







# INCLUSIVE, ACCESSIBLE, ARCHAEOLOGY (HEFCE FDTL5)

Phase 4c

# FIELD TRIALS AT KNOWLTON: ARCHIVE REPORT

(December 2006)

Tim Phillips, Stephanie Le Scouiller,
Iain Hewitt, Sue Churchill,
Roberta Gilchrist & Geoff Cook

### LAYOUT OF THE REPORT

Introduction		
I	Methodology	9
II	The Knowlton Training Excavation	21
Ш	The Sample of Participants	23
IV	Limitations of the Phase 4c Field Trials	25
V	Statistical Comparison of the Part 2 and Part 3 Documents	27
VI	Part 4 Self-Evaluation of Skills	39
VII	The Individual Participants	43
VIII	Report Summary	109
Refe	erences	111
	endix I: king Forms	113
	endix II: ults of the Statistical Comparison Between the Part 2 and Part 3 Documents	117
	endix III: ults of the Analysis of the Part 4 Document	243

#### INTRODUCTION

This archive report provides a summary of the Phase 4 Field Trials at Bournemouth University's Knowlton 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

#### **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.

#### **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).

#### 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 the 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.

#### 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 Knowlton 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 2006b):
  - ➤ 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 2006c):
  - Having developed the self-evaluation tool kit through a series of controlled tests, the draft document was tested on actual archaeological training excavations.
  - ➤ The first of these Field Trials was held on Bournemouth University's excavation at East Holton, Dorset.
- Phase 4b Field Trials at Silchester: Archive Report (Phillips et al 2006a):
  - Having developed the self-evaluation tool kit through a series of controlled tests, the draft document was tested on actual archaeological training excavations.
  - The second of these Field Trials was held on the University of Reading's excavation at Silchester, Hampshire.

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

#### B. THE PHASE 4c METHODOLOGY

The draft self-evaluation tool kit used on the Knowlton excavations was exactly the same as used on the Silchester excavations. This was because the two excavations ran consecutively. The tool kit was divided into four parts:

#### PART 1 – SELF-EVALUATION OF ABILITIES

This was completed before participating in archaeological 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 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 tool kit used in Phases 3 and 4a, and the version used in Phase 4c. 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 selfevaluation.
- 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	Υ	N
Α	I can push a spade into the ground		В
В	I can push a sharp pole into the ground		С
С	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
  - Gradiometry using instrument
  - Gradiometry 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 gradiometer
  - 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

A focus group of 21 students participating in the excavation were individually 'tracked' in order to understand how they were progressing during their time on the fieldwork (**Appendix I**). 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
- Intellectual skills
- Inter-personal skills
- Transferable skills
- Attitude
- Enthusiasm
- Confidence

The participants were asked to complete the tracking forms once a week and also invited to make any comments on their progress during the fieldwork training. Support and advice were available for those who required it.

#### B. Complementary Data

To complement the data being provided by the participants involved in the Field Trials, a second copy of the tracking form was completed for each student in the group by their supervisor(s). In order to obtain a final overview of each student's skills development, a second form was completed by the supervisor(s) at the end of the excavation period (**Appendix I**).

The purpose of this was to discover if the participants may have been under- or over-estimating their performance, and the extent to which this was the case.

#### II THE KNOWLTON TRAINING EXCAVATION

At Bournemouth University the School of Conservation Sciences has designed two research projects that provide opportunities for undergraduate training; one of these is at Knowlton. The School has developed a multi-course approach to the teaching of archaeology there being seven 'programmes' in all, most of which share some common elements. However, two of the programmes have different fieldwork requirements to the other five and for this reason training provision has to be flexible. This flexibility has determined that the administration of the self-evaluation package varies in detail and the period for reflection between Part 1 and Part 4 also differs.

Knowlton (High Lea Farm), virtually equidistant between the Dorset towns of Wimborne and Cranborne, is the site of the University's principal research project. Archaeological Investigations here begin in mid-August for a period of five weeks though Second Year undergraduate students are required to be on site for just four of those weeks. Participating programmes were, BSc Archaeology, BSc Archaeology and Forensic Science, BSc Field Archaeology, FdSc Field Archaeology, BA Archaeology and Prehistory. The Project offers access to the usual range of skills' development opportunities including manual excavation techniques, soil flotation, microscopy, geophysical survey, finds processing, measured drawing, and field survey. There was also a rota for 'domestic' chores. On the training excavation qualitative and transferable skills such as leadership, team building and time keeping are regarded as pivotal. Students are required to keep a daily log. However, the site is not residential and a daily bus service is provided.

Parts 1 and 2 of the self-evaluation kit were completed at the beginning of the first full week of the project. Parts 3 and 4 were distributed and collected after each student had completed four weeks on site. The potential sample number was 74, virtually all of whom participated in the field trial of the self-evaluation tool kit. However, a focus group of 21 students was identified at the outset, the composition of which included representatives from each of the undergraduate groups on site. Members of the focus group were tracked throughout their excavation experience and during this process these students were regularly interviewed. The results of the focus group tracking were recorded on supplementary tracking forms.









Illus 1 Excavations at Knowlton

# III THE SAMPLE OF PARTICIPANTS IN THE FOCUS GROUP

All the students participating in the training excavation were asked to complete each part of the tool kit. From amongst these, a 'focus group' of 21 disabled and non-disabled students were chosen (**Table 4**). These were tracked individually through the course of the fieldwork.

Table 4 The 'Focus Group' in the Phase 4c Field Trials

No	Name*	Sex	Disability	Fieldwork Experience
1	James	М	Asperger's Syndrome	Yes
2	Mark	M	Dyslexia, Dyspraxia	Yes
3	Derek	M	Dyslexia	Yes
4	Jonathan	M	Non-disabled	Yes
5	Charles	M	Non-disabled	No
6	Helen	F	Non-disabled	No
7	Nigel	M	Dyslexia, Dyspraxia	Yes
8	Hannah	F	Non-disabled	No
9	Isabel	F	Non-disabled	No
10	Paula	F	Non-disabled	Yes
11	Linda	F	Non-disabled	No
12	Douglas	M	Non-disabled	No
13	Matthew	M	Dyslexia	No
14	Nicola	F	Non-disabled	No
15	Charlotte	F	Non-disabled	No
16	Alexandra	F	Dyslexia, AHDH	Yes
17	Jerry	M	Deaf	Yes
18	Elaine	F	Non-disabled	No
19	Danny	M	Dyslexia, OCD	Yes
20	Martin	M	Non-disabled	Yes
21	Louise	F	Non-disabled	No

<sup>\*</sup>individual names have been changed to preserve anonymity

#### IV LIMITATIONS TO THE FIELD TRIALS

There was one major limitation to the Field Trials. This was due to the 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, over 70 individuals at times, precluded some of the subjects participating in particular activities. In the areas that the individuals worked on, they did not always carry out every technique. This is normal for any excavation where not every individual has the opportunity to participate in every activity.
- Despite this limitation, it was possible to give the draft selfevaluation tool kit a thorough field trial on the Knowlton excavations.

## V STATISTICAL COMPARISON OF THE PART 2 AND PART 3 DOCUMENTS

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

#### 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 Knowlton 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, 95% confidence level), 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 73 participants.

**Example 2a** summarises the results for the activity 'comprehending site records'.

#### **Example 2a Results for 'Comprehending site records'**

	Able with	Able with	Able with	Not
	no	minor	substantial	applicable
	adjustments	adjustments	adjustments	
Able with no	27	20	2	13
adjustments				
Able with minor		5	3	
adjustments				
Able with substantial				
adjustments				
Not applicable				

<sup>3</sup> missing participants

In **Example 2a** the rows represent the data from the Part 2 document (potential ability) and the columns the results from 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 Knowlton in Part 3 across the whole sample. 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.

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 2a**), then the number of combinations will be  $3 \times 3 = 9$  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 2a** there were 27 participants who were predicted to be able to do the task with no adjustments in the Part 2 document. The same number of participants were 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 2a**, 20 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. Two participants who were predicted to be able to do the task with no difficulties were 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.

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 ability scores before and after the fieldwork at Knowlton, a series of Wilcoxon signed-rank tests was performed for each task. The aim of this was to control any over- or under-estimation of ability amongst the participants.

This test is a non-parametric test designed to compare 2 categorical variables when the responses (ability scores before fieldwork versus ability scores after fieldwork) relate to the same participants for a given skill.

#### **Example 2b Ranks for 'Comprehending site records'**

#### Ranks

		N	Mean Rank	Sum of Ranks
Part3: Comprehending	Negative Ranks	0 <sup>a</sup>	.00	.00
site records - Part2:	Positive Ranks	25 <sup>b</sup>	13.00	325.00
Comprehending site records	Ties	32 <sup>c</sup>		
records	Total	57		

a. Part3: Comprehending site records < Part2: Comprehending site records

The absolute differences between the variables are ranked and divided into three groups (**Example 2b**):

- Negative ranks include the participants whose score for the second variable (Part 2, potential ability) exceeds the score of the first variable (Part 3, actual ability). This relates to the number of participants below the diagonal. In **Example 2b** no participants under-estimated their ability for 'Comprehending site records'.
- Positive ranks include the participants whose score for the first variable (Part 3, actual ability) exceeds the score of the second variable (Part 2, potential ability). This relates to the number of participants above the diagonal. In **Example 2b** 20+2+3=25 participants over-estimated their ability for 'Comprehending site records'.

b. Part3: Comprehending site records > Part2: Comprehending site records

c. Part3: Comprehending site records = Part2: Comprehending site records

• 'Ties' include participants for whom the two variables are equal. In this example there are 27+5=32 participants who had the same ability level in Part 2 and Part 3, potential and actual ability.

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 the table below (**Example 2c**).

#### **Example 2c Test statistics for 'Comprehending site records'**

Test	Statistics <sup>b</sup>	•
------	-------------------------	---

	Part3:
	Comprehe
	nding site
	records -
	Part2:
	Comprehe
	nding site
	records
Z	-4.838 <sup>a</sup>
Asymp. Sig. (2-tailed)	.000

a. Based on negative ranks.

The Wilcoxon Signed-Rank test detects the difference between the distributions of two related variables (scores before fieldwork and scores after fieldwork). The sum of the ranks for the less frequent sign is standardized. Small significance values (<0.05) indicate that the two variables differ in distribution. In **Example 2c** the significance value is less than 0.0001 (the P-Value is very close to 0.000). This indicates that the scores for the actual ability level are significantly lower than the scores for the potential ability level for 'Comprehending site records'.

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. Wilcoxon Signed Ranks Test

#### **B. RESULTS**

**Table 5** 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 include a wide range of archaeological activities, and a few of the physical and cognitive abilities and transferable skills.

## Table 5 Activities where the ability level was over-estimated with a confidence level of higher than 80%

•	Archaeo	logical	activities:

	Comprehending site records	P = 0.000
	Complete site records – numbers	P = 0.000
	Discern stratigraphy – tactile	P = 0.000
	Discern stratigraphy – vision	P = 0.000
	Discern stratigraphy – texture	P = 0.000
	Drawing – ability	P = 0.000
	Sorting finds	P = 0.000
	Identifying finds – tactile	P = 0.000
	Identifying finds – texture	P = 0.000
	Identifying finds – vision	P = 0.000
	Sort environmental samples – tactile	P = 0.000
	Sort environmental samples – texture	P = 0.000
	Sort environmental samples – vision	P = 0.000
	Total Station – readings on screen	P = 0.000
	Field walking – identify material	P = 0.000
	Gradiometry – use an instrument	P = 0.000
	Drawing – use graph paper	P = 0.001
	Take bulk environmental samples	P = 0.001
	Sort environmental samples – physical	P = 0.001
	Prismatic compass – use	P = 0.001
	Optical square – use	P = 0.001
	Gradiometry – audible signals	P = 0.001
	Identifying finds – colour	P = 0.002
	Sort environmental samples – colour	P = 0.002
	Total Station – manual focussing	P = 0.002
>	Resistivity – use instrument	P = 0.002
	Wet sieving/flotation	P = 0.003
>	Read and understand maps	P = 0.004
<b>&gt;</b>	Level – set up tripod	P = 0.005
<b>&gt;</b>	Total Station – set up tripod	P = 0.005
	Total Station – read measurements	P = 0.005
	Total Station – attach prism to staff	P = 0.006
	Total Station – use visually	P = 0.007

	Handle planning frame	P = 0.008
	Level – manual focussing	P = 0.008
	Total Station – audible signals	P = 0.008
	Resistivity – identify walking line	P = 0.008
	Field survey – identify surface features	P = 0.012
	Read and understand plans	P = 0.013
	Gradiometry – identify walking line	P = 0.014
	Discern stratigraphy – colour	P = 0.019
	Cut turf	P = 0.020
	Mark sample trays/boxes	P = 0.020
	Level – use visually	P = 0.021
	Lift turf	P = 0.034
	Level – read measurements	P = 0.038
	Dry sieving	P = 0.046
	Washing finds	P = 0.083
	Marking finds	P = 0.132
	Excavation – secateurs	P = 0.157
	Handling finds	P = 0.157
	Field walking – pick up material	P = 0.157
	Level – attach to tripod	P = 0.166
	Clear waste material – on a spade	P = 0.180
	Vision – close and distant	P = 0.180
	Complete site records – descriptions	P = 0.184
	Ranging poles – line up	P = 0.194
•	Physical abilities:	
	Strength	P = 0.001
	Physical stamina	P = 0.162
•	Cognitive abilities:	
	Organisation/categorisation	P = 0.000
	Vision – texture	P = 0.008
	Comprehension – drawings	P = 0.046
	Hearing	P = 0.059
	➤ Touch	P = 0.180
•	Transferable skills	
	<ul><li>Communication – at a distance</li></ul>	P = 0.000
	Analysing qualitative data	P = 0.050
	Problem solving	P = 0.059

**Table 6** lists the activities where the ability level in the Part 2 document was under-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. The numbers of under-estimated aspects of archaeological fieldwork is a great deal less than those overestimated and includes a range of archaeological activities, physical and cognitive abilities, and transferable skills.

