 0.34 – 0.66 indicates a medium-strength relationship
- >0.67 indicates a strong relationship which is likely to be significant.

A strong negative correlation between the student ratings and the supervisor ratings was present for one task. This is the strongest disagreement amongst all the tasks:

- Understanding of what is involved in the processing of artefacts.

Two positive medium-strength correlations were present. For these tasks the student ratings increase at the same rate as the supervisor ratings. These correspond to the best rating progress agreement amongst all the tasks, although the average student ratings were significantly higher than the supervisor ratings for the first of these tasks:

- Comprehending site records
- Drawing an archaeological plan.

Six negative medium-strength correlations were present. For these tasks the supervisor ratings decrease at the same rate as the student ratings increase:

- Disposal of spoil
- Section drawing
- Taking off-sets
- Accurate recording of measurements (surveying)
- Understanding of what is involved in the process of surveying
- Accurate recording of measurements (instrument survey).

Seven weak-strength correlations were present. For these tasks the supervisor ratings are only weakly related to the student ratings. For the supervisor rating the range of student ratings correspond to a wider spread above and below the supervisor value:

- Excavation – light tools
- Understanding of what is involved in the process of excavation
- Using a Total Station
- Independent working
- Problem solving

- Physical stamina
- An appreciation of site Health and Safety

About a third of the tasks showed no linear relationship between the student and supervisor ratings. This indicates that the two ratings are independent of one another; any given student rating corresponds to a random supervisor rating:

- Completing site records – descriptions
- Completing site records – numerical data
- Read and understand maps and plans accurately
- Understanding of what is involved with site records
- Excavation – large tools
- Discerning stratigraphy
- Using a sprayer
- Understanding of what is involved in the process of planning
- Identifying artefacts
- Using tape measures
- Understanding of what is involved in the process of instrument survey
- Communication
- Team working
- Time management
- Adapting to a new environment
- Decision making
- Social skills
- Mental stamina
- Understanding of the importance and applications of transferable skills.

C. COMPARISONS WITH THE PHASE 4a RESULTS

Table 11 compares the lowest average ratings from the Part 4 self-evaluation of skills at Silchester with the results from East Holton (Phase 4a).

Table 11 Lowest average ratings in the Part 4 self-evaluation of skills in Phases 4a and 4b (Phase 4a was on a 3-point scale and Phase 4b on a 7-point scale)

Task	4a	4b
Complete site records – numerical data	1.75	
Understand site records	1.88	
Taking off-sets	1.75	4.75
Understand planning	1.75	
Flotation and wet sieving	1.50	
Understand environmental sampling	1.40	
Using a Total Station		4.80
Using a prismatic compass		4.75
Using an optical square		4.75
Time management		4.92
Physical stamina		4.92

Only one activity was given a low skills rating on both excavations, taking off-sets. At Silchester the lowest ratings were given to aspects of physical survey, organisation and physical stamina; and at East Holton to aspects of site recording, planning and environmental sampling.

Table 12 compares the highest average ratings from the Part 4 self-evaluation of skills at Silchester with the results from East Holton (Phase 4a).

Table 12 Highest average ratings in the Part 4 self-evaluation of skills in Phases 4a and 4b (Phase 4a was on a 3-point scale and Phase 4b on a 7-point scale)

Task	4a	4b
Excavation with large tools	2.75	
Excavation with small tools		5.86
Using a sprayer		5.80
Disposal of spoil	2.75	
Washing artefacts		5.92
Using tape measures	2.78	
Using ranging poles	2.78	
Understand surveying	2.67	
Independent working	2.67	5.85
Appreciate site health and safety		6.23
Understand transferable skills		5.92

Only one skill was given a high rating on both excavations, independent working. At Silchester the highest ratings were given to the more skilled aspects of excavation, washing artefacts and some transferable skills; and at East Holton to the heavier aspects of excavation, surveying and independent working.

This comparative data of the self-evaluation of skills comes from a limited sample of two training excavations, but it does suggest that within different excavations students may be gaining greater or lesser expertise in different archaeological tasks and transferable skills.

D. SECTION SUMMARY

- Both the students and the supervisors tended to rate skills between ‘average’ (4) and ‘high’ (6). The students tended to rate themselves higher than the supervisors.

- The students rated themselves lowest at aspects of using technical equipment, physical stamina and time management. They rated themselves highest for the main excavation technique (trowelling), independent working and understanding transferable skills.

- The supervisors rated the students lowest for site recording and aspects of self-confidence. They rated them highest for the taking and recording of various measurements.

- Where the students rated themselves higher, the significant differences between the student and supervisor responses were in site recording, understanding aspects of archaeological fieldwork and transferable skills, the main excavation technique (trowelling), the psychological demands of fieldwork and aspects of self-confidence. Using some technical equipment was rated higher by the supervisors.

- The activities on which both the students and the supervisors agreed in their ratings were planning, aspects of surveying, heavy excavation work and physical stamina. There were also a number of transferable skills including team working, social skills and analysing various forms of data.

- In comparison to the East Holton training excavation, the students may have gained greater or lesser expertise in different archaeological tasks and transferable skills.

VII THE INDIVIDUAL PARTICIPANTS

A. STUDENTS ON THE EXCAVATION

1. JULIAN

DETAILS OF DISABILITY

Heart Condition – Aortic Dissecetion Type B, non-surgical intervention. Regarded as a disability from a work point of view and retired due to ill-health in 2002. No mobility problems and blood pressure kept artificially low.

PRE-FIELDWORK ABILITIES (PART 2)

A. Can potentially do activity with minor adjustments/assistance:

- Physical abilities:
  - Carry equipment on back
- Transferable skills:
  - Team working
  - Time management
  - Adapting to a new environment.

POST-FIELDWORK ABILITIES (PART 3)

A. Can actually do activity with minor adjustments/assistance:

- Archaeological activities:
  - Completing site records – descriptions
  - Completing site records – numerical data
- Physical abilities:
  - Strength
  - Physical stamina
- Transferable skills:
  - Adapting to a new environment.

SELF-EVALUATION OF SKILLS (PART 4)

A. Student evaluation:

Julian participated in most of the activities on site. He rated himself as ‘average’ (4) and ‘above average’ (5) for most of the archaeological activities and transferable skills. It was only for Processing of Artefacts that he evaluated himself as ‘high’ (6). Because he had declared his

disability to the site director and mentioned that he was concerned about his physical stamina, on most days he spent the mornings excavating and the afternoons on finds processing. On his returned Part 4 document he made the following comments:

> ‘Hot weather conditions made things rather difficult for a period. I was away for a while and then off sick for nearly a week, so my attendance was disrupted. I wasn’t keen on the camping and felt I would have been less tired had I not been obliged by circumstances to do so. I also had problems with the food. I think generally I found it tough going and initially overestimated my past skills and underestimated my ability to learn other ways of doing things. However, considering the very serious nature of my illness seven years ago, the overall result for me was pretty good. I think it difficult when carrying a hidden disability to deal with the expectations one carries of oneself, as well as dealing with the expectations of others, even though people keep such thoughts to themselves. It remains to be seen what I can achieve in the long term, although I believe there are things with the fieldwork experience that I can develop. The archaeology was incredibly interesting.’

B. Supervisor evaluation:

Julian’s supervisor rated him as ‘average’ (4) for most of the activities and skills. There was no evaluation of processing of artefacts, environmental sampling or surveying. Amongst the transferable kills, Julian was rated as ‘high’ (6) and ‘very high’ (7) for team working, communication and his social skills.

TRACKING

Julian was working on site for four weeks in total, with a week’s break after two weeks. He was also ill for part of the time.

A. Student returns:

- Technical skills – started as ‘above average’ (5), dropped to ‘average’ (4) in the last week
- Analytical skills - started as ‘above average’ (5), dropped to ‘average’ (4) in the last week
- Inter-personal skills – started as ‘very high’ (7) in the first week, dropped to ‘high’ (6) and then ‘above average’ (5)
- Understanding – started as ‘above average’ (5), dropped to ‘average’ (4) in the last week

- Attitude – started as ‘high’ (6), then dropped to ‘above average’ (5) and ‘average’ (4)
- Confidence – started and ended as ‘average’ (4), although rose to ‘above average’ (5) during the period of fieldwork
- Enjoyment – started as ‘high’ (6), but dropped after a period of illness.

Feedback:

- Week 1/2 – ‘Lack of fitness and stamina is probably not allowing me to operate at full potential. I feel this situation may well change’
- Week 2/1 – ‘Off sick for three days, but seem to be dealing with tasks given me’
- Week 2/2 – ‘Hot weather is making things difficult, but I feel I am gaining confidence in some areas’.

B. Supervisor returns:

- Technical skills – ‘average’ (4) throughout
- Analytical skills - started as ‘above average’ (5), dropped to ‘average’ (4)
- Inter-personal skills – started as ‘very high’ (7) in the first week, dropped to ‘high’ (6) and then ‘average’ (4)
- Understanding – started as ‘above average’ (5), dropped to ‘average’ (4) by the last week
- Attitude – started as ‘very high’ (7), dropped to ‘average’ (4) by the last week
- Confidence – ‘average’ (4) throughout
- Enjoyment – started as ‘high’ (6), but dropped to ‘average’ (4) in the last week.

INTERVIEW

Julian found the excavation had been a very hard experience for him personally. It was very intense hands-on work with a wide range of different tasks. This had been difficult he felt because of his lack of physical stamina. He had become extremely tired and run down, especially in his last two weeks. Although took a break in the middle of his four weeks on site, he had become ill. This was partly due to the extreme heat which had affected his blood pressure. He had to monitor this and adjust his medication accordingly. Combined with this was the cold at night and disturbed sleep with the noise on the campsite. There were also psychological pressures. Amongst the younger students there was competition to do as much geophysics in a day as possible and

Julian found this competitive ethos difficult to cope with. There was also the psychological pressure to make an effort and not to make excuses, even when he felt ill. Although he looks perfectly fit and able, this is not the case. His health problems and the psychological pressure had affected his confidence.

An amount of planning had gone into how he would go about being on the training dig. This involved him excavating in the mornings and working on finds in the afternoons. He was also working on a ‘sensitive’ area which required careful excavation and a minimum of heavy labour. He felt that this arrangement had worked well, although he did think that he missed some of what was going on in his area of excavation. He experienced very few problems on the social side and managed to get on with most people.

He found the process of self-evaluation a useful exercise, especially the section on transferable skills. He was unsure if he had been totally objective, but it had made him think about how and why he was doing particular things. He also enjoyed being part of the self-evaluation project feeling that people were taking an interest in him personally.

SUMMARY

- It was anticipated that Julian would have few serious difficulties with any of the activities. This did prove to be the case; the most important were his physical stamina and strength which can be directly related to his heart condition.
- His self-evaluation of skills was similar to the responses given by his supervisor. He assessed himself at a high level for the processing of artefacts, an activity that he had participated more than most of the other students.
- In the tracking documents his ratings dropped steadily over the four week period. His supervisor also recorded a similar decline in ratings. This can be directly related to him becoming tired as the excavation progressed.
- He had declared his disability before the field work started and, after discussion, arrangements for what he would do on the excavation had been put in place. This appeared to work well; however, his progress varied with both his physical and psychological state.
- He found certain aspects of the excavation difficult. Apart from the physical labour and stamina required, he felt under psychological pressure at times, some of this related to the ‘macho’ image of field archaeology.

2. FREDDIE

DETAILS OF DISABILITY

Asperger's Syndrome
Dyslexia
Colour blind –problems with some colour combinations.

