Key skills

2006

Levels 1 and 2

Combined example portfolio

Application of number, communication, problem solving

QCA Qualifications and Curriculum Authority

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Contents

Foreword

Key skills are for everyone, from learners in the workplace, colleges and schools, to chief executives in large companies. They are the skills most commonly needed for success in education, training, work and life in general. The six key skills are:

- application of number
- communication
- improving own learning and performance
- information and communication technology
- problem solving
- working with others.

In developing key skills, people improve the quality of their learning as well as their performance in the world of work.

When QCA completed its review of the key skills qualifications and units, it was clear that there was a need for examples of key skills portfolios.

Over the past two years we have published example portfolios for all six key skills at levels 1 to 3. The portfolios show one key skill being developed in different projects. We have now produced portfolios that show different key skills being developed in a single project.

The example portfolios are based on the 2004 key skills qualifications standards and guidance for the six key skills. They provide practical guidance on organising and referencing portfolio evidence and on the kind and amount of evidence required. They are intended, along with the 2004 standards documents, to help assessors understand the key skills. Their production is supported by the key skills awarding bodies.

Ken Boston AO
Chief Executive Officer, QCA

Overview

The key skills awarding bodies and the three regulatory authorities (the Department for Education, Lifelong Learning and Skills (DELLS, formerly ACCAC), the Council for Curriculum, Examinations and Assessment (CCEA) and the Qualifications and Curriculum Authority (QCA)) have produced this example portfolio as a result of a collaborative project. The purpose of the project was to produce a set of portfolios that would give practitioners a clear understanding of the requirements for key skills portfolios.

We have now published four example project portfolios:

- Combined example portfolio: application of number, communication, problem solving (levels 1 and 2)
- Combined example portfolio: application of number, communication, information and communication technology, improving own learning and performance (levels 1–3)
- Combined example portfolio: application of number, information and communication technology, communication (levels 1 and 2)
- Combined example portfolio: problem solving, improving own learning and performance, working with others (level 3).

The project group selected a range of learning and vocational contexts to show application of the skills and levels across the four combined portfolios. While a specific context may not be directly relevant to all sectors, the principles of approach, recording and assessment apply and should prove useful to all.

Key skills chief moderators and external verifiers for the awarding bodies have met and scrutinised the portfolios. They agree that the portfolios meet the standards for the key skills qualifications. QCA chaired and facilitated the meetings.

These portfolios went through an internal assessment by a centre and then an external verification/moderation process by the centre's awarding body. Each of them met the standard and received a pass. They should be viewed as such, not as perfect examples of work.

You will see that improvements could be made to the portfolios. For example evidence could be more effectively or logically presented. However, room for improvement is to be expected: candidates develop skills over time, reflecting and progressing as they do so. Key skills are free-standing qualifications open to everyone at any age. This means that portfolios of evidence are created in a range of academic, occupational and vocational contexts.

Also included in the portfolios are:

- record sheets that make the feedback and assessment decisions clear
- commentaries that outline some of the issues and describe the context in which the candidate gathered the evidence.

Some of these portfolios have been reworked to avoid 'benefit of the doubt' situations. The record sheets have been rewritten to make decisions clearer to the reader. During the copying process, some loss of clarity may have occurred, especially in images that were originally in colour.

These example portfolios should be read with *The key skills qualifications standards and guidance* (2004), which provides advice and guidance on the assessment of key skills.

QCA and the key skills moderators and external verifiers would like to acknowledge the valuable contribution of centres and students in the production of these materials.

Commentary

This portfolio has been produced by a trainee soldier, aged 17, as part of their course. This person is training to be in the Royal Logistics Corps.

The portfolio provides evidence for communication level 2, application of number level 1 and problem solving level 2.

The tasks (on pp14–15) are an integral part of the Army's training programme and are set out initially as problems. The first task involves carrying out a travel survey. The second task is a piece of research into the contribution of British forces to the Normandy landings during D-Day.