## Table 6 Activities where the ability level was under-estimated with a confidence level of higher than 80%

•	Archaeological activities:	
	Open and close finds bags (excavation)	P = 0.046
	Dispose of waste – wheelbarrow/bucket	P = 0.052
	Use a sprayer	P = 0.058
	Open and close finds bags (finds)	P = 0.083
	Waste – empty wheelbarrow/bucket	P = 0.152
	Read tape measure (planning)	P = 0.157
•	Physical abilities:	
	Carry equipment on back	P = 0.007
	Sitting with knees up to chest	P = 0.025
	Squatting	P = 0.034
	Kneeling	P = 0.157
•	Cognitive abilities:	
	Spatial awareness	P = 0.000
	Long-term memory	P = 0.000
	Short-term memory	P = 0.006
	Hand/eye co-ordination	P = 0.013
	Vision – physical features	P = 0.197
•	Transferable skills:	
	Communication – conveying information	P = 0.001
	Social skills	P = 0.008
	Decision making	P = 0.034
	Adapting to a new environment	P = 0.083
	Independent working	P = 0.197

The activities where the ability had the greatest chance of being overestimated can be isolated by tabulating those with a probability value of less than 0.05, a confidence level of over 95% (**Table 7**). The main tasks to note are the activities relating to site recording, aspects of identification, planning and the use of technical equipment in instrument and geophysical survey.

## Table 7 Activities where the ability level was over-estimated with a confidence level of higher than 95%

- Site records:
  - Comprehending site records
  - Complete site records numerical data
  - Read and understand maps and plans
- Excavation:
  - Cut and lift turf
  - Dry sieving
  - ➤ Discern stratigraphy tactile, vision, colour, texture

- Planning:
  - Manipulate planning frame
  - Drawing ability, use graph paper
- Processing of artefacts:
  - Sorting finds
  - Identifying finds tactile, vision, colour, texture
- Environmental sampling:
  - Take bulk samples
  - Wet sieving/flotation
  - Sort samples physical, tactile, vision, colour, texture
  - ➤ Mark sample trays/boxes
- Instrument survey:
  - Level set up tripod, use visually, manual focussing, read measurements
  - Total Station set up tripod, use visually, manual focussing, read measurements, record readings on screen, audible signals, attach prism to staff
  - Prismatic compass use
  - Optical square use
- Surface survey:
  - Field walking identify material
  - > Field survey identify surface features
- Geophysical survey:
  - > Identify walking line
  - Gradiometry use an instrument
  - Resistivity use an instrument
- Physical abilities:
  - Strength
- Cognitive abilities:
  - Vision texture
  - Comprehension drawings
  - Organisation/categorisation
- Transferable skills:
  - Communication at a distance
  - Analysing qualitative data

The activities where the ability had the greatest chance of being underestimated can be isolated by tabulating those with a probability value of less than 0.05, a confidence level of over 95% (**Table 8**). These were mainly a few physical and cognitive abilities, and some of the transferable skills.

## Table 8 Activities where the ability level was under-estimated with a confidence level of higher than 95%

- Excavation:
  - Open and close finds bags
- Physical abilities:
  - Carry equipment on back
  - Squatting
  - Sitting with knees pulled up to chest
- Cognitive abilities:
  - Spatial awareness
  - Hand/eye co-ordination
  - > Short-term memory
  - Long-term memory
- Transferable skills:
  - Communication conveying information
  - Decision making
  - Social skills

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 2006b), the Phase 4a field trials at East Holton (Phillips et al 2006c) and the Phase 4b field trials at Silchester (Phillips et al 2006a). This information is provided in Table 9 below. Direct comparisons between the Phase 3 controlled tests, the Phase 4a field trials and the Phase 4c 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 4c 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. There is a closer correlation between the data from the Phase 4b field trials and Phase 4c. Both were carried out on extensive archaeological training excavations involving a wide range of archaeological tasks. The same version of the self-evaluation tool kit was also used on both these excavations.

The main archaeological tasks represented are the activities relating to site recording, aspects of identification, planning and the use of technical equipment in instrument and geophysical survey. There are also a few physical and cognitive abilities, and some of the transferable skills.

Table 9 Activities where the ability level was over-or underestimated in the Phase 3 Controlled Tests, and the Phase 4a, 4b and 4c Field Trials

Task/Ability	Ph 3	Ph 4a	Ph 4b	Ph 4c
Comprehending site records	U		O*	O*
Complete site records – numerical data			O**	O**
Dispose of waste – wheelbarrow	U			U*
Discern stratigraphy – tactile		0		O**
Discern stratigraphy – vision			O*	O**
Discern stratigraphy – texture		0		O**
Manipulate planning frame			O**	O**
Drawing – ability	U		O*	O**
Drawing – use graph paper			O*	O**
Marking finds			U*	O*
Sort environmental samples – physical			O*	O**
Mark sample trays/boxes			U*	U**
Level – set up tripod			O*	O**
Level – manual focussing			O*	O**
Total Station – readings on screen			O*	O**
Total Station – attach prism			O*	O**
Gradiometry – identify walking line			O*	O**
Resistivity – identify walking line			O*	O**
Carry equipment on back	U*			U**
Physical stamina			O*	O*
Hearing			O*	O*
Spatial awareness	U		U**	U**
Hand/eye co-ordination			U*	U**
Short-term memory	U	U		U**
Long-term memory		U	U*	U**
Communication – conveying information			U**	U**
Adapting to a new environment			U*	U*
Problem solving			U*	O*
Decision making		U		U**
Social skills			U**	U**

O – over-estimated ability

U – under-estimated ability

To more accurately identify an activity, ability or skill that was over- or under-estimated, the tasks where the ability level was incorrectly predicted at a confidence level of 95% or greater in both the Phase 4b and Phase 4c field trials can be isolated (**Table 10**). These are the aspects within the self-evaluation tool kit that may need to be modified.

<sup>\* 80-94%</sup> confidence level, P-value 0.20 - 0.51

<sup>\*\* &</sup>gt;95% confidence level, P-value <0.50

Table 10 Activities where the ability level was over-or underestimated in both the 4b and 4c Field Trials at a confidence level greater than 95% (the results from the Phase 3 Controlled Tests and the Phase 4a Field Trials are also listed)

Task/Ability	Ph 3	Ph 4a	Ph 4b	Ph 4c
Complete site records – numerical data			0	0
Manipulate planning frame			0	0
Spatial awareness	U		U	U
Communication – conveying information			U	U
Social skills			U	U

O – over-estimated ability

U – under-estimated ability

The tasks and abilities that show the highest differences between anticipated and actual difficulties, as listed in **Table 10**, can be used as an aid in refining the tool kit. This especially relates to the questions about everyday activities in the Part 1 document.

# VI PART 4 SELF-EVALUATION OF SKILLS

## A. METHOD

The average rating for each task was calculated and the activities with the highest and lowest averages were noted. The results of this analysis can be found in **Appendix III**.

## B. RESULTS

For most of the tasks, the majority of responses given by the students to measure their skill level 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 excavation (except for cutting and lifting turf), planning (except for section drawing), sorting and identifying artefacts and the general understanding of processing artefacts, instrument survey, and using a magnetometer and a resistance meter. Amongst the transferable skills, a few students rated themselves as 'low' (2) for communication, independent working, team working, time management, problem solving, decision making, mental stamina, an appreciation of site Health and Safety, and understanding the importance and application of transferable skills. One student rated them self as 'very low' (1) for the understanding the process of environmental sampling.

The tasks having the lowest average ratings (4.40 - 4.85) among the students were:

•	Using an optical square	4.40
•	Using a prismatic compass	4.55
•	Understanding site records	4.82
•	Drawing an archaeological plan	4.82
•	Use a resistance meter	4.82
•	Complete site records – descriptions	4.85

The tasks having the highest average ratings (5.81 - 6.04) among the students were:

•	Using tape measures	5.81
•	Social skills	5.87
•	Disposal of spoil	5.94
•	Understanding of the importance and	
	applications of transferable skills	5.97
•	Team working	5.99
•	Appreciation of site health and safety	6.04

The activities with the lowest average ratings were all archaeological tasks and included the use of some technical equipment, aspects of completing site records and planning. The activities with the highest average ratings included some archaeological tasks, but there was also an emphasis on transferable skills.

# C. COMPARISONS WITH THE PHASE 4a AND 4b RESULTS

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

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

Task	4a	4b	4c
Complete site records – descriptions			4.85
Complete site records – numerical data	1.75		
Understand site records	1.88		4.82
Drawing an archaeological plan			4.82
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	4.55
Using an optical square		4.75	4.40
Using a resistance meter			4.82
Time management		4.92	
Physical stamina		4.92	

None of the low rated activities were the same at all three excavations. At East Holton the lowest ratings were given to aspects of site recording, planning and environmental sampling; at Silchester to aspects of physical survey, organisation and physical stamina; and at Knowlton to aspects of site recording, planning and the use of some technical equipment.

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

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

Task	4a	4b	4c
Excavation with large tools	2.75		
Excavation with small tools		5.86	
Using a sprayer		5.80	
Disposal of spoil	2.75		5.94
Washing artefacts		5.92	
Using tape measures	2.78		5.81
Using ranging poles	2.78		
Understand surveying	2.67		
Independent working	2.67	5.85	
Team working			5.99
Social skills			5.87
Appreciate site health and safety		6.23	6.04
Understand transferable skills		5.92	5.97

None of the low rated activities were the same at all three excavations. At East Holton the highest ratings were given to the heavier aspects of excavation, surveying and independent working; at Silchester to the more skilled aspects of excavation, washing artefacts and some transferable skills; and at Knowlton to a couple of the archaeological tasks, and a number of transferable skills.

This comparative data of the self-evaluation of skills comes from a limited sample of three 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. FEEDBACK

Only a few of the Knowlton students provided feedback on the Part 4 returns; much of this feedback centred around not being able to participate in all the archaeological activities on site:

'Really enjoyed it and I learnt a lot, but would have liked to have tried more things/different aspects of archaeology, such as Resistivity and instrument survey.'

'I am disappointed that the training of students was not the most important issue on site. I have not done any surveying or planning, through no fault of my own. I think I should have been trained in all areas of the excavation process, not just do what is necessary.'

'Have not been instructed in/completed certain skills, such as using a Total Station and identifying finds etc. to a high level. However, have a basic understanding.'

'I don't feel that I was taught very much other than manual labour.'

"...would have liked to have had the chance to have done some more of the specialised areas eg. context recording, geophysics, environmental sampling, Total Station, etc."

Despite this, two of the students felt that they had gained a great deal from the training excavation, especially in relation to their professional and personal development:

'Gained which are invaluable to my learning of archaeology and prehistory.'

'I feel that being on his excavation has developed my mental and physical skills and stamina greatly. Before coming, I felt nervous about not being able to complete tasks. Now I am confident that I am capable of performing tasks at the minimum of an average level and learning quickly anything I have not been able to try this time.'

# E. SUMMARY

- The students and the tended to rate their skills between 'average' (4) and 'high' (6).
- The students rated themselves lowest at aspects of using technical equipment, completing site records and planning. They rated themselves highest for some of the archaeological tasks, but there was also an emphasis on transferable skills.
- In comparison to the East Holton and Silchester training excavations, the students may have gained greater or lesser expertise in different archaeological tasks and transferable skills.

# VII THE INDIVIDUAL PARTICIPANTS

# A. THE PARTICIPANTS

## 1. JAMES

## **DETAILS OF DISABILITY**

Asperger's Syndrome – suspected.

## PRE-FIELDWORK ABILITIES (PART 2)

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

- Archaeological activities:
  - Comprehending site records
  - Completing site records descriptions
  - Dry sieving
  - Discern stratigraphy vision, colour
  - > Lay a tape measure
  - See area to be planned
  - Handle and manipulate planning frame
  - Washing finds
  - ➤ Identifying finds colour
  - Wet sieving
  - Sorting environmental samples colour
  - Ranging poles hold
  - Measuring staff extend
  - Level/Total Station manual focussing
  - Total Station attach prism to staff
  - Field walking identify material
  - Field survey identify surface features
  - Geophysics identify walking line
- Cognitive abilities:
  - Vision colour, physical details and features
  - > Balance
  - Spatial awareness
  - Comprehension written material
  - Mental stamina
- Transferable skills:
  - Independent working
  - > Team working
  - > Time management
  - Adapting to a new environment
  - Analysing qualitative data

- Analysing quantitative data
- Problem solving
- Social skills.

# 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)

There was no Part 4 return for James.

#### **TRACKING**

Returns only for weeks 1 to 3.

#### A. Student returns:

- Technical skills rose from 'average' (4) to 'above average' (5) in week 3
- Intellectual skills rose from 'low' (2) to 'above average' (5) in week 2, dropped to 'average' (4) in week 3
- Inter-personal skills rose steadily from 'low' (2) to 'average' (4) by week 3
- Transferable skills rose steadily from 'low' (2) to 'above average' (5) by week 3
- Attitude rose from 'average' (4) to 'above average' (5) in week 3
- Enthusiasm rose from 'average' (4) to 'above average' (5) in week 2
- Confidence rose steadily from 'below average' (3) to 'above average' (5) by week 3.

## B. Supervisor returns:

- Technical skills rose from 'above average' (5) to 'high' (6) in week 2
- Intellectual skills 'above average' (5) throughout
- Inter-personal skills varied between 'above average' (5) and 'high' (6)
- Transferable skills 'above average' (5) throughout
- Attitude 'above average' (5) throughout
- Enthusiasm 'above average' (5) throughout
- Confidence varied between 'average' (4) and 'above average' (5).

#### C. Feedback:

The letters by each entry in this section denote the comments made by different supervisors.

Week 1, A – 'He is a very capable student and a willing worker.
He listens and understands instructions well and fits in with the
rest of the team. A slight lack of confidence in his own ability, but
this is not a problem as his confidence will grow with more
experience.'