PRE-FIELDWORK ABILITIES (PART 2)

A. Can potentially do activity with minor adjustments/assistance:

- Archaeological activities:
  - Comprehending site records
  - Completing site records – descriptions
  - Completing site records – numerical data
  - *Excavation – secateurs
  - *Write labels, sample trays/boxes
  - Read a tape measure accurately
  - *Marking finds
  - *Ranging poles – line up
  - Level/Total Station – attach to tripod
  - *Field walking/survey – traverse
  - *Field walking – pick up material
  - Gradiometry – use an instrument
  - Resistivity – use an instrument
- Physical abilities:
  - Strength
- Cognitive abilities:
  - Vision – close and distant
  - Spatial awareness
  - Comprehension – written material, verbal information
  - Long-term memory
- Transferable skills:
  - Communication – conveying/understanding information
  - Independent working
  - Team working
  - Problem solving
  - Decision making
  - Social skills.

B. Can potentially do activity with substantial adjustments/assistance:

- Archaeological activities:
  - *Excavation – large tools
  - Dispose of waste material – empty wheelbarrow
  - Ranging poles/measuring staff – hold
  - Level/Total Station – read measurements
  - *Prismatic compass – use
- Cognitive abilities:
  - Hand/eye co-ordination
  - Short-term memory
- Transferable skills:
  - Analysing quantitative data.

* Did not do this activity

POST-FIELDWORK ABILITIES (PART 3)

A. Can actually do activity with minor adjustments/assistance:

- Archaeological activities:
  - Completing site records – numerical data
  - Lay a tape measure
  - Drawing – ability, use graph paper
  - Level/Total Station – read measurements
- Cognitive abilities:
  - Vision – colour
  - Spatial awareness
  - Hand/eye co-ordination
  - Short-term memory
- Transferable skills:
  - Social skills.

SELF-EVALUATION OF SKILLS (PART 4)

A. Student evaluation:

Freddie participated in all the activities on site. He rated himself as ‘high’ (6) and ‘very high’ (7) for most of the archaeological and transferable skills. It was only for social skills that he rated himself as ‘average’ (4).

B. Supervisor evaluation:

Freddie’s supervisor rated him as ‘average’ (4) and ‘above average’ (5) for his archaeological skills. There was no evaluation for processing of

artefacts, environmental sampling, surveying or geophysical survey. For his transferable skills Freddie was rated between 'average' (4) and 'high' (6). Interestingly, the supervisor gave Freddie a 'high' (6) evaluation for his social skills. On the returned Part 4 document the supervisor made the following comments:

> 'Technical skills around average, but then this comes with more experience. Very good understanding of the processes involved and analytical side of problem solving is there with very high potential for the future. Attitude and team work are definitely strong points.'

TRACKING

Freddie was working on site for four weeks in total.

A. Student returns:

- Technical skills – stayed fairly constant at 'high' (6), rose to 'very high' (7) in the last week
- Analytical skills – started as 'high' (6), but rose to 'very high' (7) after an incident on site (see feedback comments below)
- Inter-personal skills – started as 'below average' (3), rose to 'average' (4) after the first week
- Understanding – varied between 'high' (6) and 'very high' (7)
- Attitude – 'very high' (7) throughout
- Confidence – started at 'high' (6), rose to 'very high' (7) in third week
- Enjoyment – 'very high' (7) throughout.

Feedback:

- Week 3/2 – 'Think I have been under-rating my analytical skills due to something that happened [on site] yesterday'.

B. Supervisor returns:

- Technical skills – varied between 'average' (4) and 'above average' (5)
- Analytical skills – varied between 'average' (4) and 'above average' (5)
- Inter-personal skills – 'high' (6) throughout
- Understanding – started as 'average' (4), rose to 'high' (6) by last week
- Attitude – 'high' (6) throughout

- Confidence – ‘average’ (4) throughout
- Enjoyment – ‘high’ (6) throughout.

INTERVIEW

Freddie thoroughly enjoyed his time on the training excavation. He had no major problems with any of the activities; the heat had been difficult at times, but this had affected all the students on site. There were minor problems with a few activities. The red tags on the yellow geophysics lines had been difficult to distinguish in bright sunlight and he had sometimes required assistance in completing site records. He did not camp, but travelled to the site each day. However, he felt that he was able to join in with some of the social activities, having a social mentor had been of great help.

SUMMARY

- Freddie seemed to have greatly under-estimated his abilities, especially on the physical side.
- The areas where he experienced the greatest difficulties were related to dyslexia.
- His supervisor gave lower ratings for his skills and abilities, except in the case of his social skills. This may reflect his self-expectation of having poorer social skills than is actually the case.
- The provision of a social mentor helped him to participate in social activities.

3. RACHEL

DETAILS OF DISABILITY

Unseen disability

PRE-FIELDWORK ABILITIES (PART 2)

A. Can potentially do activity with minor adjustments/assistance:

- Cognitive abilities:
  - Spatial awareness
- Transferable skills:
  - Team working
  - Adapting to a new environment
  - Analysing quantitative data
  - Social skills.

POST-FIELDWORK ABILITIES (PART 3)

Rachel had no difficulties with any of the activities, transferable skills or abilities.

SELF-EVALUATION OF SKILLS (PART 4)

A. Student evaluation:

Rachel participated in all the activities on site except geophysical survey. She rated herself ‘average’ (4) and ‘above average’ (5) for most of the archaeological and transferable skills. It was only for washing artefacts and independent working that she rated herself as ‘high’ (6).

B. Supervisor evaluation:

Rachel’s supervisor rated her as ‘average’ (4) and ‘above average’ (5) for her archaeological skills. There was no evaluation for processing of artefacts, environmental sampling, surveying, instrument or geophysical survey. For most of her transferable skills Rachel was also rated as ‘average’ (4) and ‘above average’ (5). The exceptions were communication and social skills which were rated as ‘below average’ (3).

TRACKING

Rachel was working on site for two weeks in total.

A. Student returns:

- Technical skills – started as ‘high’ (6), dropped to ‘above average’ (5) in the second week
- Analytical skills – ‘above average’ (5) throughout
- Inter-personal skills – started as ‘average’, (4), rose to ‘above average’ (5) by the end of the first week
- Understanding – started as ‘above average’ (5) rose to ‘high’ (6) by the second week
- Attitude – started as ‘average’, (4), rose to ‘above average’ (5) by the end of the first week
- Confidence – started as ‘average’ (4) rose to ‘high’ (6) by the end of the second week
- Enjoyment – started as ‘average’, (4), rose to ‘above average’ (5) by the end of the first week.

B. Supervisor returns:

- Technical skills – varied between ‘below average’ (3) and ‘above average’ (5)
- Analytical skills – varied between ‘average’ (4) and ‘high’ (6)
- Inter-personal skills – ‘high’ (6) throughout
- Understanding – started as ‘average’ (4), dropped to ‘below average’ (3) in the second week
- Attitude – varied between ‘average’ (4) and ‘above average’ (5)
- Confidence – varied between ‘below average’ (3) and ‘average’ (4)
- Enjoyment – ‘average’ (4) throughout.

Feedback:

- Week 2/2 – ‘Rachel is very quiet, this probably accounts for most of the average scores as she is not particularly forthcoming, but still pleasant and seems reasonably happy.’

INTERVIEW

There was no interview with Rachel.

SUMMARY

- There were only a few tasks that it was expected that Rachel could have difficulties in completing. In the event, she felt she had been able to tackle all the activities without experiencing any problems.
- In the self-evaluation of skills most of her ratings were similar to the supervisor’s assessment. A low rating for her communication and social skills was commented on by the supervisor.
- In the tracking Rachel recorded a steady improvement in her performance. Her supervisor provided variable returns, but within the same rating range.

4. LESLEY

DETAILS OF DISABILITY

Dyslexia – difficult to put thoughts on paper, poor organisation and spelling, problems with dates
Heart condition – should not lift heavy weights.

PRE-FIELDWORK ABILITIES (PART 2)

A. Can potentially do activity with minor adjustments/assistance:

- Archaeological activities:
  - Read and understand plans
  - Dispose of waste material – empty wheelbarrow
  - Discern stratigraphy – texture
  - Drawing – ability
  - Identifying finds – texture
  - Sorting environmental samples – texture
  - Measuring staff – extend
- Physical abilities:
  - Carry equipment on back
  - Strength
  - Physical stamina
- Cognitive abilities:
  - Vision – texture
  - Spatial awareness
  - Comprehension – drawings
  - Long-term memory
- Transferable skills:
  - Analysing quantitative data
  - Decision making
  - Social skills.

B. Can potentially do activity with substantial adjustments/assistance:

- Archaeological activities:
  - Use a wheelbarrow
- Transferable skills:
  - Adapting to a new environment.

POST-FIELDWORK ABILITIES (PART 3)

A. Can actually do activity with minor adjustments/assistance:

- Archaeological activities:
  - Completing site records – descriptions
  - Completing site records – numerical data
  - Excavation – large tools
  - Clear waste material – by hand
  - Use a wheelbarrow
  - Empty a wheelbarrow
  - Discern stratigraphy – colour
  - See area to be planned
  - Handle and manipulate planning frame
  - Identifying finds – tactile/colour
  - Sorting environmental samples – tactile
  - Level/Total Station – set up tripod
  - Total Station – read measurements
- Physical abilities:
  - Strength
  - Physical stamina
- Cognitive abilities:
  - Vision – colour
  - Spatial awareness
  - Long-term memory
- Transferable skills:
  - Time management
  - Adapting to a new environment
  - Decision making
  - Social skills.

SELF-EVALUATION OF SKILLS (PART 4)

A. Student evaluation:

Lesley participated in all the activities on site. She rated herself as ‘above average’ (5) and ‘high’ (6) for most of the archaeological and transferable skills. She rated herself as ‘average’ (4) for disposal of spoil, sorting environmental samples, communication, problem solving and decision making and as ‘below average’ (3) for adapting to a new environment. Amongst the transferable skills she also rated herself as ‘very high’ (7) for mental stamina and understanding health and safety and the importance of transferable skills.

B. Supervisor evaluation:

There was no Part 4 return from the supervisor.

TRACKING

Lesley was working on site for four weeks in total.

A. Student returns:

- Technical skills – stayed fairly constant at ‘above average’ (5), rose to ‘high’ (6) in the last week
- Analytical skills – started as ‘below average’ (4), rose steadily to ‘above average’ (5) by the last week
- Inter-personal skills – started as ‘average’ (4), rose to ‘above average’ (5) by the end of the last week
- Understanding – started as ‘average’ (4), rose to ‘above average’ (5)
- Attitude – remained fairly constant as ‘above average’ (5)
- Confidence – started as ‘low’ (2), rose steadily to ‘average’ (5)
- Enjoyment – ‘below average’ (3) throughout.

B. Supervisor returns:

- Technical skills – remained fairly constant at ‘average’ (4)
- Analytical skills – remained fairly constant at ‘average’ (4)
- Inter-personal skills – ‘high’ (6) throughout
- Understanding – varied between ‘average’ (4) and ‘above average’ (5)
- Attitude – varied between ‘average’ (4) and ‘high’ (6)
- Confidence – varied between ‘average’ (4) and ‘above average’ (5)
- Enjoyment – varied between ‘average’ (4) and ‘high’ (6).

Feedback:

- Week 4/1 – ‘She has spent quite a long time cleaning the same area. Now that she has moved on to excavating a finds-rich layer her enjoyment has improved markedly.’

INTERVIEW

Lesley felt she did not really enjoy her time on the training excavation, although she managed to gain experience of many of the archaeological activities. A lot of this was to do with camping and not

having her own space. She shared a tent and was with people all the time. To some extent, this affected her enjoyment of the work on site. She found the digging tough and having a heart condition was not allowed to move heavy wheelbarrows, although she wanted to be involved in all the activities. The heat was also a problem, as it was for all the students. She had some difficulties with completing the site records, especially recording the correct numbers. She found doing self-evaluation useful and had no problems with the process, finding a useful way of tracking her own progress and recognising her transferable skills.

Lesley had always thought that she wanted to be a field archaeologist but, after her experience on the training excavation, this is no longer the case. However, she enjoyed doing geophysical survey to such an extent that she wants to do something on this activity as her undergraduate dissertation and perhaps specialise in this area.

SUMMARY

- Potentially, it was expected that Lesley would experience difficulties with a number of activities, and this proved to be the case.
- In the self-evaluation of skills she tended to rate herself fairly high, except for aspects of self-confidence.
- The results of the tracking suggested an improvement over the four week period, except for her enjoyment which stayed low. Her supervisor rated her as alternating between average and high over the period.
- Although she did not enjoy the training excavation overmuch, she felt this had a lot to do with feeling uncomfortable in the accommodation. However, she recognised that she had gained invaluable experience and also identified an area of activity that she wishes to pursue further.

5. CATHERINE

DETAILS OF DISABILITY

Unseen.

PRE-FIELDWORK ABILITIES (PART 2)

A. Can potentially do activity with minor adjustments/assistance:

- Archaeological activities:
  - Discern stratigraphy – colour
  - Identifying finds – colour
  - Sorting environmental samples – colour
  - Total Station/Gradiometry – audible signals
  - *Field walking/survey – traverse
- Cognitive abilities:
  - Vision – colour
  - Hearing
  - Spatial awareness
  - Short-term memory
  - Long-term memory
- Transferable skills:
  - Adapting to a new environment
  - Social skills.

B. Can potentially do activity with substantial adjustments/assistance:

- Cognitive abilities:
  - Hand/eye co-ordination.

*Did not do this activity

POST-FIELDWORK ABILITIES (PART 3)

A. Can actually do activity with minor adjustments/assistance:

- Cognitive abilities:
  - Hearing
  - Balance.

SELF-EVALUATION OF SKILLS (PART 4)

A. Student evaluation:

Catherine participated in all the activities on site except environmental sampling. She rated herself between ‘below average’ (3) and ‘above average’ (5) for most of the archaeological and transferable skills. Amongst the transferable skills she rated herself as ‘low’ (2) for time management and adapting to a new environment.

B. Supervisor evaluation:

Catherine’s supervisor rated her as ‘above average’ (5) and ‘high’ (6) for most of her archaeological and transferable skills. For using a level and accurate recording of the measurements, time management and understanding of transferable skills she was rated as ‘very high’ (7). There was no evaluation for environmental sampling or geophysical survey. On the returned Part 4 document the supervisor made the following comments:

> ‘Her time has been spent largely digging a well, so a very specific set of circumstances applied. Overall, she is keen, interested and highly motivated. She is likely to become a very skilled excavator.’

TRACKING

Catherine was working on site for six weeks in total. She was ill for a few days in the fifth week.

A. Student returns:

- Technical skills – ‘average’ (4) throughout
- Analytical skills – remained fairly constant as ‘average’ (4)
- Inter-personal skills – remained fairly constant as ‘average’ (4)
- Understanding – remained fairly constant as ‘average’ (4)
- Attitude – remained fairly constant as ‘average’ (4)
- Confidence – remained fairly constant as ‘below average’ (3)
- Enjoyment – remained fairly constant as ‘very high’ (7).

The time when Catherine’s self-evaluation rating dropped was immediately after she was ill.

B. Supervisor returns:

- Technical skills – varied between ‘high’ (6) and ‘very high’ (7)
- Analytical skills – remained fairly constant at ‘high’ (6)
- Inter-personal skills – started as ‘average’, rose to ‘high’ (6)
- Understanding – varied between ‘high’ (6) and ‘very high’ (7)
- Attitude – started as ‘average’ (4), rose to ‘very high’ (7) by the end of the first week
- Confidence – ‘very high’ (7) throughout
- Enjoyment – started as ‘high’ (6), rose to ‘very high’ (7) by the end of the first week.

INTERVIEW

There was no interview with Catherine.

SUMMARY

- It was expected that Catherine would experience difficulties with a number of tasks and abilities.
- In the event she only experienced difficulties with a couple of cognitive abilities.
- In the self-evaluation of skills she consistently rated herself as ‘average’, whilst her supervisor gave her much higher ratings.
- This was also true of the tracking, except for enjoyment which she rated highly.
- Whether her low ratings in the self-evaluation relate to modesty or a lack of self-confidence or not, her supervisor had a very high opinion of her skills and abilities.

6. EVELYN

DETAILS OF DISABILITY

Dyslexia/Dyspraxia tendencies.
Specific Learning Disability – difficulties with her working memory, especially the processing of information.

PRE-FIELDWORK ABILITIES (PART 2)

A. Can potentially do activity with minor adjustments/assistance:

- Archaeological activities:
  - Completing site records – numerical data
  - Read and understand maps accurately
  - Read and understand plans
  - Write labels
  - Marking finds
  - Mark sample trays/boxes
- Cognitive abilities:
  - Spatial awareness
  - Hand/eye co-ordination
  - Comprehension – drawings and verbal information
  - Mental stamina
- Transferable skills:
  - Communication – conveying and understanding information
  - Independent working
  - Time management
  - Analysing quantitative data.

POST-FIELDWORK ABILITIES (PART 3)

A. Can actually do activity with minor adjustments/assistance:

- Archaeological activities:
  - Comprehending site records
  - Completing site records – descriptions
  - Completing site records – numerical data
  - Read and understand maps accurately
  - Read and understand plans
  - Read a tape measure accurately
  - See area to be planned
  - Handle and manipulate planning frame
  - Sorting environmental samples
  - Level – set up tripod

        - Level – attach to tripod
        - Level – use visually
        - Level – manual focussing
        - Level – read measurements
- Cognitive abilities:
    - Vision – texture
    - Comprehension – verbal information
    - Short-term memory
    - Long-term memory
- Transferable skills:
    - Communication – understanding information
    - Independent working
    - Adapting to a new environment
    - Analysing qualitative data.

B. Can actually do activity with substantial adjustments/assistance:

- Archaeological abilities:
    - Drawing – ability
    - Drawing – use graph paper
- Cognitive abilities:
    - Comprehension – written material and drawings
    - Organisation/categorisation
- Transferable skills:
    - Analysing quantitative data.

SELF-EVALUATION OF SKILLS (PART 4)

A. Student evaluation:

Evelyn participated in all the activities on site except processing of artefacts and geophysical survey. She rated herself between ‘low’ (2) and ‘average’ (4) for surveying; as ‘below average’ (3) and ‘average’ (4) for instrument survey; as ‘average’ (4) and ‘above average’ (5) for site recording, excavation, planning and most of the transferable skills; and as ‘high’ (6) for environmental sampling. Amongst the transferable skills she rated herself as ‘below average’ (3) for time management and mental stamina and as ‘high’ (6) for social skills.

B. Supervisor evaluation:

Evelyn’s supervisor rated her as ‘average’ (4) and ‘above average’ (5) for site records, excavation and instrument survey; as ‘above average’ (5) and ‘high’ (6) for planning and surveying and between ‘below average’ (3) and ‘above average’ (5) for her transferable skills.

TRACKING

Evelyn was working on site for two weeks in total. She was ill for a couple of days at the beginning of the second week.

B. Student returns:

- Technical skills – ‘average’ (4) throughout
- Analytical skills – started as ‘below average’ (3), rose to ‘above average’ (5) by the end of the second week
- Inter-personal skills – ‘high’ (6) throughout
- Understanding – started as ‘low’ (2), rose to ‘average’ (4)
- Attitude – remained fairly constant as ‘average’ (4)
- Confidence – remained fairly constant as ‘average’ (4)
- Enjoyment – varied considerably between ‘below average’ (3) and ‘high’ (6).

Feedback:

- Week 1/1 – ‘I think that the potential that I have is not being achieved on this excavation as I am finding it very difficult here. I enjoy the social aspect of it; however, understandably the archaeology is very difficult for me and digging is mind-numbingly dull. This afternoon I intend to be more positive.’
- Week 1/2 – ‘The first time I filled this out I really didn’t like the digging aspect of the work. However, now I have been allocated an area, I have really started to enjoy digging and recording the observations of my post hole. Hooray! Taking time away from the excavation was necessary to do this though. I am finding my diary very difficult. I didn’t start it on time and I can’t keep up with the days accurately. I just don’t know what to write. Part of this is because I will be assessed on it and I want to get it right. Also scared of showing people around because I don’t know that much, will get embarrassed and give a really bad tour.’
- Week 2/1 – ‘I have had a fluctuation in attitude towards the excavation so far. It has a lot to do with the constant changes in weather and being so exposed. I found on Monday it was the first time my dyslexia came into the foreground and I didn’t have a strategy to deal with it. I could not take the measurements for the section of my post hole. I felt very incompetent and stupid. The frustration exasperated my bad mood and I felt really ill. I went to the doctor’s yesterday, but I feel a lot better now it is sunny again and, apart from litter duty this morning, I am going to persevere with the many measurements this afternoon!’

- Week 2/2 – ‘I am finding myself losing concentration as I actually can’t do the context cards correctly without supervision, and I can’t have it gone through step-by-step, so it’s a bit crap. Stare around site as I don’t want to ask for help again. On the plus side I managed a spot of interpretation independently, which was fun. Though now I don’t really know what to do. I am not particularly confident on filling in the cards. Tried by myself, but got it wrong. Analytical skills good today because of the interpretation. Enjoyed Roman glass talk, but am slightly nervous about exam tomorrow and my diary, as I haven’t written all that much.’

B. Supervisor returns:

- Technical skills – remained fairly constant as ‘above average’ (5)
- Analytical skills – started as ‘above average’ (5), dropped to ‘average’ (4) in the second week
- Inter-personal skills – varied between ‘average’ (4) and ‘high’ (6)
- Understanding – started as ‘above average’ (5), dropped to ‘below average’ (3) in the second week
- Attitude – remained fairly constant as ‘average’ (4)
- Confidence – varied between ‘below average’ (3) and ‘average’ (4)
- Enjoyment – varied between ‘below average’ (3) and ‘average’ (4).

Feedback:

- Week 1/1 – ‘She has been able to carry out the tasks she has been allocated, but at this early stage only basic tasks have been carried out. As the season progresses, there will be more of an opportunity to assess her skills.’
- Week 1/2 – ‘She has displayed a good understanding of the archaeology and of the recording processes. She is keen and has shown confidence in working as a member of the team.’
- Week 2/1 – ‘She has suffered a period of illness over the last few days, but has carried out the recording of a half-sectioned post hole. She struggled slightly with technical aspects of the section drawing. She has also commented on not particularly enjoying her time so far.’
- Week 2/2 – ‘She has struggled with the recording of the feature she has been recording. With prompting and assistance she is able to carry out her work to a high standard. However, her lack of confidence in her own ability leads to quite slow progress.’