#### **SUMMARY**

- It was expected that James could potentially have difficulties with a wide range of activities and abilities. This proved not to be the case, his main difficulties centred on site recording and the physical aspects of the excavation.
- In the tracking he felt that he was improving steadily as the excavation progressed. The supervisor returns suggested a variable performance, but this was at an above average level.
- His greatest difficulty appeared to centre on his lack of selfconfidence, but he was able to participate fully in the excavation.

## 2. MARK

#### **DETAILS OF DISABILITY**

Dyslexia, Dyspraxia.

## 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
    - Field survey identify surface features
  - Cognitive abilities:
    - Vision physical features
    - Spatial awareness
    - Comprehension verbal information
  - Transferable skills:
    - Communication understanding information
    - Independent working
    - > Time management
    - Adapting to a new environment
    - Analysing qualitative data
    - Analysing quantitative data
    - > Problem solving.
- B. Can potentially do activity with substantial adjustments/assistance:
  - Archaeological activities:
    - Drawing ability
  - Cognitive abilities:
    - Short-term memory
  - Transferable skills:
    - Decision making.

<sup>\*</sup> Did not do this activity

## POST-FIELDWORK ABILITIES (PART 3)

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

- Cognitive abilities:
  - Short-term memory
- Transferable skills:
  - Adapting to a new environment
  - Decision making.

## SELF-EVALUATION OF SKILLS (PART 4)

Mark participated in all the activities on site except planning, processing of artefacts, environmental sampling, and surface and geophysical survey. For most of the archaeological activities he rated himself as between 'high' (6) and 'very high' (7), except for the site recording where he rated himself as between 'above average' (5) and 'high' (6). For the transferable skills he rated himself between 'average' (4) and 'very high' (7). The 'average' skills were independent working, problem solving, decision making and analysing qualitative data. The 'very high' skills were analysing digital data, physical and mental stamina, health and safety and understanding transferable skills.

#### TRACKING

#### A. Student returns:

- Technical skills rose steadily from 'average' (4) to 'high' (6) by week 4
- Intellectual skills rose from 'average' (4) to 'high' (6) by week 4
- Inter-personal skills rose steadily from 'average' (4) to 'high' (6) by week 4
- Transferable skills rose from 'average' (4) to 'above average'
   (5) by week 4
- Attitude started as 'very high' (7), dropped to 'high' (6) in week 4
- Enthusiasm 'high' (6) throughout
- Confidence rose steadily from 'low' (2) to 'above average' (5) by week 4.

#### B. Supervisor returns:

- Technical skills rose from 'average' (4) to 'high' (6) by week 4
- Intellectual skills rose from 'below average' (3) to 'above average' (5) by week 4

- Inter-personal skills rose from 'average' (4) to 'high' (6) by week
- Transferable skills rose 'below average' (3) to 'above average'
   (5) by week 4
- Attitude rose 'above average' (5) to 'high' (6) in week 4
- Enthusiasm rose 'above average' (5) to 'very high' (7) by week
- Confidence rose from 'average' (4) to 'high' (6) by week 4.

#### C. Feedback:

- Week 1, A 'Tends to be quite forgetful and requires prompting on [completing] his logbook. He isn't very confident, but appears willing to work.'
- Week 1, D 'He is a happy and popular member of the team.
   However, it seems that he may question his own ideas and thoughts, which makes him lose confidence in his own abilities.'
- Week 2, C 'He is a valued member of the team since being moved from another area [of the site].'
- Week 3, B 'A very willing student willing to take on any task set him with confidence and enthusiasm.'
- Week 4, A 'He has been given the privilege of digging one of the graves due to his competence and dedication.'
- Final comments, A 'He is a very intelligent, quiet lad who always shows himself to be hard working and willing. He is now working on the graves because he has continuously shown himself to be eager and hard working.'

#### **SUMMARY**

- It was expected that Mark could potentially have difficulties with a wide range of activities and abilities. This proved not to be the case.
- In the self-evaluation of skills he rated himself at a reasonably high level, except for some of the transferable skills.
- In the tracking he felt that he was improving steadily as the excavation progressed, this pattern was supported by the supervisor returns.
- His greatest difficulty appeared to centre on his lack of selfconfidence, but he was able to participate fully in the excavation especially due to his enthusiasm. This led to him being given the responsibility of excavating sensitive features

## 3. DEREK

#### **DETAILS OF DISABILITY**

Dyslexia.

## 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
- Cognitive abilities:
  - ➤ Vision colour
  - Long-term memory
- Transferable skills:
  - Analysing quantitative data.

## POST-FIELDWORK ABILITIES (PART 3)

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

- Archaeological activities:
  - Identifying finds tactile, colour, texture, vision
  - Wet sieving
  - Sorting environmental samples tactile, colour, texture, vision
  - Field walking identify material
  - > Field survey identify surface features
  - Geophysics identify walking line
  - Gradiometry use an instrument
  - Gradiometry audible signals
  - Resistivity use an instrument.

## SELF-EVALUATION OF SKILLS (PART 4)

Derek participated in all the activities on site. He rated himself between 'above average' (5) and 'high' (6) for most of the archaeological skills. It was only for using a resistance meter that he rated himself as 'below average' (3) and for sorting and identifying artefacts, and using a gradiometer as 'average' (4). There was no return for the transferable skills.

#### **TRACKING**

#### A. Student returns:

- Technical skills rose from 'above average' (5) to 'high' (6) in week 2
- Intellectual skills 'above average' (5) throughout
- Inter-personal skills rose from 'above average' (5) to 'high' (6) by week 4
- Transferable skills rose from 'average' (4) to 'high' (6) in week 2
- Attitude rose from 'above average' (5) to 'high' (6) in week 2
- Enthusiasm rose from 'above average' (5) to 'very high' (7) by week 3
- Confidence rose from 'average' (4) to 'high' (6) by week 4.

## B. Supervisor returns:

- Technical skills rose from 'above average' (5) to 'high' (6) in week 4
- Intellectual skills varied between 'average' (4) and 'high' (6)
- Inter-personal skills varied between 'average' (4) and 'high' (6)
- Transferable skills varied between 'average' (4) and 'high' (6)
- Attitude varied between 'above average' (5) and 'high' (6)
- Enthusiasm varied between 'above average' (5) and 'high' (6)
- Confidence rose from 'average' (4) to 'above average' (5) by week 4.

#### C. Feedback:

- Week 2, B 'He is a conscientious worker, though needs to concentrate on trowelling skills rather than using a mattock.'
- Week 3, C 'The work he has carried out has been of a good standard with great commitment.'
- Week 4, A 'He has good archaeological experience and has been trusted enough to work with the sarsen stone and a possible inhumation underneath. A very competent archaeologist.'
- Final comments, A 'He appears to be a real hard working student and is not afraid to 'get in' and help with the less desirable side of archaeology. When speaking to him he appears quite shy and quiet, although with his friends/colleagues he seems quite chatty. He appeared quite cautious with the [project's] questionnaires to begin with, but now approaches them with ease and completed them rapidly. He certainly doesn't partake in 'small talk' and doesn't open up or want to talk about

anything, may be a bad trait to have. Very quiet, but friendly and hard-working.'

#### SUMMARY

- It was expected that Derek could potentially have difficulties with a few of the activities and abilities, especially in recognising colours. This proved to be the case for aspects of colour recognition, but also for geophysical survey. Interestingly, he did not appear to experience any difficulties with site recording or planning.
- In the tracking he felt that he was improving steadily as the excavation progressed. The supervisor returns suggested a variable performance, but this was at an above average level.
- His greatest difficulty appeared to centre on his lack of selfconfidence, but he was able to participate fully in the excavation.
- He was recognised as a hard working individual and, as such, was given the responsibility of excavating a sensitive feature.

## 4. JONATHAN

### **DETAILS OF DISABILITY**

Non-disabled.

## PRE-FIELDWORK ABILITIES (PART 2)

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

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

## POST-FIELDWORK ABILITIES (PART 3)

Jonathan had no difficulties with any of the tasks, abilities or skills.

## SELF-EVALUATION OF SKILLS (PART 4)

Jonathan participated in all the activities on site except planning and instrument survey. For most of the archaeological activities he rated himself as between 'high' (6) and 'very high' (7), except for sorting and

identifying artefacts where he rated himself as 'above average' (5). For the transferable skills he rated himself as 'very high' (7) for most of them. The only exceptions were 'above average' (5) for analysing digital data, and 'high' (6) for analysing qualitative and quantitative data.

#### **TRACKING**

#### A. Student returns:

- Technical skills rose from 'average' (4) to 'very high' (7) by week 4
- Intellectual skills 'high' (6) throughout
- Inter-personal skills rose from 'high' (6) to 'very high' (7) in week
- Transferable skills rose from 'high' (6) to 'very high' (7) in week 3
- Attitude rose from 'high' (6) to 'very high' (7) in week 2
- Enthusiasm 'very high' (7) throughout
- Confidence rose from 'high' (6) to 'very high' (7) in week 2.

## B. Supervisor returns:

- Technical skills rose from 'high' (6) to 'very high' (7) in week 4
- Intellectual skills varied between 'high' (6) and 'very high' (7)
- Inter-personal skills varied between 'high' (6) and 'very high' (7)
- Transferable skills dropped from 'very high' (7) to 'high' (6) in week 2
- Attitude rose from 'high' (6) to 'very high' (7) in week 3
- Enthusiasm rose from 'high' (6) to 'very high' (7) in week 2
- Confidence varied between 'high' (6) and 'very high' (7).

#### C. Feedback:

- Week 1, D 'Works very well in a team, always appears enthusiastic and eager to learn about the process of environmental flotation and other areas of the excavation.'
- Week 2, C 'He is very competent generally and a very good member of the team. He comes across as a quiet person and this may impact slightly in the area of his group interaction. However, being a mature student may also affect this as the others are mainly younger. When working in a group of his own age he interacts excellently.'
- Week 3, C 'He is very good! I consider him to be the best archaeologically in my trench.'

• Final comments, A – 'As a mature student he has come onto site with some experience in archaeology, as well as life skills. He is very sensible and has a very good attitude which reflects well in his work and when you talk to him. He is very confident in his work, which was recognised by his supervisors, and he was given various responsibilities very early on. He is a very competent and well-liked student who is always willing to offer his help and participate in the focus group.'

## **SUMMARY**

- It was expected that Derek could potentially have difficulties with only a couple of the activities and abilities. In the event he experienced no difficulties.
- In the self-evaluation of skills he gave himself fairly high ratings.
- In the tracking he felt that he was improving steadily as the excavation progressed. This pattern was supported by the supervisor returns.
- He was seen as a hard working student who experienced no real difficulties on the excavation. This was partially attributed to his maturity.

## 5. CHARLES

**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
- Cognitive abilities:
  - Short-term memory
  - Long-term memory
- Transferable skills:
  - > Time management
  - Decision making.

## POST-FIELDWORK ABILITIES (PART 3)

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

- Archaeological activities:
  - Comprehending site records
  - > Total Station record readings on screen
- Transferable skills:
  - > Time management.

## SELF-EVALUATION OF SKILLS (PART 4)

Charles participated in all the activities on site except flotation and wet sieving. For most of the archaeological activities and transferable skills he rated himself as between 'above average' (5) and 'high' (6). The only exceptions were 'average' (4) for site recording and time management.

#### Feedback:

'I have not had a chance to complete some aspects of excavation such as environmental [sampling]. However, I feel my skills have greatly improved since the beginning of the dig.'

#### **TRACKING**

#### A. Student returns:

- Technical skills rose from 'average' (4) to 'above average' (5) in week 4
- Intellectual skills rose from 'average' (4) to 'high' (6) by week 4
- Inter-personal skills rose from 'above average' (5) to 'high' (6) in week 4
- Transferable skills 'average' (4) throughout
- Attitude 'above average' (5) throughout
- Enthusiasm started as 'very high' (7), dropped to 'above average' (5) in week 2, rose to 'very high' (7) in week 4
- Confidence rose from 'average' (4) to 'high' (6) by week 4.

#### B. Supervisor returns:

- Technical skills rose steadily from 'average' (4) to 'high' (6) by week 3
- Intellectual skills rose steadily from 'average' (4) to 'high' (6) by week 4

- Inter-personal skills rose from 'above average' (5) to 'high' (6) by week 4
- Transferable skills stayed relatively constant as 'above average'
   (5)
- Attitude rose steadily from 'average' (4) to 'high' (6) by week 3
- Enthusiasm rose from 'above average' (5) to 'high' (6) in week 3
- Confidence rose from 'average' (4) to 'above average' (5) by week 4.

#### C. Feedback:

- Week 1, B 'A good student, a bit quiet but seemed to enjoy working. Carried out all tasks without any problems.'
- Week 2, A 'He has admitted he is nervous of edging because he's worried he may do damage. He has \* as his supervisor which is making him apprehensive.'
- Week 3, B 'A very good worker who is able to understand what is being done and why.'
- Week 4, E 'Although he did not get to experience every aspect of finds work, he exhibited interest in finds identification which he showed a high competence for.'
- Final comments, A 'I have always found him to be friendly, talkative and approachable. He always asks questions when he is unsure of anything. Over the last four weeks I have watched him develop from a very nervous student who doubted his own ability to excavate and grow into a confident student who appears happy and enthusiastic. He has also now decided to continue into Week 5 as he is enjoying his time so much. I also think he has developed better because he was in a smaller trench with almost one-to-one supervision. He always appears happy in the group and I feel his confidence has come on in leaps and bounds since the first week. He has been a great focus group member.'

#### SUMMARY

- It was expected that Charles could potentially have minor difficulties with only a few of the activities and abilities, and this proved to be the case.
- In the self-evaluation of skills he gave himself fairly high ratings, except for a couple of activities.
- In the tracking he felt that he was improving steadily as the excavation progressed. This pattern was supported by the supervisor returns.
- It was suggested by the supervisors that the experience of doing archaeological fieldwork had helped his self-confidence to grow.

## 6. HELEN

#### **DETAILS OF DISABILITY**

Non-disabled.

## PRE-FIELDWORK ABILITIES (PART 2)

- A. Can potentially do activity with minor adjustments/assistance:
  - Archaeological activities:
    - Write labels
    - > Handle and manipulate planning frame
    - Marking finds
    - Mark sample trays/boxes
  - Cognitive abilities:
    - Spatial awareness
    - Long-term memory
    - > Recognition
  - 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, numerical data
    - Dry sieving
    - Use a sprayer
    - Discern stratigraphy texture
    - Identifying finds colour, texture, vision
    - Sorting environmental samples tactile, colour, texture, vision
    - Mark sample trays/boxes
    - Ranging poles hold
  - Cognitive abilities:
    - Long-term memory.
- B. Can actually do activity with substantial adjustments/assistance:
  - Archaeological activities:
    - Ranging poles line up.

## SELF-EVALUATION OF SKILLS (PART 4)

For most of the archaeological activities Helen rated herself as between 'above average' (5) and 'high' (6). The exceptions were 'average' (4) for taking off-sets, and understanding artefact processing and environmental sampling; and 'high' (7) for excavation with small tools and disposal of spoil. For the transferable skills she rated herself as between 'high' (6) and 'very high' (7).

#### **TRACKING**

#### A. Student returns:

- Technical skills rose from 'average' (4) to 'high' (6) by week 4
- Intellectual skills varied between 'above average' (5) and 'high'
   (6)
- Inter-personal skills rose steadily from 'average' (4) to 'high (6) by week 4
- Transferable skills stayed relatively constant as 'above average'
   (5)
- Attitude rose from 'above average' (5) to 'high (6) in week 3
- Enthusiasm varied between 'average' (4) and 'above average'
   (5)
- Confidence dropped from 'high' (6) to 'above average' (5) in week 3.

#### B. Supervisor returns:

- Technical skills rose from 'average' (4) to 'above average' (5) in week 4
- Intellectual skills rose from 'below average' (3) to 'above average' (5) in week 4
- Inter-personal skills rose from 'below average' (3) to 'average'
   (4) in week 3
- Transferable skills rose from 'below average' (3) to 'average' (4) in week 4
- Attitude rose from 'below average' (3) to 'average' (4) in week 3
- Enthusiasm started as 'below average' (3), dropped to 'very low' (1) in week 2, rose to 'average' (4) in week 3
- Confidence started as 'below average' (3), dropped to 'low' (2) in week 2, rose to 'average' (4) by week 4.

#### C. Feedback:

- Week 3, A 'Did geophysics, but didn't enjoy [it].'
- Week 3, C 'Since being separated from her friend, she seems to be improving. Today she approached me with an enthusiasm I haven't seen in her before, after finding two stake/post holes. I hope she continues to improve with her new found enthusiasm and enjoyment.'
- Week 4, A 'A very quiet student who tends to stick close by her closest friends which gives the impression that she's not part of the team. However, she works hard when asked.'
- Final comments, A 'She has always been very quiet with me and at times it's been a struggle to get her to open up. On site she tends to stick close to her partner and, because of that, she doesn't work as hard as they talk a lot. Since they were separated, she works harder as she isn't distracted. In the last two weeks she has come out of her shell and has chatted to me in a rather more relaxed manner. She gives the impression of being switched on.'

#### SUMMARY

- It was expected that Helen would have a few difficulties with some of the archaeological tasks. In the event she did have some difficulties, but with different tasks and mostly related to site records and aspects of identification.
- In the self-evaluation she rated herself at a generally high level.
- In the tracking she recorded variable ratings as the excavation progressed. However, her supervisors recorded increasing ratings.
- The supervisors felt that she was distracted and not working to her full potential whilst she was along side her close friend. After the two were separated, she appeared to work better and her performance improved.

## 7. NIGEL

### **DETAILS OF DISABILITY**

Dyslexia, Dyspraxia.

## PRE-FIELDWORK ABILITIES (PART 2)

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

- Archaeological activities:
  - Comprehending site records
  - Discern stratigraphy vision
  - Read a tape measure accurately
  - \*See area to be planned
  - \*Drawing ability
  - > \*Level/Total Station read measurements
  - \*Prismatic compass use
  - \*Field walking identify material
  - \*Field survey identify surface features
  - Geophysics identify walking line
  - Sitting with knees pulled up to chest
- Cognitive abilities:
  - Vision physical details
  - Vision physical features
  - Spatial awareness
  - Hand/eye co-ordination
  - Comprehension written material
  - Long-term memory
  - > Recognition
- Transferable skills:
  - Communication conveying information
  - Decision making.

## POST-FIELDWORK ABILITIES (PART 3)

- A. Can actually do activity with minor adjustments/assistance:
  - Archaeological activities:
    - Comprehending site records
    - Excavation large tools, light tools
    - Discern stratigraphy tactile, vision, colour, texture
    - Identifying finds tactile, vision

<sup>\*</sup> Did not do this activity

- Gradiometry use an instrument
- Gradiometry identify walking line
- Cognitive abilities:
  - Vision physical details
  - > Balance
  - Spatial awareness
  - Hand/eye co-ordination
  - Organisation/categorisation
  - Short-term memory
  - Recognition
  - Mental stamina
- Transferable skills:
  - Communication conveying, understanding information, at a distance
  - Independent working
  - > Team working
  - Analysing qualitative data
  - Analysing quantitative data
  - Problem solving
  - Decision making
  - Social skills.
- B. Can actually do activity with substantial adjustments/assistance:
  - Cognitive abilities:
    - Comprehension verbal information.

## SELF-EVALUATION OF SKILLS (PART 4)

Nigel participated in all the activities on site except environmental sampling and instrument survey. For most of the archaeological activities he rated himself as between 'average' (4) and 'above average' (5). The exceptions were 'high' (6) for disposal of spoil, understanding excavation, sorting artefacts, and using tape measures and a gradiometer; and 'very high' (7) for dry sieving. For the transferable skills he rated himself as between 'above average' (5) and 'high' (6), except for 'average' (4) for time management and decision making, and 'very high' (7) for health and safety.

#### TRACKING

#### A. Student returns:

- Technical skills varied between 'average' (4) and 'above average' (5)
- Intellectual skills dropped from 'high (6) to 'above average' (5) in week 2
- Inter-personal skills 'average' (4) throughout
- Transferable skills varied between 'average' (4) and 'above average' (5)
- Attitude varied between 'above average' (5) and 'high' (6)
- Enthusiasm dropped from 'high (6) to 'above average' (5) in week 2
- Confidence varied between 'average' (4) and 'above average' (5).

## B. Supervisor returns:

- Technical skills rose from 'average' (4) to 'above average' (5) in week 2
- Intellectual skills varied widely between 'below average' (3) in week 2 and 'above average' (5) in week 4
- Inter-personal skills varied between 'average' (4) and 'above average' (5)
- Transferable skills varied widely between 'below average' (3) in week 2 and 'above average' (5) in week 4
- Attitude rose from 'average' (4) to 'above average' (5) in week 3
- Enthusiasm rose from 'average' (4) to 'high' (6) by week 3, dropped to 'above average' (5) in week 4
- Confidence varied widely between 'below average' (3) and 'above average' (5).

#### C. Feedback:

- Week 1, A 'Very confident individual who recognises that he may come over as a bit too confident.'
- Week 1, B 'Needs to stop talking and listen to what is being said sometimes.'
- Week 2, C 'I haven't known him for very long, but he has become quite a good worker who is willing to tackle any job he is given.'
- Week 3, A He has been having problems in a few areas, but is overcoming them. He is recognising what he is doing wrong and making efforts to change it.'

- Week 3, B 'He is a good student, but tends to be over-confident about his own ability.'
- Week 4, A 'He is working hard and is very conscientious. He is trying really hard to do things correctly and is aware of his own 'failings' which he is working hard to overcome.'
- Final comments, A 'He has always been the most suspicious of all my tracking students. I think he feels I'm trying to catch him out in some way. He is a very sensitive student who openly struggles with his disability. He finds it hard to relax and always appears agitated and wants to be somewhere else. I believe he's very honest about the marks he gives himself, but doubts that he is doing well. Compared to some of the other students he works very hard and is very responsible. We didn't seem to bond too well, but he was always pleasant.'

#### **SUMMARY**

- There were a number of activities that it was expected Nigel could potentially have difficulties with, and this proved to be the case. Aspects of identification and geophysics were highlighted; and he felt that he had experienced more difficulties with the transferable skills than had been expected.
- In the self-evaluation of skills he tended to rate himself relatively high.
- In the tracking he gave himself variable ratings as the excavation progressed. His supervisors tended to observe an improvement in the ratings that they recorded.
- The supervisors felt that Nigel was aware of possible limitations to his performance due to his disability and thought that he compensated for these by appearing over-confident. However, they did note an improvement in his performance as the excavation progressed.

## 8. HANNAH

### **DETAILS OF DISABILITY**

Non-disabled.

## PRE-FIELDWORK ABILITIES (PART 2)

- A. Can potentially do activity with minor adjustments/assistance:
  - Archaeological activities:
    - Comprehending site records
    - Excavation large tools
    - Use a wheelbarrow
    - Discern stratigraphy colour, texture
    - \*Identifying finds colour, texture
    - Sorting environmental samples colour, texture
  - Physical abilities:
    - Carry equipment on back
    - \*Squatting
    - \*Kneeling
    - \*Sitting with knees pulled up to chest
  - Cognitive abilities:
    - ➤ Vision colour, texture
    - Comprehension written material.
- B. Can potentially do activity with substantial adjustments/assistance:
  - Physical abilities:
    - \*Climb in and out of trenches
  - Cognitive abilities:
    - Long-term memory.

## POST-FIELDWORK ABILITIES (PART 3)

- A. Can actually do activity with minor adjustments/assistance:
  - Archaeological activities:
    - Comprehending site records
    - Completing site records descriptions, numerical data
    - Read and understand maps
    - ➤ Discern stratigraphy tactile, vision, colour, texture
    - Measuring staff hold and extend

<sup>\*</sup> Did not do this activity

- Level/Total Station set up tripod
- Level/Total Station attach to tripod
- Level/Total Station use visually
- Level/Total Station manual focussing
- Total Station read measurements
- Total Station record readings on screen
- Total Station audible signals
- > Total Station attach prism to staff
- Field walking traverse
- Field walking identify material
- Field walking pick up material
- Cognitive abilities:
  - Vision physical details
  - Vision physical features
  - Vision printed details
- Transferable skills:
  - Team working.
- B. Can actually do activity with substantial adjustments/assistance:
  - Archaeological activities:
    - Prismatic compass use
    - Optical square use
    - ➤ Field survey traverse
    - Field survey identify surface features.

## SELF-EVALUATION OF SKILLS (PART 4)

Hannah participated in all the activities on site. For most of the archaeological activities she rated herself as between 'average' (4) and 'above average' (5). The exceptions were 'below average' (3) for excavation with large tools; 'high' (6) for site records numerical data, section drawing and accurate recording of measurements; and 'very high' (7) for environmental sampling and using tape measures. For most of the transferable skills she rated herself between 'high' (6) and 'very high' (7). The exceptions were 'below average' (3) for physical stamina; and 'average' (4) for health and safety and understanding transferable skills.

## **TRACKING**

#### A. Student returns:

- Technical skills rose from 'very low' (1) to 'high' (6) by week 4
- Intellectual skills rose from 'average' (4) to 'above average' (5) in week 4

- Inter-personal skills rose from 'below average' (3) to 'above average' (5) by week 4
- Transferable skills rose from 'above average' (5) to 'high' (6) in week 2
- Attitude rose from 'below average' (3) to 'average' (4) in week 3
- Enthusiasm rose from 'low' (2) to 'above average' (5) by week 3
- Confidence varied between 'high' (6) and 'very high' (7).

## B. Supervisor returns:

- Technical skills rose from 'below average' (3) to 'very high' (7) by week 3, dropped to 'above average' (5) in week 4
- Intellectual skills rose from 'below average' (3) to 'high' (6) by week 3, dropped to 'above average' (5) in week 4
- Inter-personal skills rose from 'below average' (3) to 'very high'
   (7) in week 2, dropped to 'average' (4) in week 4
- Transferable skills rose from 'below average' (3) to 'very high'
   (7) in week 2, dropped to 'above average' (5) in week 4
- Attitude rose from 'below average' (3) to 'high' (6) in week 2, dropped to 'average' (4) in week 4
- Enthusiasm rose from 'below average' (3) to 'high' (6) in week
   2, dropped to 'average' (4) in week 4
- Confidence rose from 'below average' (3) to 'very high' (7) in week 2, dropped to 'above average' (5) in week 4.

#### C. Feedback:

- Week 1, A 'Very confident student who has admitted she has an 'attitude'. Perhaps needs persuading on the etiquette of the site.'
- Week 1, C 'Having spoken with her, I find her a likeable person. However, she does seem to be easily led by her close friends on site. When separated, I have seen an improvement in her attitude and work ethic.'
- Week 2, D 'She works well in a team and seems to really enjoy environmental archaeology. Polite and knows what she is doing; able to understand the processes and why they are used.'
- Week 3, D 'Very keen and interested, works very well in a team, asks relevant questions and seems interested in the whole process. Knows exactly what she's doing and the outcomes and objectives to meet.'
- Final comments, A 'She is certainly one of the most prominent characters on site. She made a very big impression with everyone early on due to her opinions and frankness. She is a very confident individual who was happy to express her opinions.

This perhaps upset a number of students and supervisors. She has always said that she is not interested in the archaeological side of her course, but has managed to gain a lot of skills including being given some form of responsibility on environmental processing. She has always happily co-operated with this project and always chatty and forthcoming. A very honest person who is not afraid to speak her mind.'

#### SUMMARY

- It was expected that Hannah could experience difficulties with a few of the archaeological tasks. In the event, she felt that there were several activities that she had difficulties with, mainly site recording, using technical equipment and surface survey. However, given her disinterest in archaeological fieldwork, it may be that she just did not 'like' these tasks.
- In the self-evaluation of skills she tended to rate herself at the average/above average level.
- In the tracking she recorded a steady improvement in her performance as the excavation progressed, as did her supervisors.
- Although not interested in archaeological fieldwork, Hannah seemed to perform well, gaining and improving various archaeological and transferable skills.