INTERVIEW

Evelyn felt she had a reasonable time on the training excavation. Her main difficulties lay with understanding her supervisor's instructions and taking and recording measurements. The hot weather had made some days hard and she had also been ill at one point. She found her physical and mental stamina stretched, but felt that she had got the benefit from the challenges that she faced. She summed up her experience as having good days and bad days. Her enjoyment had centred on doing something other than theory, the making of new friends and the food. Although she enjoyed the social side, she commented that some of the more experienced students were rather 'cliquey'. She had felt very comfortable doing the self-evaluation and preferred it to being evaluated by another person. It gave her the opportunity to look at the things she had been doing, and how well she had been doing them, and she felt that this helped to fix the experiences in her mind. The self-evaluation had been useful to her and she was glad that she had been chosen to participate in the project.

SUMMARY

- Evelyn had more difficulties than predicted by the Part 2 document. These were mostly related to dyslexia.
- The self-evaluation of her skills and that of her supervisor correlate fairly closely at levels between 'below average' (3) and 'above average' (5).
- Her supervisor tended to rate her technical skills at a higher level than she was aware of herself.
- Although she had some difficulties with the training excavation, she was reasonably happy with her experiences.
- She had found the process of self-evaluation extremely useful.

8. MARGARET

DETAILS OF DISABILITY

Dyslexia and Dyspraxia – clumsy and some difficulties writing.

PRE-FIELDWORK ABILITIES (PART 2)

A. Can potentially do activity with minor adjustments/assistance:

- Archaeological activities:
  - Completing site records – descriptions
- Cognitive abilities:
  - Spatial awareness
  - Hand/eye co-ordination
  - Comprehension – verbal information
  - Short-term memory
  - Long-term memory
- Transferable skills:
  - Communication – conveying and understanding information
  - Social skills.

POST-FIELDWORK ABILITIES (PART 3)

A. Can actually do activity with minor adjustments/assistance:

- Archaeological activities:
  - Excavation – large tools
  - Discern stratigraphy – colour
  - Drawing - ability
- Physical abilities:
  - Strength
- Cognitive abilities:
  - Balance
  - Spatial awareness.

SELF-EVALUATION OF SKILLS (PART 4)

A. Student evaluation:

Margaret participated in all the activities on site except geophysical survey. She rated herself as ‘above average’ (5) and ‘high’ (6) for most of the archaeological and transferable skills. For excavation with large tools, discerning stratigraphy, planning and social skills she rated

herself as ‘average, (4); and for independent working and mental stamina she rated herself as ‘high’ (7).

B. Supervisor evaluation:

Margaret’s supervisor rated her as ‘average’ (4) and ‘above average’ (5) for most of the archaeological and transferable skills. For team working she was rated as ‘low’ (2); for planning, identifying artefacts and social skills she was rated as ‘below average’ (3); and for environmental sampling and independent working as ‘above average’ (6). On the returned Part 4 document the supervisor made the following comments:

> ‘It was a pleasure to have her on my team, a good and enthusiastic worker. The only major short-coming was a difficulty working in groups and interpersonal communication. She always ended up working alone.’

TRACKING

Margaret was working on site for two weeks in total.

A. Student returns:

- Technical skills – varied between ‘high’ (6) and ‘very high’ (7)
- Analytical skills – rose from ‘above average’ (5) to ‘high’ (6) in the second week
- Inter-personal skills – varied between ‘high’ (6) and ‘very high’ (7)
- Understanding – varied between ‘high’ (6) and ‘very high’ (7)
- Attitude – ‘very high’ (7) throughout
- Confidence – rose from ‘high’ (6) to ‘very high’ (7)
- Enjoyment – ‘very high’ (7) throughout.

B. Supervisor returns:

- Technical skills – varied between ‘average’ (4) and ‘high’ (6)
- Analytical skills – remained fairly constant at ‘above average’ (5)
- Inter-personal skills – rose from ‘below average’ (3) to ‘above average’ (5) in the second week
- Understanding – rose from ‘average’ (4) to ‘above average’ (5) by the end of the first week
- Attitude – ‘high’ (6) throughout
- Confidence – rose from ‘average’ (4) to ‘above average’ (5) by the second week
- Enjoyment – rose from ‘above average’ (5) to ‘high’ (6) by the end of the first week.

Feedback:

- Week 1/1 – ‘Seems to be keen enough, has not done any analytical work as yet, but her attention to detail looks promising. Lacks confidence and I think feels a little less social at the moment.’
- Week 1/2 – ‘She is doing well and finding her feet convincingly. I think that after we have gone through the process a few times, she will work well. She seems to be enjoying herself and getting on fine.’
- Week 2/1 – ‘She has now been working on the clay surface for a week and a half. She remains enthusiastic and volunteers for any opportunity to do new stuff. A pleasure to work with and I am looking forward to seeing the results of her new venture within the [excavated] house.’
- Week 2/2 – ‘She is a competent participant and with further field experience will make a fine field archaeologist.’

INTERVIEW

Margaret thoroughly enjoyed her time at Silchester. She described it as really good fun, apart from the lack of sleep due to camping. She felt that she had gained a good all round experience of a variety of archaeological activities. Her main difficulty was in keeping her fieldwork diary up to date. She had very few problems completing the site records and was grateful that people were on hand to check what she had written. On one occasion, she had difficulty discerning the colour difference between two contexts, but even her supervisor was having difficulties with this particular part of the stratigraphy. The social side of things was not too good for her as she does not feel comfortable in groups of people. If her own particular friends were not around, she would sit on her own. She said that she found doing self-evaluation very easy and a useful way of tracking her own progress.

When Margaret was diagnosed with dyslexia she was told it was probably worse when she was younger, but she had worked out a number of coping strategies already. She found these difficult to describe as she was not conscious of many of them. However, her methods of organising information including breaking things down into letter codes rather than words and making links between them.

SUMMARY

- Margaret had very few problems with the archaeological activities; her main difficulty was fitting into some of the social aspects of the training excavation.

- In the self-evaluation of skills, she noted her difficulties with heavy work and her supervisor commented on her problems with integrating herself into a team.
- Although in the tracking her supervisor rated her lower than she did herself, the supervisor did record increasing levels of achievement.

10. HANNAH

DETAILS OF DISABILITY

Specific Learning Disability/Dyslexic tendencies – she has a higher level of understanding than of analytical skills, although these are high. She either reads slowly or too quickly and misses things and can transpose numbers at times.

PRE-FIELDWORK ABILITIES (PART 2)

A. Can potentially do activity with minor adjustments/assistance:

- Cognitive abilities:
  - Spatial awareness
- Transferable skills:
  - Adapting to a new environment
  - Analysing quantitative data
  - Decision making
  - Social skills.

POST-FIELDWORK ABILITIES (PART 3)

A. Can actually do activity with minor adjustments/assistance:

- Transferable skills:
  - Decision making.

SELF-EVALUATION OF SKILLS (PART 4)

A. Student evaluation:

Hannah participated in all the activities on site except geophysical survey. She rated herself between ‘average’ (4) and ‘high’ (6) for most of the archaeological and transferable skills. For decision making she rated herself as ‘below average’ (3), and for discerning stratigraphy as ‘very high’ (7).

B. Supervisor evaluation:

Hannah's supervisor rated her as 'above average' (5) and 'high' (6) for her archaeological and transferable skills. There was no evaluation for processing of artefacts or environmental sampling. On the returned Part 4 document the supervisor made the following comments:

> 'It would be good to have teaching and community boxes for her as she is in the transition between two years digging and trainer so I have been trying to use her on community management and decision making more this year.'

TRACKING

Hannah was working on site for four weeks in total.

A. Student returns:

- Technical skills – mainly varied between 'average' (4) and 'above average' (5), rated as 'very high' (7) at end of fourth week
- Analytical skills – varied between 'average' (4) and 'above average' (5)
- Inter-personal skills – rose steadily from 'below average' (3) to 'above average' (5)
- Understanding – varied between 'average' (4) and 'above average' (5)
- Attitude – rose from 'above average' (5) to 'very high' (7) by start of third week
- Confidence – rose steadily from 'average' (4) to 'very high' (7)
- Enjoyment – 'very high' (7) throughout.

B. Supervisor returns:

- Technical skills – remained fairly constant as 'high' (6)
- Analytical skills – varied between 'above average' (5) and 'high' (6)
- Inter-personal skills – varied between 'above average' (5) and 'high' (6)
- Understanding – rose from 'above average' (5) to 'high' (6)
- Attitude – remained fairly constant as 'high' (6)
- Confidence – varied between 'above average' (5) and 'high' (6)
- Enjoyment – remained fairly constant as 'high' (6).

Feedback:

- Week 1/1 – ‘Hannah is returning from last year and has made a good contribution to site work so far. She is enjoying her work and is happy to move outside of her area with more confidence than in the previous season. I have plans for her and think she will easily fulfil them.’
- Week 1/2 – ‘She is having a good season so far and has already thought about applying to be a trainee supervisor next year. The hearth she is digging is coming on nicely and it seems to be going with a speed that can only reflect this newly found confidence.’
- Week 2/1 – ‘As always, she has been great working within the area she is used to. I have plans to move her soon on to a new task and hope that she can bring her confidence and enthusiasm together and excel as she shows a lot of promise.’
- Week 4/1 – ‘She continues to be a great help moving enthusiastically between both her hearth and the road and helping explain to new people how the hearth works.’
- Week 4/2 – ‘She has willingly moved onto the new clay floor areas and easily taking on one student of her own. The only thing lacking slightly is a dip in confidence as a result of her new work, was no problem. Will increase if she returns next year as a trainee.’

INTERVIEW

Hannah thoroughly enjoyed her time at Silchester and this was her second season on the site. Her attitude was at high level and she felt she did well at all the tasks given her. She had no difficulties with completing the site records, although she was very conscious of her spelling. She did become a bit stressed when given charge of excavating a house. However, she did recognise that her supervisor was finding ways to give her more responsibility so that she could progress and she enjoyed taking ‘ownership’ of her own area. She found doing the self-evaluation exercise very useful. It helped her to identify the areas where things were going well and where things needed improvement and, at a general level, a good way of developing her self-awareness. She commented that she may have played down her strengths in her self-evaluation as everyone is their own worst critic.

SUMMARY

- The Part 2 document suggested that Hannah would have very few difficulties on site, her only actual difficulty related to her self-confidence (decision making).
- In the self-evaluation of skills, her supervisor tended to rate her higher than she did herself.
- This pattern of a higher supervisor rating was repeated in the Tracking, although she did record a steady rise in her own ratings.
- She found the process of self-evaluation useful in developing her own self-awareness, although she felt that she may have played down her strengths.

11. GEOFF

DETAILS OF DISABILITY

Non-disabled.

PRE-FIELDWORK ABILITIES (PART 2)

Potentially, Geoff should have no difficulties with the activities, transferable skills or abilities.

POST-FIELDWORK ABILITIES (PART 3)

A. Can actually do activity with minor adjustments/assistance:

- Archaeological activities:
  - Completing site records – descriptions.

SELF-EVALUATION OF SKILLS (PART 4)

A. Student evaluation:

Geoff participated in all the activities on site. He rated himself as ‘high’ (6) and ‘very high’ (7) for most of the archaeological and transferable skills. It was only for completing site records descriptions that he rated himself as ‘average’ (4).

B. Supervisor evaluation:

Geoff’s supervisor rated him as ‘average’ (4) for his archaeological skills and most of his transferable skills. Amongst the transferable skills he

was rated as ‘above average’ (5) for adapting to a new environment and understanding transferable skills; ‘high’ (6) for team working; and ‘very high’ (7) for communication and social skills. There was no evaluation for processing of artefacts, environmental sampling, surveying, instrument survey or geophysical survey.

TRACKING

Geoff was working on site for two weeks in total.

A. Student returns:

- Technical skills – rose from ‘above average’ (5) to ‘high’ (6) by the end of the second week
- Analytical skills – rose from ‘above average’ (5) to ‘high’ (6) by the end of the second week
- Inter-personal skills – rose from ‘high’ (6) to ‘very high’ (7) by the end of the second week
- Understanding – rose from ‘above average’ (5) to ‘high’ (6) by the second week
- Attitude – rose from ‘high’ (6) to ‘very high’ (7) by the end of the second week
- Confidence – remained fairly constant as ‘high’ (6)
- Enjoyment – rose from ‘above average’ (5) to ‘high’ (6) by the end of the first week.

B. Supervisor returns:

- Technical skills – remained fairly constant as ‘above average’ (5)
- Analytical skills – varied between ‘average’ (4) and ‘above average’ (5)
- Inter-personal skills – rose from ‘average’ (4) to ‘high’ (6) by the second week
- Understanding – remained fairly constant as ‘above average’ (5)
- Attitude – rose from ‘above average’ (5) to ‘high’ (6) by the end of the second week
- Confidence – rose from ‘above average’ (5) to ‘high’ (6) by the second week
- Enjoyment – rose from ‘above average’ (5) to ‘high’ (6) by the end of the second week.

INTERVIEW

Geoff had found the excavation ‘not too bad’; the camping had been the hardest part. He experienced no difficulties with the actual work or the

social side of the excavation. He had enjoyed the physical work more than technical aspects such as planning and surveying. He was slightly disappointed that he did not get to do everything, such as section drawing. Two weeks had been just right for him; he felt that if he had done any more it may have been too much. The knowledge that he was being assessed for his degree all the time had made it difficult to feel at ease all the time. He had always been unsure about fieldwork and does not intend to go into that side of the profession, but his estimation of field archaeology had risen and he felt that the training excavation had been a very rewarding experience. He had also found doing self-evaluation very useful. It had helped him look at the bigger picture of himself and to navigate a series of new experiences without getting lost. He felt that it is very difficult to be objective about oneself, but thought that he had been fairly accurate in his self-evaluation.

SUMMARY

- Geoff had hardly any problems with the activities, except for writing descriptions in the site records.
- In the self-evaluation of skills he rated himself highly. His supervisor gave a consistent set of ratings, but at a slightly lower level.
- Both Geoff and his supervisor recorded steadily increasing rates for the aspects of the tracking document.
- He does not see himself as a field archaeologist, but felt that his time spent on the training excavation was an important and rewarding experience.
- He found the process of self-evaluation extremely useful, as it had helped him to understand and absorb a range of new experiences.

12. ANGIE

DETAILS OF DISABILITY

Non-disabled.

PRE-FIELDWORK ABILITIES (PART 2)

A. Can potentially do activity with minor adjustments/assistance:

- Archaeological activities:
  - Completing site records – descriptions
  - Completing site records – numerical data

- Cognitive abilities:
  - Spatial awareness
  - Long-term memory
- Transferable skills:
  - Analysing quantitative data
  - Social skills.

POST-FIELDWORK ABILITIES (PART 3)

A. Can actually do activity with minor adjustments/assistance:

- Archaeological activities:
  - Completing site records – descriptions
  - Prismatic compass – use
  - Optical square – use
- Physical abilities:
  - Strength
  - Physical stamina
- Cognitive abilities:
  - Hearing
  - Spatial awareness
  - Hand/eye co-ordination
  - Short-term memory.
- Transferable skills:
  - Analysing quantitative data.

SELF-EVALUATION OF SKILLS (PART 4)

A. Student evaluation:

Angie participated in all the activities on site except geophysical survey. She rated herself as ‘high’ (6) and ‘very high’ (7) for most of the archaeological and transferable skills. For using a total station, prismatic compass and optical square she rated herself as ‘average’ (4); and ‘above average’ (5) for physical stamina.

B. Supervisor evaluation:

Angie’s supervisor rated her as ‘average’ (4) and ‘above average’ (5) for most of her archaeological and transferable skills. She was rated as ‘low’ (2) for understanding site records, discerning stratigraphy and section drawing; ‘below average’ (3) for completing site record descriptions, understanding excavation and planning, communication and time management; and ‘very high’ (7) for health and safety. There was no evaluation for environmental sampling.

TRACKING

Angie was working on site for six weeks in total.

A. Student returns:

- Technical skills – rose steadily from ‘average’ (4) to ‘high’ (6)
- Analytical skills – rose steadily from ‘average’ (4) to ‘high’ (6)
- Inter-personal skills – varied between ‘high’ (6) to ‘very high’ (7)
- Understanding – remained fairly constant as ‘high’ (6)
- Attitude – ‘very high’ (7) throughout
- Confidence – rose from ‘above average’ (5) to ‘high’ (6) by the end of the first week
- Enjoyment – ‘very high’ (7) throughout.

Feedback:

- Week 1/1 – ‘The excavation uses all one’s skills and ingenuity, which needs to be developed over several years. It is difficult to make oneself keep trying with the weaker skills when excavating is such fun.’
- Week 1/2 – ‘I am not confident with my technical ability and started planning this morning in a mental fog. However, once the tapes were in position, I thoroughly enjoyed the drawing and the Improvement in confidence.’
- Week 2/1 – ‘Practice definitely improves skills; weak areas need plenty of it! Perhaps a Skill assessment in Year 1 with a follow-up focus on weaknesses would benefit me, then I would feel more confident of my technical and analytical skills.’
- Week 2/2 – ‘It takes time to reap the benefits of excavating and grow in confidence, as familiarity with the routine and camping less of a factor and the archaeology becomes more significant to me.’
- Week 3/1 – ‘Teaching others skills raises confidence in oneself. Perhaps all ‘the taught’ should be given a chance to teach?’
- Week 3/2 – ‘Thank goodness it is cooler; it was hard to maintain enthusiasm in adverse conditions.’
- Week 4/1 – ‘I am beginning to think that I am benefiting and improving my skills through teaching tasks to visiting students.’
- Week 4/2 – ‘Changeable weather makes working/concentrating conditions difficult!’
- Week 5/1 – ‘Achievement (ie. end of planning) raises confidence and gives an enthusiasm boost to keep on task.’

B. Supervisor returns:

- Technical skills – dropped from ‘high’ (6) to ‘average’ (4) in the sixth week
- Analytical skills – dropped steadily from ‘high’ (6) to ‘below average’ (3) in the sixth week
- Inter-personal skills – varied between ‘average’ (4) and ‘high’ (6)
- Understanding – varied between ‘average’ (4) and ‘high’ (6)
- Attitude – varied between ‘average’ (4) and ‘high’ (6)
- Confidence – varied between ‘above average’ (5) and ‘very high’ (7)
- Enjoyment – varied between ‘high’ (6) and ‘very high’ (7).

Feedback:

- Week 2/2 – ‘She is confident in her ability and carries out work well and to a high standard.’
- Week 3/1 – ‘She has been working well unsupervised and has shown good understanding of what she has been working on. She can display slight confusion over more detailed interpretation.’
- Week 3/2 – ‘She has continued to excavate her slot through the road well and generally unsupervised. Her technical skills are very good, but her interpretations can sometimes be slightly wayward.’

INTERVIEW

Angie has been working at Silchester for the last six years and although she enjoyed it, she had found this the hardest season that she had experienced, especially with regards to her physical stamina. She put this down to a combination of her age and the heat. She had also felt under pressure with doing her MA dissertation research on a topic associated with the excavation. She is a designated First Aider and had assisted other students with various problems. She found that her life and transferable skills had helped her to ‘survive’ the six weeks in both the work and social aspects of the excavation. She felt that she was still developing these skills.

She commented that she had marked herself down in the self-evaluation, but wanted to leave space for improvement. She felt that her biggest problem is with recording numerical data and this had not developed over the excavation period. She found using the tool kit an interesting experience and thought that it should be given to all students before they embarked on fieldwork.

SUMMARY

- Angie was expected to have very few difficulties on the excavation. This proved to be the case, except for her physical stamina and strength.
- In the self-evaluation of skills she rated herself highly for most of the archaeological activities, except for the use of technical equipment. Her supervisor tended to give her lower ratings, but this may be related to personal tensions.
- In the tracking, Angie recorded a steady rise. Her supervisor recorded variable ratings over the six week period.
- Although labelled as 'non-disabled', Angie felt that she had experienced the greatest difficulties with her physical stamina and strength. She attributed this to the hot weather and her age. She also had problems with numerical data, but was able to record the data successfully with the help of work colleagues.

13. LINDA

DETAILS OF DISABILITY

ME – physical and mental tiredness, lack of concentration
Claustrophobia – nervousness in stressful situations that are crowded, allowed to take exams in a room on her own.

PRE-FIELDWORK ABILITIES (PART 2)

A. Can potentially do activity with minor adjustments/assistance:

- Cognitive:
  - Long-term memory
- Transferable skills:
  - Time management
  - Decision making.

POST-FIELDWORK ABILITIES (PART 3)

Linda was only present on the excavation for a few days. She left after falling ill.

TRACKING

Only one tracking form was completed.

A. Student returns:

- Technical skills – ‘above average’ (5)
- Analytical skills – ‘above average’ (5)
- Inter-personal skills – ‘above average’ (5)
- Understanding – ‘high’ (6)
- Attitude – ‘high’ (6)
- Confidence – ‘below average’ (3)
- Enjoyment – ‘above average’ (5).

B. Supervisor returns:

Linda’s supervisor gave her a rating of ‘average’ (4) for each category and provided the following feedback:

> ‘As she has spent only half a day cleaning the area due to illness and training talks, any assessment of her abilities is difficult to make.’

INTERVIEW

Linda explained that, although her ME had not been a problem for some time, it had affected her on the training excavation. This related mainly to the physical aspects of fieldwork, both the process of excavation and the hardships of camping. She found that, due to recurrent tiredness, that she was unable to do more than one hour of physical work. Consequently, she had not done much digging. With the agreement of the site director, she had spent the time attending the training talks and observing the different aspects of fieldwork. She felt that she had at the very least developed a basic understanding of the techniques involved in archaeological fieldwork. There were many activities that she was interested in, such as geophysics, but felt that she did not have the stamina to participate. It was at this point that she left the training excavation.

Linda explained that she was looking forward to returning to the Field School in the next season. She felt that now she knows what to expect, it would not be so ‘scary’, especially the hard physical work and coping with the domestic arrangements. She has been looking at ways that can help her participate fully, including cognitive behaviour therapy. She is also having regular meetings with her tutor and the site director so as to monitor the situation and devise ways in which she can complete her

fieldwork training. She is expected to spend at least four weeks in total on the Field School as part of her undergraduate degree and the options being considered include doing this in 'blocks' of days with time off in between. She will also be treated as a returning 2nd Year student and, as such, will not have to repeat the basic training in fieldwork techniques, she will be allowed some choice in the activities and tasks that she carries out.