#### 9. ISABEL

#### **DETAILS OF DISABILITY**

Non-disabled.

## PRE-FIELDWORK ABILITIES (PART 2)

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

- Archaeological activities:
  - > Read and understand plans
  - Excavation large tools
  - Use and empty wheelbarrow
  - Drawing ability
  - ➤ Field walking/survey traverse
- Physical abilities:
  - Squatting
  - Kneeling

- Sitting with knees pulled up to chest
- > Sitting with legs to one side
- Cognitive abilities:
  - Comprehension drawings
  - Short-term memory
  - Long-term memory
- Transferable skills:
  - Communication conveying information
  - Decision making.

## POST-FIELDWORK ABILITIES (PART 3)

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

- Archaeological activities:
  - Completing site records descriptions
  - Field walking identify material
- Cognitive abilities:
  - Comprehension written material
  - Comprehension drawings
  - > Long-term memory
- Transferable skills:
  - Communication at a distance.

# SELF-EVALUATION OF SKILLS (PART 4)

Isabel participated in all the activities on site except processing artefacts, using a Total Station and geophysical survey. For excavation she rated herself as between 'average' (4) and 'above average' (5); and for the other archaeological activities between 'above average' (5) and 'high' (6). For the transferable skills she rated herself as between 'high' (6) and 'very high' (7). The only exceptions were 'above average' (5) for problem solving, decision making and mental stamina.

### **TRACKING**

#### A. Student returns:

- Technical skills varied between 'average' (4) and 'above average' (5)
- Intellectual skills rose from 'average' (4) to 'above average' (5) in week 3
- Inter-personal skills varied between 'above average' (5) and 'high' (6)

- Transferable skills varied between 'above average' (5) and 'high' (6)
- Attitude rose from 'average' (4) to 'high' (6) in week 2, dropped to 'above average' (5) in week 4
- Enthusiasm rose from 'below average' (3) to 'high' (6) by week
   3, dropped to 'low' (2) in week 4
- Confidence varied between 'average' (4) and 'above average' (5).

## B. Supervisor returns:

- Technical skills rose from 'below average' (3) to 'above average' (5) in week 3
- Intellectual skills rose from 'below average' (3) to 'above average' (5) in week 3
- Inter-personal skills rose from 'below average' (3) to 'above average' (5) by week 4
- Transferable skills varied widely between 'average' (4) and 'high' (6)
- Attitude rose from 'average' (4) to 'high' (6) by week 4
- Enthusiasm rose from 'below average' (3) to 'above average'
   (5) by week 3, dropped to 'below average' (3) in week 4
- Confidence rose from 'average' (4) to 'above average' (5) in week 2, dropped to 'average' (4) in week 4.

#### C. Feedback:

- Week 2, B 'A valued member of the team.'
- Week 3, B 'She has the potential to be a good archaeologist.
  Her speed needs to improve some, but overall she is reliable, but
  tentative at times. With more experience this would lessen.'
- Week 4, A 'Due to trench tension she seems very low. She is a hard worker who perhaps needs more stimulation to flourish.'
- Final comments, A 'Very quiet and keeps herself to herself.
   Very cautious and has not opened-up or been chatty. She appears to do her work well and efficiently.'

## SUMMARY

- It was expected that Isabel could experience difficulties with a few of the tasks and skills and, in the event, this was the case.
- In the self-evaluation of skills she tended to rate herself at the average/above average level for her archaeological skills and high for transferable skills.

 In the tracking she recorded a steady improvement in her performance as the excavation progressed, as did her supervisors. However, in both cases enthusiasm and confidence dropped off in the last week. This was probably due to 'tensions' on the site.

## 10. PAULA

### **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
  - Handle and manipulate planning frame
- Physical abilities:
  - Squatting
- Cognitive abilities:
  - Spatial awareness
  - Comprehension verbal information
  - Short-term memory
  - Long-term memory
- Transferable skills:
  - Communication conveying and understanding information
  - Analysing quantitative data
  - Decision making.

## POST-FIELDWORK ABILITIES (PART 3)

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

- Archaeological activities:
  - Comprehending site records
  - Completing site records descriptions and numerical data
  - Read and understand maps and plans
  - Discern stratigraphy tactile
  - ➤ Identifying finds tactile
  - Take bulk environmental samples
  - Field walking/survey traverse
  - Field walking identify and pick up material

- Field survey identify surface features
- Gradiometry audible signals
- Physical abilities:
  - Physical stamina
  - > Strength
- Cognitive abilities:
  - Hearing
  - Comprehension drawings
  - Long-term memory
  - Mental stamina
- Transferable skills:
  - Communication understanding information, at a distance
  - Analysing qualitative data
  - Analysing quantitative data.

## SELF-EVALUATION OF SKILLS (PART 4)

Paula participated in all the activities on site. For most of the archaeological activities she rated himself as between 'average' (4) and 'above average' (5). The only exception was 'high' (6) for washing artefacts. For most of the transferable skills she rated herself as between 'above average' (5) and 'high' (6). The exceptions were 'average' (4) for analysing digital data and physical stamina; and 'very high' (7) for health and safety.

#### TRACKING

#### A. Student returns:

- Technical skills rose from 'above average' (5) to 'high' (6) in week 3
- Intellectual skills rose from 'average' (4) to 'high' (6) in week 2
- Inter-personal skills varied between 'above average' (5) and 'high' (6)
- Transferable skills rose from 'above average' (5) to 'high' (6) in week 3
- Attitude 'high' (6) throughout
- Enthusiasm rose from 'average' (4) to 'high' (6) in week 2
- Confidence rose from 'above average' (5) to 'high' (6) in week 3.

## B. Supervisor returns:

- Technical skills rose steadily from 'average' (4) to 'high' (6) in week 3, dropped to 'above average' (5) in week 4
- Intellectual skills rose from 'average' (4) to 'high' (6) in week 3, dropped to 'above average' (5) in week 4
- Inter-personal skills varied widely between 'average' (4) and 'high' (6)
- Transferable skills varied widely between 'average' (4) and 'high' (6)
- Attitude varied between 'above average' (5) and 'high' (6)
- Enthusiasm rose from 'above average' (5) to 'high' (6) in week 3, dropped to 'average' (4) in week 4
- Confidence rose from 'above average' (5) to 'high' (6) in week 3, dropped to 'above average' (5) in week 4.

#### C. Feedback:

- Week 2, C 'A good worker and willing to undertake tasks she is given. She can talk the ear off a donkey if given the chance, and even this isn't all bad.'
- Week 3, B 'An all round good student, but only on the trench for a few days.'
- Week 4, A 'She wasn't feeling too well today, but instead of hiding this she is quite miserable and has been moaning about having to do the trowelling back.'
- Final comments, A 'She has always been happy to co-operate with this project and with a sister who is an archaeologist and always keen to work. She does tend to show her emotions more than others, so can appear quiet and moody, but when speaking to her she always chats and is very open. I believe she feels she's missed out on some aspects of the excavation, but acknowledges that she has gained skills in other areas which other students haven't.'

#### SUMMARY

- It was expected that Paula could experience difficulties with a few of the tasks and abilities. In the event, she felt that there were several activities that she had difficulties with, especially the physical aspects.
- In the self-evaluation of skills she tended to rate herself at the average/above average level for the archaeological activities, and higher for the transferable skills.

- In the tracking she recorded a steady improvement in her performance as the excavation progressed, as did her supervisors. The exception was the last week when her supervisors recorded a drop in the rating for her skills, enthusiasm and confidence. This can be attributed to her not being well.
- Despite problems with illness in the last week, she appears to have gained skills, and increased her existing skills, over the course of the excavation.

## 11. LINDA

### **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
  - > \*Drawing ability
- Physical abilities:
  - Carry equipment on back
- Cognitive abilities:
  - Balance.

# POST-FIELDWORK ABILITIES (PART 3)

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

- Archaeological activities:
  - Completing site records numerical data
  - Read and understand plans
  - Excavation large tools
  - Sorting finds
  - ➤ Identifying finds colour
  - Gradiometry use an instrument
- Physical abilities:
  - Strength

<sup>\*</sup>Did not do this activity

- Cognitive abilities:
  - Vision close and distant.

### SELF-EVALUATION OF SKILLS (PART 4)

Linda participated in all the activities on site except environmental sampling, and instrument and surface survey. For most of the archaeological activities and transferable skills she rated herself as between 'high' (6) and 'very high' (7). The only exceptions were 'above average' (5) for excavation with large tools, using a gradiometer and analysing digital data.

#### **TRACKING**

#### A. Student returns:

- Technical skills rose steadily from 'below average' (3) to 'high'
   (6) in week 4
- Intellectual skills rose from 'average' (4) to 'above average' (5) in week 3
- Inter-personal skills rose from 'average' (4) to 'high' (6) in week
- Transferable skills rose from 'average' (4) to 'high' (6) in week 2
- Attitude relatively constant as 'high' (6)
- Enthusiasm relatively constant as 'above average' (4)
- Confidence rose from 'average' (5) to 'high' (6) in week 3, dropped to 'above average' (5) in week 4.

### B. Supervisor returns:

- Technical skills rose from 'below average' (3) to 'high' (6) in week 4
- Intellectual skills rose from 'average' (4) to 'high' (6) in week 4
- Inter-personal skills rose from 'below average' (3) to 'very high'
   (7) in week 4
- Transferable skills rose from 'below average' (3) to 'average' (4) in week 3
- Attitude rose from 'average' (4) to 'above average' (5) in week 3
- Enthusiasm rose from 'below average' (3) to 'above average'
   (5) by week 3
- Confidence rose from 'below average' (3) to 'above average' (5) in week 4.

#### C. Feedback:

- Week 1, C 'Very quiet and shy, more confidence would produce a more rounded personality.'
- Week 2, C 'She still seems to be very quiet, although she does interact better with very small groups.'
- Week 3, C 'She has made great progress and is no longer quiet and you can see she is feeling more at home. Archaeologically she has made good progress and I think of her as a valued member of the team.'
- Week 3, E 'Although she highlighted her lack of confidence in identifying flint, she was very capable at the job and worked well in a team. She asked good questions and listened attentively.'
- Week 4, C 'I like her and think she is improving. However, she can tend to withdraw [into] herself at times. Her confidence is improving and I must commend her efforts throughout her digging. She took great pride in her work and it was a joy to watch.'
- Final comments, A 'She has a very bubbly character and always appears happy and willing to work. She has developed in her technical skills and has the experience of excavating one of the ditch sections, as well as drawing it. She appears to get on with everyone and has a very positive attitude even when given very mundane jobs. I believe her confidence has grown with the experience she has gained and her enthusiasm never appeared to falter. She was a very willing participant to the focus group, although still kept her independence.'

- It was expected that Linda could experience difficulties with a few of the archaeological tasks, in the event, this was the case.
- In the self-evaluation of skills she tended to rate herself at a high level.
- In the tracking she recorded a steady improvement in her performance as the excavation progressed, as did her supervisors.
- Linda started the excavation as a quiet girl who appeared to be lacking in self-confidence. By the end of the fieldwork her confidence had grown and she had become more sociable.

### 12. DOUGLAS

### **DETAILS OF DISABILITY**

Non-disabled.

### PRE-FIELDWORK ABILITIES (PART 2)

- A. Can potentially do activity with minor adjustments/assistance:
  - Cognitive abilities:
    - Long-term memory.

### POST-FIELDWORK ABILITIES (PART 3)

- A. Can actually do activity with minor adjustments/assistance:
  - Archaeological activities:
    - Cutting and lifting turf
    - Discern stratigraphy tactile, vision, colour, texture
    - > Take bulk environmental samples
    - Wet sieving
    - Sorting environmental samples tactile, colour, texture, vision
    - Measuring staff hold and extend
    - Level/Total Station set up tripod
    - Level/Total Station attach to tripod
    - ➤ Level/Total Station use visually
    - Level/Total Station manual focussing
    - Level/Total Station read measurements
    - Total Station record readings on screen
    - ➤ Total Station audible signals
    - > Total Station attach prism to staff
    - Field walking/survey traverse
    - Field walking identify and pick up material
    - > Field survey identify surface features
    - Gradiometry audible signals.
- B. Can actually do activity with substantial adjustments/assistance:
  - Archaeological activities:
    - Prismatic compass use
    - Optical square use.

### SELF-EVALUATION OF SKILLS (PART 4)

Douglas participated in all the activities on site. For site recording, most of the excavation activities, planning, processing of artefacts and surveying he rated himself as between 'above average' (5) and 'high' (6). He rated himself as 'low' (2) for geophysical survey; 'below average' (3) for dry sieving, instrument and surface survey; and 'average' (4) for cutting and lifting turf, and environmental sampling. For most of the transferable kills he rated himself as between 'average' (4) and 'above average' (5). The exceptions were 'below average' (3) for time management, and physical and mental stamina; 'high' (6) for communication and problem solving; and 'very high' (7) for social skills.

#### **TRACKING**

#### A. Student returns:

- Technical skills rose from 'average' (4) to 'high' (6) in week 2, dropped to 'above average' (5) in week 4
- Intellectual skills dropped from 'above average' (5) to 'below' average' (3) by week 3, rose to 'above average' (5) in week 4
- Inter-personal skills 'high' (6) throughout
- Transferable skills varied between 'average' (4) and 'above average' (5)
- Attitude varied between 'average' (4) and 'above average' (5)
- Enthusiasm dropped from 'high' (6) to 'below average' (3) by week 4
- Confidence varied between 'above average' (5) and 'high' (6).