SUMMARY

- It was expected that Linda would have difficulties with only a few of the activities, none of these archaeological in nature. In the event she had to leave the excavation because of a re-occurrence of ME.
- In the one tracking form that was completed, she rated herself at mostly above average level, except for her confidence.
- When it was discovered that she was unable to cope with the continuous physical work, she was placed in positions where she was still able to learn about the process of excavation, although this did not involve full participation.
- Since the excavation various procedures and adaptations have been proposed so as to enable her to participate fully in the next season's excavation. This process of over coming barriers is being carried out through joint discussion.

14. STEVEN

DETAILS OF DISABILITY

Non-disabled.

PRE-FIELDWORK ABILITIES (PART 2)

A. Can potentially do activity with minor adjustments/assistance:

- Archaeological activities:
  - Level/Total Station – set up tripod
  - Level/Total Station – attach to tripod
- Transferable skills:
  - Decision making.

POST-FIELDWORK ABILITIES (PART 3)

A. Can actually do activity with minor adjustments/assistance:

- Archaeological activities:
  - Discern stratigraphy – vision
  - Ranging poles – hold and line up
  - Level/Total Station – set up tripod
  - Level/Total Station – attach to tripod
  - Total Station – record readings on screen
  - Total Station – audible signals
  - Total Station – attach prism to staff
  - Prismatic compass – use
  - Optical square – use
  - Geophysical survey – identify walking line
  - Gradiometry – use an instrument and audible signals
  - Resistivity – use an instrument.

SELF-EVALUATION OF SKILLS (PART 4)

A. Student evaluation:

Steven participated in all the activities on site. He rated himself as 'above average' (5) and 'high' (6) for most of the archaeological and transferable skills. For using a Total Station, prismatic compass and optical square and geophysical survey he rated himself as 'average' (4); and as 'very high' (7) for excavation with large and small tools, washing artefacts, independent working, analysing qualitative and quantitative data, and site health and safety.

B. Supervisor evaluation:

Steven's supervisor rated him as 'above average' (5) and 'high' (6) for his archaeological and transferable skills. There was no evaluation for processing of artefacts, environmental sampling or geophysical survey.

TRACKING

Steven was working on site for five weeks in total.

A. Student returns:

- Technical skills – mainly varied between 'above average' (5) to 'high' (6)
- Analytical skills – varied between 'high' (6) and 'very high' (7)

- Inter-personal skills – rose from ‘average’ (4) to ‘high’ (6) by the middle of the second week
- Understanding – varied between ‘high’ (6) and ‘very high’ (7)
- Attitude – remained fairly constant as ‘high’ (6)
- Confidence – rose from ‘above average’ (5) to ‘high’ (6) by the end of the first week, and ‘very high’ by the end of the fifth week
- Enjoyment – rose from ‘above average’ (5) to ‘high’ (6) by the end of the first week.

Feedback:

- Week 2/1 – ‘Extremely hot weather, work hard but enjoyable.’

B. Supervisor returns:

- Technical skills – mainly varied between ‘above average’ (5) and ‘high’ (6)
- Analytical skills – remained fairly constant as ‘above average’ (5)
- Inter-personal skills – remained fairly constant as ‘high’ (6)
- Understanding – remained fairly constant as ‘high’ (6)
- Attitude – remained fairly constant as ‘high’ (6)
- Confidence – mainly varied between ‘above average’ (5) and ‘high’ (6)
- Enjoyment – remained fairly constant as ‘high’ (6).

INTERVIEW

Steven felt that he had a very successful season on the excavation. He is has a fair amount of previous experience and was given an area to work on mostly by himself. He was able to record and remove contexts, do all the planning and take the environmental samples himself, as well as construct the matrix for the area and relate it to the main site matrix. The responsibility for, and ‘ownership’, of his own area had boosted his self-confidence. He also found that several of his transferable skills had developed, especially independent working, problem solving and decision making.

He had camped at the excavation and had no problems joining the social aspects of the fieldwork. He felt that it was the mature students and those who did not camp who had difficulties integrating socially.

He found the process of self-evaluation especially useful. It had helped him reflect on what he was doing and his own progress. Without this, he would have forgotten about quite a few of his experiences. He felt that it

was difficult to self-evaluate objectively and often gave himself medium to high grades so as to leave room for development.

SUMMARY

- Steven felt that he had a very successful season on the excavation. This was mainly due to him being given charge of a particular area.
- Potentially, it was expected that Steven would have very few problems.
- In practice, he felt that he had difficulties with using various pieces of technical equipment.
- In the self-evaluation of skills he rated himself at a high level, but lower for using technical equipment. His supervisor rated him highly in all aspects of archaeological and transferable skills.
- In the tracking documents, Steven recorded a steady increase in his rating to high levels. This was also the case with the supervisor's ratings.

15. BILL

DETAILS OF DISABILITY

Dyslexia – difficulties with maths and writes slowly, has no problem with reading
Hard of hearing – deaf in one ear, only difficulty is when there a lot of background noise.

PRE-FIELDWORK ABILITIES (PART 2)

A. Can potentially do activity with minor adjustments/assistance:

- Cognitive abilities:
  - Spatial awareness
  - Long-term memory
- Transferable skills:
  - Analysing quantitative data.

POST-FIELDWORK ABILITIES (PART 3)

A. Can actually do activity with minor adjustments/assistance:

- Archaeological activities:
  - Completing site records – numerical data
  - Discern stratigraphy – tactile, vision, colour and texture

    - Identifying finds – tactile
    - Sorting environmental samples – physical ability
- Cognitive abilities:
    - Vision – texture, close and distant
    - Hearing
    - Short-term memory
- Transferable skills:
    - Communication – at a distance
    - Time management
    - Analysing qualitative data
    - Analysing quantitative data.

B. Can actually do activity with substantial adjustments/assistance:

- Archaeological activities:
    - Sorting environmental samples – tactile, colour, texture.

SELF-EVALUATION OF SKILLS (PART 4)

A. Student evaluation:

Bill participated in all the activities on site. He rated himself as 'above average' (5) and 'high' (6) for most of the archaeological skills. For completing site record numerical data and dry sieving he rated himself as 'average' (4); and as 'very high' (7) for planning. For his transferable skills Bill rated himself as mostly 'high' (6) or 'very high' (7). For time management, analysing qualitative, quantitative and digital data and physical stamina he rated himself as 'average' (4).

B. Supervisor evaluation:

Bill's supervisor rated him as 'above average' (5) and 'high' (6) for his archaeological and transferable skills. There was no evaluation for processing of artefacts, environmental sampling or geophysical survey.

TRACKING

Bill was working on site for four weeks in total.

A. Student returns:

- Technical skills – rose from 'average' (4) to 'above average' (5) in the third week
- Analytical skills – remained fairly constant as 'above average' (5)
- Inter-personal skills – rose from 'average' (4) to 'above average' (5) in the second week

- Understanding – started as ‘high’ (6), dropped to ‘average’ (4) at end of the first week, rose to ‘above average’ (5) in the second week
- Attitude – started as ‘high’ (6), dropped to ‘average’ (4) at end of the first week, rose to ‘above average’ (5) in the second week
- Confidence – rose from ‘average’ (4) to ‘above average’ (5) in the second week
- Enjoyment – started as ‘high’ (6), dropped to ‘below average’ (3) at end of the first week, rose to ‘above average’ (5) in the second week.

Feedback:

- Week 1/2 – ‘Feeling a bit down as dog has died, difficult to be enthusiastic.’

B. Supervisor returns:

- Technical skills – rose from ‘above average’ (5) to ‘high’ (6) in the fourth week
- Analytical skills – ‘above average’ (5) throughout
- Inter-personal skills – rose from ‘above average’ (5) to ‘high’ (6) in the first week
- Understanding – rose from ‘above average’ (5) to ‘high’ (6) in the third week
- Attitude – remained fairly constant as ‘high’ (6)
- Confidence – varied between ‘average’ (4) and ‘above average’ (5)
- Enjoyment – rose from ‘above average’ (5) to ‘high’ (6) in the first week.

INTERVIEW

Bill felt he had enjoyed the experience of fieldwork immensely. It had helped to give direction to his degree course; previously he had always felt rather confused by education. He has now decided that he wants to go into fieldwork after he graduates. He felt that he had very few serious difficulties on the training excavation and his hearing and dyslexia had not presented insurmountable problems. He felt that he had been especially successful with the excavation techniques and planning. He found that he was good at, and enjoyed, practical tasks. Completing the context sheets had been tedious and he had experienced a few problems with the numerical data, but had overcome these difficulties with practice.

He had been a bit reclusive when he was younger due to his hearing difficulty, but in the final years at school had learnt to interact with his peers. Because of this he had no problems with the social side of the fieldwork training. He did not think that the process of self-evaluation had been of benefit to him personally, but it had helped to identify and build on his transferable skills.

SUMMARY

- Bill had a very successful season on the training excavation and the experience had helped him identify his direction. His disabilities had not detracted from him participating fully in the fieldwork.
- It was not expected that he would experience many difficulties with fieldwork.
- In practice he felt that he had a few difficulties with aspects of identification, completing site records and analysing data.
- In the self-evaluation of skills he rated himself at a high level, except for the activities where he felt he had experienced difficulties.
- In the tracking his ratings rose steadily as the excavation progressed. The same pattern was recorded by his supervisor. The only time there was a drop in his ratings was in relation to an outside factor, the death of his dog.
- He felt that the process of doing self-evaluation had not been of especial benefit to him, although it had helped him to recognise the transferable skills that he was gaining and developing.

16. CAROL

DETAILS OF DISABILITY

Dyscalculia and Irritable Bowel Syndrome.

PRE-FIELDWORK ABILITIES (PART 2)

A. Can potentially do activity with minor adjustments/assistance:

- Archaeological activities:
  - Completing site records – numerical data
  - Read and understand maps accurately
  - Read and understand plans
  - Read a tape measure accurately
  - Level/Total Station – set up tripod
- Cognitive abilities:

    - Hand/eye co-ordination
    - Comprehension - drawings
- Transferable skills:
    - Analysing quantitative data.

POST-FIELDWORK ABILITIES (PART 3)

A. Can actually do activity with minor adjustments/assistance:

- Archaeological activities:
    - Comprehending site records
    - Completing site records – descriptions
    - Read and understand maps accurately
    - Use a wheelbarrow
    - Read a tape measure accurately
    - Handle and manipulate planning frame
    - Drawing – ability
    - Drawing – use graph paper
    - Take bulk environmental samples
    - Wet sieving.

B. Can actually do activity with substantial adjustments/assistance:

- Archaeological activities:
    - Completing site records – numerical data.

SELF-EVALUATION OF SKILLS (PART 4)

A. Student evaluation:

Carol participated in all the activities on site except geophysics. She rated herself as ‘average’ (4) and ‘above average’ (5) for site recording, planning and instrument survey; ‘above average’ (5) and ‘high’ (6) for surveying; and ‘very high’ (7) for excavation, processing of artefacts, environmental sampling and most transferable skills. The only activity outside of this pattern was discerning stratigraphy: ‘above average’ (5). On the returned Part 4 document Carol made the following comments:

> ‘I enjoyed the two weeks and learnt loads. Importantly, my stamina improved and I can now trowel and mattock for longer. I can now use a Total Station and record small finds.’

B. Supervisor evaluation:

Carol’s supervisor rated her as ‘average’ (4) and ‘above average’ (5) for her archaeological and transferable skills, except for physical stamina

which was rated as ‘below average’ (3). There was no evaluation for environmental sampling. For her transferable skills Carol was rated between ‘average’ (4) and ‘high’ (6).

TRACKING

Carol was working on site for two weeks in total.

A. Student returns:

- Technical skills – rose from ‘high’ (6) to ‘very high’ (7) at the end of the second week
- Analytical skills – rose from ‘above average’ (5) to ‘high’ (6) at the end of the second week
- Inter-personal skills – remained fairly constant as ‘very high’ (7)
- Understanding – remained fairly constant as ‘high’ (6)
- Attitude – rose from ‘high’ (6) to ‘very high’ (7) at the end of the second week
- Confidence – rose from ‘high’ (6) to ‘very high’ (7) at the end of the second week
- Enjoyment – ‘very high’ (7) throughout.

Feedback:

- Week 1/1 –‘I am enjoying the dig a lot, it’s hard work and very hot! My skills are improving, but I need to improve my stamina.’
- Week 1/2 – ‘I am enjoying the dig. I am finding the drawing hard, but working on that.’
- Week 2/1 – ‘I have been enjoying myself. I have mattocked for two days and planned twice. Problems with diet – IBS.’
- Week 2/2 – ‘I have enjoyed the dig. I am tired, but it has all been worth it.’

B. Supervisor returns:

- Technical skills – varied between ‘average’ (4) and ‘above average’ (5)
- Analytical skills – ‘average’ (4) throughout
- Inter-personal skills – ‘above average’ (5) throughout
- Understanding – varied between ‘average’ (4) and ‘above average’ (5)
- Attitude – varied between ‘above average’ (5) and ‘high’ (6)
- Confidence – ‘above average’ (5) throughout
- Enjoyment – ‘above average’ (5) throughout.

Feedback:

- Week 1/1 – ‘She has a little digging experience that has aided her ability to fit into a new group of mostly returning team members. She is enthusiastic and seems to have a fairly good grasp of the deposits she is dealing with.’
- Week 1/2 – ‘She is still taking an enthusiastic approach and has been carrying out her planning well.’
- Week 2/2 – ‘She has continued to be enthusiastic in her approach to removing large areas of silt.’

INTERVIEW

There was no interview with Carol.

SUMMARY

- It was expected that Carol would have difficulties with a few of the tasks and abilities.
- In the event she had difficulties with a number of the archaeological tasks, especially those relating to her Dyscalculia.
- In the self-evaluation of skills she gave herself variable ratings, as did her supervisor.
- In the tracking documents she recorded a rise in her ratings as the excavation progressed. Her supervisor tended to give her lower and variable ratings.
- Although experiencing problems with IBS, Carol was able to successfully participate in the fieldwork.

18. KEVIN

DETAILS OF DISABILITY

Congenital heart condition – gets tired and breathless after lots of vigorous exercise; not taking medication, but has annual check-ups.

PRE-FIELDWORK ABILITIES (PART 2)

A. Can potentially do activity with minor adjustments/assistance:

- Archaeological activities:
  - Completing site records – descriptions
  - *Cutting turf
  - Use a wheelbarrow
  - Write labels

    - Read a tape measure accurately
    - Washing finds
    - Identifying finds – tactile
    - Marking finds
    - *Wet sieving
    - Sorting environmental samples – tactile
    - Mark sample trays/boxes
    - Ranging poles – line up
    - Measuring staff – extend
    - Level/Total Station – use visually
    - Level/Total Station – read measurements
    - Prismatic compass – use
    - Optical square – use
- Cognitive abilities:
    - Vision – close and distant
    - Touch
    - Hand/eye co-ordination
    - Recognition
- Transferable skills:
    - Analysing qualitative data
    - Analysing quantitative data.

* Did not do this activity

POST-FIELDWORK ABILITIES (PART 3)

A. Can actually do activity with minor adjustments/assistance:

- Archaeological activities:
    - Comprehending site records
    - Completing site records – descriptions
    - Clear waste material – on a spade
    - Lay a tape measure
    - Handling finds
    - Washing finds
    - Level – set up tripod
    - Level – attach to tripod
- Cognitive abilities:
    - Vision – printed details
    - Hearing
    - Hand/eye co-ordination
- Transferable skills:
    - Decision making

B. Can actually do activity with substantial adjustments/assistance:

- Cognitive abilities:
  - Vision – physical details and features, close and distant

SELF-EVALUATION OF SKILLS (PART 4)

A. Student evaluation:

Kevin participated in all the activities on site except instrument and geophysical survey. He rated himself as ‘average’ (4) and ‘above average’ (5) for site recording; as ‘above average‘ (5) and ‘high’ (6) for processing of artefacts; and as high’ (6) and ‘very high’ (7) for excavation, planning, environmental sampling and most of the transferable skills. Amongst the transferable skills he rated himself as ‘average’ (4) for time management, decision making and physical stamina; and as ‘above average’ (5) for communication, independent working and problem solving.

B. Supervisor evaluation:

Kevin’s supervisor rated him as ‘above average’ (5) for most of the archaeological skills. For planning he was rated as ‘high’ (6). There was no evaluation for processing of artefacts or environmental sampling. For his transferable skills Kevin was rated between ‘above average’ (5) and ‘high’ (6).

TRACKING

Kevin was working on site for two weeks in total.

A. Student returns:

- Technical skills – rose from ‘average’ (4) to ‘high’ (6) at the end of the second week
- Analytical skills – rose from ‘below average’ (3) to ‘high’ (6) at the end of the second week
- Inter-personal skills – varied between ‘average’ (4) and ‘high’ (6)
- Understanding – started as ‘high’ (6), dropped to ‘average’ (4) at the end of the first week, rose to ‘very high’ (7) at the end of the second week
- Attitude – ‘very high’ (7) throughout
- Confidence – rose from ‘below average’ (3) to ‘above average’ (5) in the second week
- Enjoyment – ‘very high’ (7) throughout.

B. Supervisor returns:

- Technical skills – rose from ‘average’ (4) to ‘above average’ (5)
- Analytical skills – rose from ‘average’ (4) to ‘above average’ (5)
- Inter-personal skills – rose from ‘above average’ (5) to ‘high’ (6)
- Understanding – rose from ‘average’ (4) to ‘above average’ (5)
- Attitude – rose from ‘above average’ (5) to ‘high’ (6)
- Confidence – rose from ‘average’ (4) to ‘above average’ (5)
- Enjoyment – rose from ‘above average’ (5) to ‘high’ (6).

INTERVIEW

Kevin thoroughly enjoyed his time at Silchester. It had made him realise that he was doing the right course at University and field archaeology was the profession that he wanted to follow. He explained that because he had enjoyed the experience so much that he put his whole self into it and had performed very well at most of the tasks. His only real difficulty had been with discerning stratigraphy, but he felt that his skill would improve with more experience. He explained that the physical labour involved in excavation had not caused him any problems and he had not suffered any bouts of breathlessness. He did get tired, but to no greater extent than other students on the excavation. He had managed to recognise the transferable skills he was gaining and develop these. This was especially the case with his observational and social skills. The process of self-evaluation had been difficult because he had difficulty finding comparisons against which he could evaluate himself. However, he had found the exercise extremely useful as it had helped him identify and reflect on his areas of strengths and weaknesses.

SUMMARY

- It was expected that Kevin would have difficulties with a number of tasks and abilities.
- In the event, he only experienced difficulties with a few activities.
- In the self-evaluation of skills Kevin rated himself at a fairly high level, although his supervisor tended to give him higher ratings.
- In the tracking he recorded a steady rise in his ratings, as did his supervisor.
- There was nothing to suggest that his disability had affected Kevin’s ability to participate fully in the excavation.

19. TREVOR

DETAILS OF DISABILITY

Dyslexia/Dyspraxia – not too many difficulties, some organisational, spelling and handwriting problems.

PRE-FIELDWORK ABILITIES (PART 2)

A. Can potentially do activity with minor adjustments/assistance:

- Archaeological activities:
  - Completing site records – descriptions
  - Completing site records – numerical data
  - Read and understand plans
  - Drawing – ability
- Physical abilities:
  - Carry equipment in hands
- Cognitive abilities:
  - Comprehension – drawings
- Transferable skills:
  - Communication – conveying information
  - Analysing quantitative data
  - Problem solving.

B. Can potentially do activity with substantial adjustments/assistance:

- Cognitive abilities:
  - Spatial awareness
  - Hand/eye co-ordination

POST-FIELDWORK ABILITIES (PART 3)

A. Can actually do activity with minor adjustments/assistance:

- Archaeological activities:
  - Comprehending site records
  - Completing site records – numerical data
  - Lay a tape measure
  - Read a tape measure accurately
  - See area to be planned
  - Handle and manipulate drawing frame
  - Drawing – ability
  - Measuring staff – hold and extend
  - Level/Total Station – set up tripod

- Level – attach to tripod
- Level – use visually
- Level/Total Station – manual focussing
- Level – read measurements
- Total Station – record readings on screen
- Total Station – attach prism to staff
- Prismatic compass – use
- Optical square – use
- Geophysical survey – identify walking line
- Gradiometry/Resistivity – use an instrument
- Gradiometry – audible signals

B. Can actually do activity with substantial adjustments/assistance:

- Archaeological activities:
  - Comprehending site records
  - Completing site records – numerical data
  - Drawing – use graph paper
  - Identifying finds – tactile, colour, texture, vision
  - Total Station – attach to tripod
  - Total Station – audible signals.

SELF-EVALUATION OF SKILLS (PART 4)

A. Student evaluation:

Trevor participated in all the activities on site. He rated himself as ‘above average’ (5) for most of the archaeological skills. It was only for dry sieving and sorting artefacts that he rated himself as ‘average’ (4).

B. Supervisor evaluation:

Trevor’s supervisor rated him as ‘below average’ (3) for site recording; ‘average’ (4) for planning and surveying; ‘above average’ (5) for instrument survey; and ‘above average’ (5) and ‘high’ (6) for excavation. There was no evaluation for processing of artefacts, environmental sampling or geophysical survey. For his most of his transferable skills Trevor was rated between ‘average’ (4) and ‘above average’ (5), apart from his social skills where he was rated ‘below average’ (3). On the returned Part 4 document the supervisor made the following comments:

> ‘He is a perfectly competent excavator who could benefit from more experience so he could get to grips with planning and recording on his own. He works well in a team.’

TRACKING

Trevor was working on site for two weeks in total.

A. Student returns:

- Technical skills – rose from ‘average’ (4) to ‘above average’ (5)
- Analytical skills – rose from ‘below average’ (3) to ‘high’ (6) at the end of the second week
- Inter-personal skills – rose from ‘below average’ (3) to ‘average’ (4)
- Understanding – rose from ‘average’ (4) to ‘above average’ (5)
- Attitude – remained fairly constant at ‘above average’ (5)
- Confidence – rose from ‘below average’ (3) to ‘above average’ (5) in the second week
- Enjoyment – remained fairly constant at ‘high’ (6).

B. Supervisor returns:

- Technical skills – varied between ‘average’ (4) and ‘above average’ (5)
- Analytical skills – varied between ‘average’ (4) and ‘above average’ (5)
- Inter-personal skills – remained fairly constant at ‘above average’ (5)
- Understanding – remained fairly constant at ‘above average’ (5)
- Attitude – remained fairly constant at ‘above average’ (5)
- Confidence – started at ‘above average’ (5), dropped to ‘low’ (2) and rose to ‘average’ (4) by end of second week
- Enjoyment – remained fairly constant at ‘above average’ (5).