### B. Supervisor returns:

- Technical skills dropped from 'below average' (3) to 'very low'
   (1) by week 4
- Intellectual skills dropped from 'below average' (3) to 'low' (2) by week 4
- Inter-personal skills varied between 'below average' (3) and 'low' (2)
- Transferable skills dropped from 'below average' (3) to 'very low' (1) by week 4
- Attitude dropped from 'below average' (3) to 'low' (2) by week 4
- Enthusiasm dropped from 'below average' (3) to 'very low' (1) by week 4
- Confidence varied between 'below average' (3) and 'above average' (5).

#### C. Feedback:

- Week 1, C 'At the beginning of the week he seemed disinterested in his tasks. However, as the week progressed he seems to be becoming more involved and is taking an interest.'
- Week 2, C 'Archaeologically he hasn't performed to the best of his ability. Never sure of what he is doing and why, even after explanation. It is a shame that his confidence isn't related to archaeology, but seems to be related to how good he looks!.'
- Week 3, C 'He is a mystery to me. He shows no real interest or passion for archaeology, often not working to his ability. However, at times he can show that he can produce a high standard of workmanship. Today he was section drawing and showed some talent. This, however, was totally undone by being disrespectful and cheeky.'
- Week 4, E 'Although confident and vocal, he does not exhibit any signs of interest in the subject itself. He did not take any of the finds [recording] system seriously and, by the afternoon, I sent him and his colleagues back to dig on site.'
- Final comments, A 'He has always been friendly and cooperative with the project and is very confident in what he does, although this confidence has meant that he has irritated a number of his supervisors. I had to explain to him twice not to lean against the section because it could cause damage and later saw supervisors having to tell him again. He has a very bubbly character and always appears eager to take in information, but then rather frustratingly doesn't act on that information. Whether he has learnt anything from this experience, only time will tell. He also missed quite a number of days on site.'

- It was expected that Douglas would experience hardly any difficulties on the excavation. In the event, he felt that there were several activities that he had difficulties with, mainly with identification, and instrument and surface survey. However, given his disinterest in the excavation as a whole, it may be that he did not 'like' these activities.
- In the self-evaluation of skills he tended to rate himself at the average/above average level for some activities. For the activities that he may not have 'liked', he gave himself a much lower rating.
- In the tracking he recorded a decline in his performance in some of the categories as the excavation progressed, as did his supervisors.

 Douglas appeared to be disinterested in archaeological fieldwork, and this seems to have inhibited him from gaining valuable skills and experience, despite his potential abilities.

### 13. MATTHEW

#### **DETAILS OF DISABILITY**

Dyslexia – recent diagnosis.

### PRE-FIELDWORK ABILITIES (PART 2)

After completing the Part 1 questionnaire, the results suggested that Matthew would be able to participate successfully in all the activities.

### 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 plans
  - Discern stratigraphy tactile
  - Drawing ability
  - Handling finds
  - Sorting finds
  - Identifying finds tactile
  - Marking finds
  - Take bulk environmental samples
  - Wet sieving
  - Sorting environmental samples tactile, colour, texture, vision
- Physical abilities:
  - Physical stamina
  - Strength
- Cognitive abilities:
  - Vision colour, texture
  - Comprehension written material, drawings, verbal information
  - Short-term memory
  - > Recognition
  - Mental stamina

- Transferable skills:
  - Analysing qualitative data
  - Analysing quantitative data.

### SELF-EVALUATION OF SKILLS (PART 4)

For planning he rated himself as 'average' (4); between 'above average' (5) and 'high' (6) for site recording, processing of artefacts, and surface and geophysical survey; and between 'high' and 'very high' (7) for excavation, surveying and instrument survey. For most of the transferable skills he rated himself as between 'high' (6) and 'very high' (7). The exceptions were 'above average' (5) for analysing qualitative, quantitative and digital data.

#### **TRACKING**

#### A. Student returns:

- Technical skills rose from 'above average' (5) to 'high' (6) in week 3
- Intellectual skills rose from 'average' (4) to 'above average' (5) in week 2
- Inter-personal skills 'high' (6) throughout
- Transferable skills rose from 'above average' (5) to 'high' (6) in week 2
- Attitude rose from 'average' (4) to 'very high' (7) by week 3
- Enthusiasm rose from 'high' (6) to 'very high' (7) in week 2
- Confidence rose from 'high' (6) to 'very high' (7) in week 4.

#### B. Supervisor returns:

- Technical skills varied between 'average' (4) and 'above average' (5)
- Intellectual skills rose from 'average' (4) to 'above average' (5) in week 4
- Inter-personal skills varied between 'below average' (3) and 'above average' (5)
- Transferable skills rose from 'average' (4) to 'high' (6) in week 4
- Attitude rose from 'above average' (5) to 'high' (6) in week 4
- Enthusiasm rose from 'above average' (5) to 'high' (6) in week 4
- Confidence rose from 'average' (4) to 'above average' (5) in week 4.

#### C. Feedback:

- Week 2, C 'In all areas he is improving as the excavation progresses. He is a reliable member of the team; however, his lack of self-confidence is holding him back.'
- Week 4, E 'At the start of the day he was rather distracted and subdued, but he had had an accident on the way to site. As the day progressed, he became more alert and interested showing high levels of social skills and organisation.'
- Final comments, A 'He has always been a happy, eager and positive student. He has been happy to work hard in the trench and never complains. His confidence has certainly grown, but was always high to begin with. He appears to get on with everyone and has always been happy to help with this project. He has done well on site and has gained a lot of experience.'

- It was expected that Matthew would not experience any difficulties with the various tasks and abilities. In the event, there were several aspects where he felt he had difficulties. Many of these can probably be related to dyslexia, but he also found the physical aspects challenging.
- In the self-evaluation of skills he tended to rate himself between average and high. He felt that his transferable skills especially had developed to a high level.
- In the tracking he recorded a steady improvement in his performance as the excavation progressed, as did his supervisors.
- Although Matthew felt that he had experienced difficulties with several activities and abilities, he had gained new skills, and improved other skills, through the course of the excavation.

### 14. NICOLA

### **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 and numerical data
- Physical abilities:
  - Physical stamina
- Cognitive abilities:
  - > Short-term memory
  - Long-term memory
  - Recognition
- Transferable skills:
  - Social skills.

## POST-FIELDWORK ABILITIES (PART 3)

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

- Archaeological activities:
  - Completing site records descriptions and numerical data
  - Cutting turf
  - Excavation secateurs
  - Use a sprayer
  - Discern stratigraphy tactile, vision
  - Handle and manipulate planning frame
  - Handling finds
  - Washing finds
  - Sorting finds
  - ➤ Identifying finds tactile, colour, texture, vision
  - Marking finds
  - Take bulk environmental samples
  - Wet sieving
  - Sorting environmental samples tactile, colour, texture, vision
  - ➤ Mark sample trays/boxes
  - Measuring staff hold and extend
  - Level/Total Station use visually
  - Level/Total Station manual focussing

- Total Station record readings on screen
- ➤ Total Station audible signals
- Total Station attach prism to staff
- Prismatic compass use
- Optical square use
- Field walking traverse
- Field walking identify material
- Write labels
- Physical abilities:
  - > Physical stamina
  - > Strength
- Cognitive abilities:
  - Hearing
  - > Touch
  - Balance
  - > Short-term memory
  - Recognition
  - Mental stamina
- Transferable skills:
  - Communication at a distance
  - Analysing qualitative data
  - Analysing quantitative data
  - Social skills.
- B. Can actually do activity with substantial adjustments/assistance:
  - Archaeological activities:
    - Geophysics identify walking line
    - ➤ Gradiometry use an instrument
    - Gradiometry audible signals
    - > Resistivity use an instrument.

### SELF-EVALUATION OF SKILLS (PART 4)

Nicola participated in all the activities on site. For most of the archaeological activities she rated herself as between 'average' (4) and 'above average' (5). The exceptions were 'below average' (3) for understanding instrument survey, and 'high' (6) for using tape measures. For most of the transferable skills she rated herself as between 'above average' (5) and 'high' (6). The only exception was 'average' (4) for analysing digital data.

### TRACKING

#### A. Student returns:

- Technical skills rose steadily from 'below average' (3) to 'high'
   (6) by week 4
- Intellectual skills varied between 'above average' (5) and 'high'
   (6)
- Inter-personal skills rose steadily from 'average' (4) to 'high' (6) by week 4
- Transferable skills rose from 'above average' (5) to 'high' (6) in week 3
- Attitude rose from 'average' (4) to 'high' (6) by week 4
- Enthusiasm 'high' (6) throughout
- Confidence rose steadily from 'average' (4) to 'high' (6) by week
   3.

### B. Supervisor returns:

- Technical skills rose steadily from 'average' (4) to 'high' (6) by week 3
- Intellectual skills varied between 'average' (4) and 'high' (6)
- Inter-personal skills rose from 'above average' (5) to 'high' (6) in week 3
- Transferable skills rose from 'above average' (5) to 'high' (6) in week 3
- Attitude rose from 'above average' (5) to 'very high' (7) in week
   3
- Enthusiasm rose steadily from 'average' (4) to 'high' (6) by week 3
- Confidence rose from 'average' (4) to 'very high' (6) in week 3.

#### C. Feedback:

- Week 3, B 'A very capable and willing worker. Although she did not spend much time in the trench, she fitted in well with the other members of the team.'
- Week 4, E 'She has been keen and attentive. Her excavation skills are steady, but slow, although this may be due to this being her first excavation of human remains.'
- Final comments, A 'She has always been one of the quieter students. She has never really opened up to me, but has always been willing to complete the tracking forms without complaint. She was allowed to dig one of the graves, which shows her dedication and trustworthiness. I'm hoping that even if she

doesn't show it, she will identify or appreciate the skills she has obviously gained.'

#### SUMMARY

- It was expected that Nicola would experience only a few difficulties with the various tasks and abilities. In the event, there were several aspects where she felt she had difficulties. These were instrument and field survey, processing of finds, environmental sampling, some cognitive abilities, analysing data and especially geophysical survey.
- In the self-evaluation of skills she tended to rate herself at the average level for the archaeological tasks, but higher for transferable skills.
- In the tracking she recorded a steady improvement in her performance as the excavation progressed, as did her supervisors.
- Despite her apparent difficulties with several activities and abilities, Nicola seemed to have performed well in actual excavation tasks, as she was chosen to work on a sensitive feature.

## 15. CHARLOTTE

**DETAILS OF DISABILITY** 

Non-disabled.

### PRE-FIELDWORK ABILITIES (PART 2)

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

- Archaeological activities:
  - Comprehending site records
  - Completing site records descriptions and numerical data
  - Empty wheelbarrow
  - Ranging poles push into ground
  - Measuring staff hold and extend
  - Level/Total Station attach to tripod
  - Level/Total Station use visually
  - Optical square use
- Physical abilities:
  - Carry equipment on back

- Cognitive abilities:
  - Balance
  - Comprehension written material
  - > Short-term memory
  - Long-term memory
- Transferable skills:
  - > Problem solving
  - Decision making.
- B. Can potentially do activity with substantial adjustments/assistance:
  - Cognitive abilities:
    - Hand/eye co-ordination
  - Transferable skills:
    - Analysing quantitative data.

## POST-FIELDWORK ABILITIES (PART 3)

- A. Can actually do activity with minor adjustments/assistance:
  - Archaeological activities:
    - Completing site records descriptions and numerical data
    - Read and understand maps and plans
    - Discern stratigraphy tactile
    - Use a wheelbarrow
    - Identifying finds tactile, vision, colour, texture
    - Handle and manipulate planning frame
    - Drawing use graph paper
    - Take bulk environmental samples
    - Wet sieving
    - Sorting environmental samples tactile, colour, vision, texture
    - Open and close finds bags
    - Mark sample trays/boxes
    - Lay a tape measure
    - Read a tape measure accurately
    - Measuring staff hold and extend
    - Level/Total Station set up tripod
    - Total Station attach to tripod
    - Total Station use visually
    - Resistivity identify walking line
  - Physical abilities:
    - Physical stamina
    - > Strength
  - Cognitive abilities:
    - Hand/eye co-ordination

- Comprehension written material, drawings, verbal information
- Organisation/categorisation
- Long-term memory
- > Recognition.

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

- Archaeological activities:
  - Comprehending site records
  - Drawing ability
  - Ranging poles hold and line up
  - Level attach to tripod
  - ➤ Level use visually
  - Level/Total Station manual focussing
  - Level/Total Station read measurements
  - > Total Station record readings on screen
  - ➤ Total Station audible signals
  - Total Station attach prism to staff
  - Prismatic compass use
  - ➤ Optical square use
  - Gradiometry use an instrument
  - ➤ Gradiometry audible signals
  - Resistivity use an instrument.

### SELF-EVALUATION OF SKILLS (PART 4)

For instrument survey Nicola rated herself as between 'low' (2) and 'below average' (3); between 'below average' (3) and 'average' (4) for site recording and geophysics; 'above average' (5) for environmental sampling, surveying and surface survey; and between 'high' (6) and 'very high' (7) for excavation and processing of artefacts. For most of the transferable skills she rated herself as between 'above average' (5) and 'high' (6). The exceptions were 'below average' (3) for physical stamina; 'average' (4) for independent working, analysing quantitative data, mental stamina and understanding transferable skills; and 'very high' (7) for social skills.

#### TRACKING

#### A. Student returns:

- Technical skills rose from 'average' (4) to 'above average' (5) in week 3
- Intellectual skills rose from 'average' (4) to 'above average' (5) in week 3

- Inter-personal skills remained relatively constant as 'high' (6)
- Transferable skills rose steadily from 'average' (4) to 'high' (6) by week 4
- Attitude 'above average' (5) throughout
- Enthusiasm varied widely between 'average' (4) and 'high' (6)
- Confidence rose from 'below average' (3) to 'above average' (5) by week 4.

### B. Supervisor returns:

- Technical skills started as 'average' (4), dropped to 'below average' (3), rose to 'above average' (5) in week 4
- Intellectual skills started as 'average' (4), dropped to 'below average' (3), rose to 'above average' (5) in week 4
- Inter-personal skills rose from 'below average' (3) to 'above average' (5) by week 4
- Transferable skills rose from 'below average' (3) to 'above average' (5) by week 4
- Attitude rose from 'below average' (3) to 'average' (4) by week
- Enthusiasm varied widely between 'low' (2) and 'average' (4)
- Confidence rose from 'below average' (3) to 'above average' (5) by week 4.