Feedback:

- Week 1/1 – ‘He seems to be doing pretty well on the road and seems enthusiastic enough. Ha filled in a whole set of records and is working well.’
- Week 1/2 – ‘He is an interesting one, he has no, or little, confidence and seems to be afraid of the planning/recording side of archaeology, but is perfectly capable. He is more confident with the physical stuff and will hopefully get a better understanding in his second week. I feel we won’t quite get there with him and he would have been better with four weeks – not enough time to get the confidence up enough.’
- Week 2/1 – ‘He seems to be competent and enjoying himself. He does lack an understanding in primarily the confidence to grasp

some of the technical side in archaeology, but it could come to him with further experience.'
- Week 2/2 – 'He seems to have clicked a little more and can excavate practically well. Still needs to work on the recording side and would definitely benefit from returning next year.'

INTERVIEW

Trevor felt that he had enjoyed his time on the excavation and had found it an interesting environment, but was unsure if he had given a high performance. His greatest difficulty had been with planning, but he as unsure whether this was as a result of his dyslexia/dyspraxia or not. There were no particular tasks that he felt that he had excelled at. He had coped with the physical demands of excavation, but found the psychological demands more difficult. These he related to long shifts, repetitive work and having to camp on site. He had grasped the idea of transferable skills and their importance, and commented that the social skills gained from participating in the Field School were especially good and intends to return next year. In relation to self-evaluation, he had found this difficult and was unsure if he had been recording an accurate assessment of his performance.

SUMMARY

- It was expected that Trevor would have difficulties with a few of the archaeological tasks, especially those related to his disability.
- In the event, he had a number of difficulties with aspects of site recording, planning, the use of technical equipment and identification.
- In the self-evaluation of skills he tended to rate himself at the 'above average' level. His supervisor tended to give lower ratings.
- In the tracking he recorded a steady rise in his performance, his supervisor recorded variable ratings.
- In his supervisor's opinion, most of the difficulties that Trevor had could be related to a lack of self-confidence rather than any disability. This can be overcome by further experience.

B. THE OUTSIDE PARTICIPANTS

The outside participants visited the Field School on two occasions and none of them had previous archaeological experience. They worked on excavation and finds processing. On each occasion they were assigned a buddy to work alongside them.

1. JOSEPH

DETAILS OF DISABILITY

Visual Impairment – retina repair to back of eyes and cataracts; like looking through a net curtain.

RESULTS

Joseph found the whole experience exciting and uplifting and enjoyed the physical aspect of excavation. He was able to understand the details of what was going on and the nature of the different tasks quite easily. Although he was unable to take in the whole of the excavation visually, he had no difficulties trowelling a specific area and recognise and collect artefacts, as he was able to see the area immediately around him. He required assistance in navigating the area of excavation and in using a wheelbarrow to dispose of the spoil. This was mainly due to Health and Safety considerations, both for himself and other people on the site.

Joseph also experienced no difficulties with the processing of artefacts. His main hobby is model building and he is used to working closely with small objects using a number of different lenses. With these he was able to sort, wash and identify artefact competently.

2. JAMES

DETAILS OF DISABILITY

Brain Tumour – neurosurgery a few years ago; general nervousness, slow at communicating, need time to think things through.

RESULTS

On his visits to the excavation James' greatest needs were to feel comfortable and 'safe' in a new environment and to have all the aspects of the tasks explained to him in a clear fashion. He also required time to absorb information. His first visit was during a very hot spell and after

about an hour on the site he became disorientated and nervous because of the extreme weather conditions. The project team brought him off the site and he sat in the shade until he found his composure. He spent the rest of the day processing artefacts which he found to be a relaxing activity. He was able to understand the process more easily than excavation and was competent at the sorting, washing and identification of artefacts.

On James' second visit the weather was more clement and he spent more time on the excavation. Under these less stressful conditions he was able to understand what was required of him with little difficulty. He was able to excavate competently and recognise and collect artefacts. His greatest difficulty was with some of the physical and repetitive aspects of the work. He found that he needed to take frequent rest breaks and stretch his limbs. However, he was not used to this kind of work and this unfamiliarity with the physical nature of excavation can be the case with many non-disabled people.

3. KAREN

DETAILS OF DISABILITY

Registered Blind
Diabetes.

RESULTS

On her two visits to the excavation Karen participated in excavation and the processing of artefacts. In trowelling she scanned the ground in front of her by touch to learn the 'geography' of the area to be excavated. She then carefully trowelled towards herself holding the trowel in her right hand and feeling what she was doing and for any artefacts with her left hand. The 'buddy' stayed beside her giving advice as necessary. She was able to complete the task competently and successfully collect a number of artefacts without damaging them. She explained that she is a keen gardener and did not find this type of work too difficult. In moving around the site and manipulating a wheelbarrow she required assistance. She successfully navigated a number of planks by following the buddy with her hands on their shoulders. She was guided by the buddy in manipulating a wheelbarrow and successfully crossed uneven ground and climbed the spoil heap.

Karen participated in the processing of artefacts and could sort, wash and identify artefacts competently. After instruction in the different types of pottery on the site, she was able to accurately identify them by touch. She was also able to distinguish between rim, body and base sherds.

Extrapolating from the shape of the rim sherds, she was able to describe the shape and size of various pots with some accuracy.

Of her experiences at the Field School, Karen said that had she enjoyed excavating the most. It was the excitement of finding 2,000 year old artefacts that captured her enthusiasm.

4. MARTIN

DETAILS OF DISABILITY

Visual Impairment – blind in one eye, tunnel vision in other eye.

RESULTS

Michael, who had never been on an excavation before, described it as a, ‘Wonderful experience’. He worked alongside other people whilst trowelling and within an area that had physical boundaries. He was quite able to focus visually on the area directly in front of him, but had difficulties seeing areas to the side or envisioning the wider context of the area he was excavating. He was able to take barrows of spoil along barrow ‘runs’ constructed of planks quite safely and required very little assistance. His greatest difficulty was in navigating his way across and around the excavation site. He required a guide to accomplish these journeys. He also needed to be warned of cut features behind him as he trowelled backwards.

Michael explained that whatever he looked at directly he could see clearly, so he was able to successfully participate in finds processing. His only difficulty was with his peripheral vision.

5. ‘BUDDY’

The student who acted as a ‘buddy’ to the outside participants was asked to summarise how they had approached their role with working alongside disabled people with no previous archaeological experience:

- Essential to talk to them – find common ground, establish a relationship and discover their abilities and limitations
- Observe how they do things, such as how they walk or gather up equipment – discover their abilities by observation
- Formulate an effective strategy to overcome any potential obstacles
- Look at access
- Ask questions as they go along – what they are doing, how and why
- Learn when to help and when to let them get on with a task
- If necessary give a wider view of things so that they can obtain an overview
- When they become competent at a particular task be willing to stand back and ‘let go’
- Each case is different, individuals have differing abilities and limitations.

C. SECTION SUMMARY

- In comparing potential pre-fieldwork abilities (Part 2) with post-fieldwork actual abilities (Part 3) individuals were able to exceed their expected potential in many cases.

- Difficulties:

    - Where students reported difficulties with particular tasks and abilities these could sometimes be related to a specific disability
    - In some cases a specific disability did not affect the ability to carry out specific tasks
    - There was some relation between the tasks where difficulties had been experienced and a low rating in the self-evaluation of skills for the same task
    - The supervisors identified the perceived difficulties of some of the participants as being the result of a lack of self-confidence.

- There was one case where the student withdrew from the excavation. This was the result of an unexpected recurrence of ME. Various alternatives were tried to include the student in the learning process, but these did not effectively fulfil the learning outcomes of the Field School. In the light of this experience, provisions and procedures are being put in place for the next season of field work.

- The main archaeological activities where difficulties were experienced included:

    - Site recording
    - Planning
    - Technical tasks, such as instrument and geophysical survey
    - Discerning stratigraphy
    - The physical nature of archaeological fieldwork.

- Difficulties with the physical aspects of excavation were exasperated by the environment, extremely hot weather conditions and the rigours of camping which affected disabled and non-disabled students alike.

- Difficulties with the psychological pressures of fieldwork also included camping, aspects of the ‘macho’ image of archaeology

and an ethos of competitiveness. Also mentioned was the sometimes ‘cliquey’ nature of socialising, the long shifts and repetitive work.

- The main transferable skills where difficulties were experienced included:

  - Analysing data
  - Decision making
  - Adapting to a new environment.

- The main cognitive abilities where difficulties were experienced included:

  - Spatial awareness
  - Hand/eye co-ordination
  - Memory.

- The impact of dyslexia appeared to be greater than expected with the dyslexic students reporting difficulties with a range of activities and abilities:

  - Aspects of site recording
  - Using tape measures
  - Drawing
  - Level/Total Station – reading measurements
  - Discerning stratigraphy
  - Handling and manipulating a planning frame
  - Aspects of identification
  - Understanding instructions
  - Spatial awareness
  - Hand/eye co-ordination
  - Memory.

- Tracking:

  - Generally there was a steady improvement in the ratings for the various categories as the excavation progressed
  - In some cases where the ratings dropped off this could be ascribed to outside problems or general tiredness.

- Many of the participants found the process of self-evaluation useful, though challenging. This highlights that self-evaluation is a skill in itself that has to be learned through experience. The participants felt that it had helped them especially in three areas:

  - Developing self-awareness
  - Understanding and absorbing a new range of experiences
  - Identify strengths and weaknesses.

- The presence of outside volunteers who were accompanied by a 'buddy' allowed the project team to observe a number of aspects in detail:

  - The factors that make a 'buddy' system successful
  - Working closely with individuals helped to identify their abilities and limitations; ways to overcome any obstacles could then be formulated
  - The outside participants were able to bring a number of transferable skills from outside archaeological fieldwork which helped them to successfully tackle various tasks.

VIII REPORT SUMMARY

- The binary comparison between the Part 2 and Part 3 returns identified a number of anomalies with some of the tasks and abilities. A detailed comparison with the anomalies identified in the Phase 3 controlled testing and Phase 4a field trials further identified areas where the wording of the questions in the Part 1 document may need to be adjusted to eliminate ambiguities and misunderstandings. The major tasks and abilities concerned are:

    - Comprehending site records
    - Drawing – ability
    - Physical stamina
    - Spatial awareness
    - Long-term memory.

- The analysis of the Part 4 document enabled the skills that the students rated highest and lowest to be identified. Comparisons with the results of the Phase 4a field trials suggested that a greater or lesser expertise was being gained for different activities on different excavations.

- The tracking of a group of students through twice weekly self-evaluation and supervisor evaluation revealed increasing ratings as the fieldwork progressed. Any decline in ratings could be ascribed to tiredness or outside concerns.

- Where individual students experienced difficulties with particular tasks and abilities, this could often be related directly to their disability. There was often a relationship between a difficulty with a particular task and a low self-evaluation of skill level for the same activity. However, the supervisors suggested that some difficulties could also be ascribed to a lack of self-confidence.

- The physical and psychological pressures of excavation were frequently cited by both disabled and non-disabled students as areas of difficulty.

- The impact of dyslexia was greater than expected.

- Many of the students found the process of self-evaluation a useful exercise in that it aided them in reflecting on their developing self-awareness and absorbing a new range of experiences.

- The use of a ‘buddy’ system with assigned individuals working alongside disabled participants was trialled. This proved successful and useful information was gained from the experience which can inform the Guidelines for Good Practice which the project will be producing.

- The field trial at Silchester has demonstrated a direct relationship between aspects of individual disability and specific archaeological tasks and transferable skills, and it has also helped significantly in identifying the aspects of the pro forma of the self-evaluation tool kit that may need refining.

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