#### C. Feedback:

 Final comments, A – 'At the beginning of the excavation I found it very difficult with her and she didn't want to open up. In the last week she seemed to blossom, she was on a high from her experience and seemed to be enjoying herself. This reflects her enthusiasm and distinct growth in various skills.'

- It was expected that Charlotte would experience difficulties with some of the tasks and abilities. In the event, there were several aspects where she felt he had difficulties. These included site records, instrument and geophysical survey, aspects of identification and the physical nature of excavation.
- In the self-evaluation of skills she rated herself low for site recording and instrument and geophysical survey. Generally, her transferable skills were rated higher.
- In the tracking she recorded a steady improvement in her performance as the excavation progressed, as did her supervisors.

• Despite feeling that she had difficulties with a number of activities and abilities, Charlotte showed great enthusiasm and appeared to gain new skills and improve existing ones.

### 16. ALEXANDRA

#### **DETAILS OF DISABILITY**

Dyslexia, ADHD.

### PRE-FIELDWORK ABILITIES (PART 2)

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

- Archaeological activities:
  - \*Completing site records descriptions and numerical data
  - \*Read and understand maps and plans
  - \*Drawing ability
- Physical abilities:
  - Carry equipment on back
- Cognitive abilities:
  - Spatial awareness
  - Comprehension drawings
  - Short-term memory
  - Long-term memory
- Transferable skills:
  - ➤ Communication conveying information
  - > Time management
  - \*Analysing quantitative data.

### POST-FIELDWORK ABILITIES (PART 3)

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

- Archaeological activities:
  - Write labels
  - Wet sieving
- Physical abilities:
  - > Physical stamina
- Cognitive abilities:
  - Organisation/categorisation
  - Short-term memory

<sup>\*</sup>Did not do this activity

- Transferable skills:
  - > Time management.

## SELF-EVALUATION OF SKILLS (PART 4)

Alexandra participated in all the activities on site except instrument, surface and geophysical survey. For site recording, discerning stratigraphy, dry sieving, planning, and processing artefacts she rated herself as between 'average' (4) and 'above average' (5); and between 'high' (6) and 'very high' (7) for excavation, environmental sampling and surveying. There was no return for the transferable skills.

### **TRACKING**

#### A. Student returns:

- Technical skills rose steadily from 'low' (2) to 'above average'
   (5) in week 3, dropped to 'average' (4) in week 4
- Intellectual skills rose from 'low' (2) to 'above average' (5) in week 2, dropped to 'average' (4) in week 4
- Inter-personal skills rose steadily from 'average' (4) to 'high' (6) by week 4
- Transferable skills remained relatively constant as 'above average' (5)
- Attitude varied between 'above average' (5) and 'high' (6)
- Enthusiasm remained relatively constant as 'high' (6)
- Confidence varied between 'average' (4) and 'high' (6).

### B. Supervisor returns:

- Technical skills varied between 'low' (2) and 'below average' (3)
- Intellectual skills varied between 'low' (2) and 'below average'
   (3)
- Inter-personal skills varied between 'low' (2) and 'below average' (3)
- Transferable skills varied between 'low' (2) and 'below average'
   (3)
- Attitude dropped steadily from 'average' (4) to 'low' (2) by week
   3
- Enthusiasm dropped from 'below average' (3) to 'very low' (1) by week 3
- Confidence dropped steadily from 'average' (4) to 'low' (2) by week 3.

#### C. Feedback:

- Week 1, A 'Not very organised, needs prompting.'
- Week 2, B 'She seems to be disinterested in her duties which is a shame as, with some application, she could progress well.'
- Week 3, A 'Problems with left hand aching.'
- Week 3, C 'She just seems to be disinterested at this stage of the project.'
- Week 4, D 'Very quiet, didn't seem to want to ask any questions. Maybe not as interested in environmental than other students. Worked well in team conditions.'
- Final comments, A 'She has always been quite cautious with me and sometimes distracted whilst talking. I wonder if she is avoiding other issues – completion of notebook – which she may find difficult. She has had excavating experience, but doesn't appear enthusiastic at work. I think she is rather shy and can be quite isolated at times. At lunch she doesn't join in with conversations, but listens to her MP3-Player. Overall, she appears friendly enough, but I'm unsure that she has enjoyed her experience on site.'

- It was expected that Alexandra would experience a few difficulties with the various tasks and abilities. In the event, she felt that this had been the case.
- In the self-evaluation of skills she tended to rate herself between average and high.
- In the tracking she recorded variable ratings, but felt that her technical, intellectual and inter-personal skills had improved as the excavation progressed. Her supervisors also recorded variable ratings and noted her attitude, enthusiasm and confidence dropping off as the excavation progressed.
- Alexandra did not appear to enjoy herself on the excavation, either from a work or a social perspective. Her disinterestedness probably inhibited her from benefiting fully from the experience, rather than any difficulties related to her disability.

### **17. JERRY**

#### **DETAILS OF DISABILITY**

Deaf.

# PRE-FIELDWORK ABILITIES (PART 2)

- A. Can potentially do activity with minor adjustments/assistance:
  - Archaeological activities:
    - Open and close finds bags
    - Total Station audible signals
    - Gradiometry audible signals
  - · Physical abilities:
    - Physical stamina
    - Squatting
  - Cognitive abilities:
    - Hearing
    - Comprehension verbal information
    - Short-term memory
    - Long-term memory
  - Transferable skills:
    - Communication conveying and understanding information
    - Time management
    - Adapting to a new environment
    - Analysing qualitative data
    - Decision making.
- B. Can potentially do activity with substantial adjustments/assistance:
  - Cognitive abilities:
    - Spatial awareness
  - Transferable skills:
    - > Team working
    - > Social skills.

### POST-FIELDWORK ABILITIES (PART 3)

- A. Can actually do activity with minor adjustments/assistance:
  - Cognitive abilities:
    - Hearing
    - Comprehension verbal information

- Transferable skills:
  - Communication conveying and understanding information
  - > Team working
  - Social skills.
- B. Can actually do activity with substantial adjustments/assistance:
  - Transferable skills:
    - Communication at a distance.

### SELF-EVALUATION OF SKILLS (PART 4)

Jerry participated in site recording, excavation, surveying and geophysical survey whilst on site. He rated himself as between 'average' (4) and 'above average' (5) for most of the archaeological activities. The only exceptions were trowelling and disposal of spoil for which he rated himself as 'high' (6). For most of the transferable skills he rated himself as between 'average' (4) and 'above average' (5). The exceptions were 'below average' (3) for physical stamina; and 'high' (6) for independent working and health and safety.

### **TRACKING**

#### A. Student returns:

- Technical skills rose from 'average' (4) to 'above average' (5) by week 4
- Intellectual skills rose from 'average' (4) to 'above average' (5) by week 3
- Inter-personal skills rose from 'below average' (3) to 'high' (6) by week 4
- Transferable skills rose from 'below average' (3) to 'high' (6) by week 3
- Attitude rose from 'above average' (5) to 'high' (6) in week 2
- Enthusiasm 'high' (6) throughout
- Confidence 'high' (6) throughout.

### B. Supervisor returns:

- Technical skills varied between 'average' (4) and 'above average' (5)
- Intellectual skills varied between 'below average' (3) and 'above average' (5)
- Inter-personal skills rose from 'average' (4) to 'above average'
   (5) by week 4

- Transferable skills rose from 'average' (4) to 'high' (6) by week
- Attitude rose from 'average' (4) to 'high' (6) by week 4
- Enthusiasm rose from 'above average' (5) to 'high' (6) by week
- Confidence started as 'average' (4), dropped to 'low' (2) in week
   2, rose to 'high (6) by week 4

### C. Feedback:

- Week 2, A 'Didn't hear the Director's talk because of the wind.'
- Week 2, C 'He has potential archaeologically to achieve well. However, his disability does leave him at a disadvantage in the area of communication with the other students. When given the time to get to know him and interact with him, he is keen and willing to participate both technically and personally.'
- Week 3, A 'Geophysics, could hear the machine.'
- Final comments, A 'He is severely deaf in both ears and as a result is very difficult to understand when he speaks. He has expressed that because of this project, he has learnt a lot about himself as an individual and be patient with people when they don't understand what he's saying. He does hide his emotions and has a happy exterior. Considering that he can become very isolated with his hearing difficulties, he has always worked well in a group and interacted fully.'

- It was expected that Jerry would experience a number of difficulties, mostly related to his deafness. In the event, the aspects where he felt he had difficulties were associated with his hearing, but these were not the archaeological tasks.
- In the self-evaluation of skills he tended to rate himself between average and high, except for his physical stamina.
- In the tracking he recorded a steady improvement in his performance as the excavation progressed. Generally, this improvement was also observed by his supervisors.
- Jerry appeared to get a great deal of benefit out of participating in the excavation. This was not only the archaeological experience, but also his transferable skills, especially in socialising and interacting with other people.

### 18. ELAINE

### **DETAILS OF DISABILITY**

Non-disabled.

### PRE-FIELDWORK ABILITIES (PART 2)

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

- Archaeological activities:
  - Level/Total Station attach to tripod
  - Field walking/survey traverse in a straight line
- Cognitive abilities:
  - Spatial awareness
  - Short-term memory
  - Long-term memory
  - Mental stamina.

### POST-FIELDWORK ABILITIES (PART 3)

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

- Archaeological activities:
  - > Comprehending site records
  - Completing site records numerical data
  - Excavation secateurs
  - Identifying finds tactile, colour
  - > Take bulk environmental samples
  - Prismatic compass use
  - Optical square use
  - Gradiometry audible signals
  - Resistivity identify walking line
- Cognitive abilities:
  - Long-term memory
- Transferable skills:
  - Analysing qualitative data
  - Analysing quantitative data.

## SELF-EVALUATION OF SKILLS (PART 4)

Elaine participated in all the activities on site. For most of the archaeological activities she rated herself as between 'above average' (5) and 'high' (6). The exceptions were 'average' (4) for cutting and lifting turf, field walking and geophysical survey. For the transferable

skills she rated herself as 'high' (6), except for communication which she rated as 'below average' (5).

#### TRACKING

#### A. Student returns:

- Technical skills rose steadily from 'average' (4) to 'high' (6) by week 4
- Intellectual skills varied between 'average' (4) to 'high' (6)
- Inter-personal skills rose from 'average' (4) to 'high' (6) by week
- Transferable skills rose from 'above average' (5) to 'high' (6) in week 2
- Attitude rose from 'above average' (5) to 'high' (6) in week 3
- Enthusiasm 'high' (6) throughout
- Confidence rose from 'below average' (3) to 'above average' (5) by week 3.

### B. Supervisor returns:

- Technical skills varied between 'above average' (5) and 'very high' (7)
- Intellectual skills varied between 'above average' (5) and 'high'
   (6)
- Inter-personal skills varied between 'above average' (5) and 'very high' (7)
- Transferable skills varied between 'above average' (5) and 'very high' (7)
- Attitude varied between 'above average' (5) and 'very high' (7)
- Enthusiasm varied between 'above average' (5) and 'very high'
   (7)
- Confidence varied between 'above average' (5) and 'high' (6).

### C. Feedback:

- Week 2, E 'She took charge of the situation today as two other students working in finds were quite reticent and lacked confidence in identifying and processing. She organised recording efficiently and competently, and was happy to help out in any area of work.'
- Week 4, A 'She has always displayed herself to be a hardworking, well-rounded and conscientious student.'

 Final comments, A – 'Although I've never had long periods of time with her, she always appears happy and willing to talk. She is hard-working, friendly and happy to help in any way she can.'

#### **SUMMARY**

- It was expected that Elaine would experience only a few difficulties with the various tasks and abilities. In the event, this proved to be the case.
- In the self-evaluation of skills she tended to rate herself between average and high for the archaeological tasks, and high for the transferable skills.
- In the tracking she recorded a steady improvement in her performance as the excavation progressed. Her supervisors recorded variable, but high ratings.
- Elaine did not appear to experience any especial difficulty in the field work; her participation seems to have been a beneficial experience for her.

### **19. DANNY**

**DETAILS OF DISABILITY** 

Dyslexia, OCD.

### PRE-FIELDWORK ABILITIES (PART 2)

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

- Cognitive abilities:
  - Spatial awareness
  - Short-term memory
  - Long-term memory
- Transferable skills:
  - Time management
  - Adapting to a new environment
  - Analysing qualitative data
  - Analysing quantitative data
  - Decision making
  - Social skills.

## POST-FIELDWORK ABILITIES (PART 3)

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

- Archaeological activities:
  - Completing site records descriptions
  - Drawing ability
  - Identifying finds tactile, colour, texture, vision
  - Sorting environmental samples tactile, colour, texture, vision
  - Ranging poles line up
  - Total Station record readings on screen
  - Total Station attach prism to staff
  - Geophysics identify walking line
  - Gradiometry use an instrument
  - Gradiometry audible signals
- Cognitive abilities:
  - Comprehension written material
  - Organisation/categorisation
  - Short-term memory
  - Long-term memory
- Transferable skills:
  - Communication at a distance
  - > Time management
  - Analysing qualitative data
  - Analysing quantitative data
  - Problem solving.

### SELF-EVALUATION OF SKILLS (PART 4)

Danny participated in all the activities on site. For most of the archaeological activities and transferable skills he rated himself as between 'average' (4) and 'above average' (5). The exceptions were 'high' (6) for excavation with small tools, dry sieving, disposal of spoil and understanding excavation; and 'below average' (3) for time management.

#### **TRACKING**

#### A. Student returns:

- Technical skills rose steadily from 'average' (4) to 'high' (6) by week 3
- Intellectual skills rose from 'average' (4) to 'above average' (5) in week 2

- Inter-personal skills varied between 'above average' (5) and 'high' (6)
- Transferable skills rose from 'below average' (3) to 'average' (4) in week 2
- Attitude rose from 'above average' (5) to 'high' (6) in week 2
- Enthusiasm 'high' (6) throughout
- Confidence rose from 'above average' (5) to 'high' (6) in week
   2.

### B. Supervisor returns:

- Technical skills dropped steadily from 'above average' (5) to 'below average' (3) by week 3, 'average' (4) in week 4
- Intellectual skills varied between 'below average' (3) and 'average' (4)
- Inter-personal skills varied between 'below average' (3) and 'average' (4)
- Transferable skills dropped steadily from 'above average' (5) to 'low' (2) by week 4
- Attitude dropped from 'above average' (5) to 'low' (2) by week 3
- Enthusiasm dropped from 'above average' (5) to 'low' (2) by week 3, 'average' (4) in week 4
- Confidence dropped steadily from 'above average' (5) to 'below average' (3) by week 3, 'average' (4) in week 4.

#### C. Feedback:

- Week 2, B 'His punctuality and general enthusiasm leave a lot to be desired, though a capable worker and fitted in well with the rest of the digging team.'
- Week 4, A 'He is pre-occupied with the possibility of failure of one exam and a letter has been sent to the Circumstances Board. May be affecting his work and has continuously avoided handing in his notebook because he is behind. He never appears to eager and is quiet. A very nice bloke, but could work harder and focus his thoughts more on the job.'
- Final comments, A 'He struggles an awful lot with time management and the completion of his notebook. Because of this he tries to avoid me and has also lost a couple of days through sickness. A pleasant guy, but needs to focus himself on his work and excavation skills. He can be a bit slow with little urgency in his work. He's always been willing to help me with the project, but the [self-evaluation] marks that he thinks he should have I believe are unrealistic. Other supervisors have commented on his lack of enthusiasm and interest. He is affecting the rest of the team.'

### **SUMMARY**

- It was expected that Danny would only experience difficulties with some cognitive abilities and transferable skills. In the event, there were several archaeological tasks where he felt he had difficulties, including aspects of identification and instrument and geophysical survey.
- In the self-evaluation of skills he tended to rate himself as average for most tasks, only rating himself as high for aspects of actual excavation skills.
- In the tracking he recorded an improvement in his performance as the excavation progressed. However, his supervisors recorded a drop off in his ratings for most of the categories, especially in the last week.
- Danny appeared to be lacking in focus, urgency and enthusiasm.
   This was especially the case in the last week when he was preoccupied with matters outside the excavation. This seems to have inhibited him from making the most of his participation in the field work.

### 20. MARTIN

### **DETAILS OF DISABILITY**

Non-disabled.

### PRE-FIELDWORK ABILITIES (PART 2)

After completing the Part 1 questionnaire, the results suggested that Martin would be able to participate successfully in all the activities.

### POST-FIELDWORK ABILITIES (PART 3)

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

- Archaeological activities:
  - Completing site records descriptions and numerical data
  - Discern stratigraphy tactile, texture
  - Handle and manipulate a planning frame
  - Identifying finds tactile
  - Sorting environmental samples tactile, colour, vision, texture
- Cognitive abilities:
  - ➤ Vision colour

- Transferable skills:
  - Decision making.

### SELF-EVALUATION OF SKILLS (PART 4)

Martin participated in all the activities on site. He rated himself as between 'above average' (5) and 'high' (6) for most of the archaeological activities. The exceptions were 'average' (4) for taking off-sets; and 'very high' (7) for excavation with large tools, disposal of spoil, understanding excavation, washing artefacts, surveying and surface survey. For most of the transferable skills he rated himself as between 'high' (6) and 'very high' (7). The exceptions were 'average' (4) for time management; and 'above average' (5) for analysing qualitative, quantitative and digital data.

#### **TRACKING**

#### A. Student returns:

- Technical skills 'high' (6) throughout
- Intellectual skills 'high' (6) throughout
- Inter-personal skills rose from 'average' (4) to 'very high' (7) in week 2, dropped to 'high' (6) in week 3
- Transferable skills rose steadily from 'low' (2) to 'high' (6) by week 4
- Attitude rose steadily from 'above average' (5) to 'very high' (7) by week 4
- Enthusiasm 'very high' (7) throughout
- Confidence rose steadily from 'above average' (5) to 'very high'
   (7) by week 4.

#### B. Supervisor returns:

- Technical skills rose from 'average' (4) to 'above average' (5) in week 2
- Intellectual skills varied between 'average' (4) and 'above average' (5)
- Inter-personal skills varied between 'average' (4) and 'above average' (5)
- Transferable skills varied between 'average' (4) and 'above average' (5)
- Attitude 'above average' (5) throughout
- Enthusiasm varied between 'above average' (5) and 'high' (6)
- Confidence rose from 'below average' (3) to 'above average' (5) in week 2.

#### C. Feedback:

- Week 1, C 'I have assessed him as being average for intellectual skills due to him being quiet. However, given more time this will rise when he becomes more relaxed and confident.'
- Week 2, A 'Organisation needs to be watched, notebook forgotten today.'
- Final comments, A 'One of the quieter students who has been perfectly happy to co-operate with the project. He has consistently given himself low marks for his transferable skills. This improved over the last couple of weeks; however, after seeing his notebook I am not sure if he has grasped the importance of producing a field notebook to a good standard. Other than that, he always appears to work hard, follows orders and works well within the group.'

- It was expected that Martin would not experience any difficulties with the various tasks and abilities. In the event, there were a few aspects where he felt he had difficulties, especially site recording and aspects of identification.
- In the self-evaluation of skills he tended to rate himself at a high level.
- In the tracking he recorded a steady improvement in his performance as the excavation progressed, or saw himself at a high level throughout. His supervisors recorded variable, but high ratings.
- Martin appeared to enjoy his time on the excavation and gained a
  great deal from the experience. In commenting on the standard of
  his notebook, the supervisors may have highlighted his present
  weakness regarding site recording.

### 21. LOUISE

### **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
    - > Read and understand maps
    - Lifting turf
    - Excavation large tools
    - Clear waste material on a spade
    - Empty wheelbarrow
    - Open and close finds bags
    - > Lay a tape measure
    - Drawing ability
    - Take bulk environmental samples
    - \*Ranging poles push into ground
    - Measuring staff hold and extend
    - Level/Total Station use visually
    - \*Optical square use
    - \*Field walking/survey traverse
    - Field survey identify surface features
    - \*Gradiometry use an instrument
  - Physical abilities:
    - Carry equipment in hands
  - Cognitive abilities:
    - Vision physical features
    - > Balance
    - Hand/eye co-ordination
    - > Recognition
  - Transferable skills:
    - Decision making
    - Social skills.
- B. Can potentially do activity with substantial adjustments/assistance:
  - Archaeological activities:
    - Use a wheelbarrow
    - \*Use a sprayer

- Cognitive abilities:
  - > Long-term memory.

\*Did not do this activity

### POST-FIELDWORK ABILITIES (PART 3)

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

- Archaeological activities:
  - Cutting and lifting turf
  - Excavation large tools
  - Use and empty wheelbarrow
  - Discern stratigraphy tactile, vision, colour, texture
  - Drawing ability, use graph paper
  - Sorting finds
  - Identifying finds tactile, vision, colour, texture
  - Mark sample trays/boxes
- Physical abilities:
  - Carry equipment on back
  - Carry equipment in hands
  - Strength
  - Physical stamina
- Cognitive abilities:
  - Vision close and distant
  - > Balance
  - Long-term memory
- Transferable skills:
  - Communication conveying information
  - Adapting to a new environment
  - Analysing qualitative and quantitative data.

### SELF-EVALUATION OF SKILLS (PART 4)

Louise participated in all the activities on site except environmental sampling, using a Total Station and geophysical survey. She rated herself as between 'above average' (5) and 'high' (6) for site recording, excavation and planning. The exceptions were 'average' (4) for understanding site recording; and 'very high' (7) for excavation with light tools and dry sieving. She rated herself as between 'high' (6) and 'very high' (7) for processing of artefacts, surveying, and instrument and surface survey. For most of the transferable skills she rated herself as between 'high' (6) and 'very high' (7). The only exception was 'above average' (5) for analysing digital data.

### TRACKING

#### A. Student returns:

- Technical skills rose steadily from 'average' (4) to 'high' (6) by week 3
- Intellectual skills 'above average' (5) throughout
- Inter-personal skills rose from 'high' (6) to 'very high' (7) in week
- Transferable skills 'high' (6) throughout
- Attitude varied between 'above average' (5) and 'high' (6)
- Enthusiasm dropped from 'high' (6) to 'average' (4) in week 4
- Confidence rose steadily from 'average' (4) to 'high' (6) by week 3.

### B. Supervisor returns:

- Technical skills rose from 'average' (4) to 'high' (6) in week 2, dropped to 'above average' (5) in week 3
- Intellectual skills dropped from 'high' (6) to 'above average' (5) in week 3
- Inter-personal skills rose from 'average' (4) to 'high' (6) in week 2, dropped to 'above average' (5) in week 3
- Transferable skills rose from 'above average' (5) to 'high' (6) in week 2, dropped steadily to 'average' (4) by week 4
- Attitude rose from 'above average' (5) to 'very high' (7) in week
   2, dropped to 'above average' (5) in week 3
- Enthusiasm rose from 'above average' (5) to 'very high' (7) in week 2, dropped steadily to 'average' (4) by week 4
- Confidence varied widely between 'average' (4) and 'high' (6).

#### C. Feedback:

- Week 2, E 'She has worked well in team and exhibited excellent skills in flint identification. I was able to leave her and another student to enter finds in the register knowing it would be carried out efficiently.'
- Week 3, B 'She is a very capable member of the excavation team and carried out all the tasks set her with confidence and enthusiasm.'
- Week 4, A 'She has been given the job of excavating one of the postholes, although because she is not feeling 100% (has a cold) she appears to have little enthusiasm for it.'
- Final comments, A 'She has always been pleasant to deal with, although she is very quiet and never seems to have much

enthusiasm for anything. She blends in well with the group and worked well enough to be given the responsibility to work on various features. She seems to have learnt a lot and should progress well. She says that she understands the site and is on top of her work, but I have some doubts.'

- It was expected that Louise would experience difficulties with a range of tasks and abilities. In the event, there were several specific aspects where she felt she had difficulties, especially identification and the physical nature of excavation.
- In the self-evaluation of skills she tended to rate herself between average and high.
- In the tracking she recorded a steady improvement in her performance as the excavation progressed. Her supervisors recorded a similar pattern, except in the last couple of weeks when there was a drop off in the ratings.
- Louise appears to have had a very beneficial experience from participating in archaeological fieldwork. She found it physically challenging, and this may be reflected in the drop off in her supervisors' ratings in the second half of the excavation.

# **B. SECTION SUMMARY**

- In comparing potential pre-fieldwork abilities (Part 2) with post-fieldwork actual abilities (Part 3) two major patterns were visible:
  - Individuals were able to exceed their expected potential
  - Individuals had more difficulties than expected; this was often the case with non-disabled participants.
- Where participants experienced difficulties these could quite often be directly related to specific disabilities or a lack of selfconfidence. However, it was observed that the self-confidence of individuals increased as the excavation progressed.
- The main archaeological activities where difficulties were experienced included:
  - Technical tasks, such as instrument and geophysical survey
  - > Site recording
  - > Aspects of identification
  - > The physical nature of archaeological fieldwork.
- The main transferable skills where difficulties were experienced included:
  - Time management
  - Analysing data
  - Aspects of self-confidence, such as problem solving and decision making.
- The main cognitive abilities where difficulties were experienced included:
  - Memory
  - Mental stamina.
- The difficulties experienced by the students with dyslexia tended to be:
  - > Site recording
  - > Discerning stratigraphy
  - Aspects of identification
  - Geophysics
  - Memory.
- Generally, the ratings given by the students and the supervisors for the categories in the tracking document increased as the excavation progressed. Where the ratings dropped the categories

tended to be attitude, enthusiasm and confidence. The drop in ratings could be attributed to a number of factors:

- > Illness
- > Tensions on site
- Concerns outside of the field work
- The disinterestedness of individual participants.
- In the self-evaluation of skills (Part 4) the participants tended to give themselves average to high ratings for the archaeological tasks, and generally higher ratings for the transferable skills.
   Where low ratings were given these could be related to areas where an individual had difficulties with a particular task or did not 'like'/had no enthusiasm for a particular activity.
- The individuals who appeared to benefit most from archaeological fieldwork were those who approached it with enthusiasm and were hard-working.
- The individuals who appeared to benefit least from archaeological fieldwork were those who were disinterested or distracted. Their attitude seemed to inhibit them from gaining new skills, or improving their existing skills.
- There were no 'across the board' high ratings given for any of the abilities, activities or skills by either the students or the supervisors. This demonstrates the potential value for students of using the self-evaluation tool kit on future excavations so that they can track their personal development.

## 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 and 4b field trials further identified areas where the wording of the questions in the Part 1 document may need to be adjusted to eliminate misunderstandings and ambiguities. The major tasks and abilities concerned are:
  - Completing site records numerical data
  - Manipulate planning frame
  - Communication conveying information
  - Spatial awareness
  - Social skills.
- Taking the group of students as a whole, the activities and abilities that gave the greatest difficulties were:
  - Site recording
  - Drawing
  - Handling and manipulating a planning frame
  - Aspects of identification stratigraphy, finds, environmental samples, features
  - Using a gradiometer
  - Physical strength and stamina
  - Spatial awareness
  - Organisation
  - Memory
  - Understanding instructions
  - Analysing data
  - Decision making.
- 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 and 4b field trials suggested that a greater or lesser expertise was being gained for different activities on different excavations.
- The tracking of a focus group of students through weekly selfevaluation and supervisor evaluation revealed increasing ratings as the fieldwork progressed. Any decline in ratings could be ascribed to three major factors: illness, outside concerns and disinterestedness on the part of individual participants.

- Where individual students experienced difficulties with particular tasks and abilities, this could sometimes 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 field trial at Knowlton 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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