Communication level 2

The group discussion is about the role of British forces during D-Day. Evidence is presented as an assessment record. The short talk is based on the findings of the travel survey. The notes and images and an assessment record are included as evidence.

The research into the role of British forces during D-Day is summarised as a leaflet. Extracts from the three source documents are included. Note that although two sources is the minimum requirement, it is appropriate to use three if necessary. In this case, the third source provides a particular image.

The first written document is the report from the travel survey, which is approximately 500 words in length. The second written document is a leaflet of one side, summarising some of the ways British forces contributed to the success of the Allied forces during D-Day.

Images, in the form of pie charts and a diagram, are used during the talk to convey information (C2.1b). Images are also used in the research (C2.2) and in the leaflet (C2.3) because this is appropriate to the subjects, although it is not a requirement of the standards to use this many images.

Application of number level 1

The travel survey allows interpretation of information from more than two sources. One source is the results of the candidate's travel survey. The second type of source is the table of motoring costs and train timetables and prices.

Calculations related to amounts or sizes, scales or proportion and handling statistics are included in the rough working and the report on the travel survey. The calculations relate to distances, the costs of travel by car and train, the time taken for journeys and the number of weekends travelled home during the 26-week course. There is checking by estimation and rounding up. The candidate also checks to ensure that totals are 100 per cent for pie charts.

There are conclusions from findings in the report. The findings are presented as pie charts and a diagram.

Problem solving level 2

The first problem involves finding the quickest and most cost-effective ways to travel home, from Aldershot, for the people in the candidate's class. The methods of solving the problem relate to ways of finding the information required to answer these questions. The candidate uses two ways of finding the information and explains why. There is evidence of planning, implementing and reviewing. The report confirms that the problem has been partly solved.

The second problem involves designing a leaflet. The possible ways of solving the problem consider different ways of getting design ideas and presenting them for the leaflet. There is evidence of planning, implementing and reviewing. The leaflet itself, together with assessor comments, confirms that an appropriate design has been produced and that the problem has been solved.

APPLICATION OF NUMBER LEVEL 1 ASSESSMENT CHECKLIST

N1.1	N1.2	N1.3
Interpret information from two different sources. At least one source must include a table, chart, graph or diagram.	Carry out and check calculations to do with: a. amounts or sizes b. scales or proportion c. handling statistics.	Interpret the results of your calculations and present your findings – in two different ways using charts or diagrams.
1.1.1 Obtain the information you need to meet the purpose of your task; and **1.1.2** identify suitable calculations to get the results you need.	**1.2.1** Carry out calculations to the levels of accuracy you have been given; and **1.2.2** check your results make sense.	**1.3.1** Choose suitable ways to present your findings; and **1.3.2** use more than one way of presenting your findings; and **1.3.3** present your findings clearly using a chart or diagram; and **1.3.4** describe what your results tell you.

LOCATION OF EVIDENCE

Page	List items of evidence and where they are located in the portfolio	N1.1		N1.2		N1.3			
		1	2	1	2	1	2	3	4
16	Travel survey questionnaire	x	x						
17	Motoring costs from AA website	x							
18	Information from Autoroute CD-ROM	x							
19	Information from thetrainline	x							
20–21	Bearings from Liverpool (calculations of distance and angle)	x		x	x				
22–27	Report on travel survey and information for short talk			x	x	x	x	x	x

Indicate the location of evidence of the following:			
N1.1 Interpret information	**Table, chart, graph or diagram** 17–19		
N1.2 Calculations	**Amounts or sizes** 20–21	**Scales or proportion** 25, 27	**Handling statistics** 24
N1.3 Interpret calculations	**One way** Diagram p.27	**Another way** Pie charts p.25	

Assessor Declaration: *I confirm that the details above are correct and that the evidence submitted is the candidate's own work and the candidate meets all the requirements for certification of this key skill.*

Assessor Name: A N Assessor

Assessor Signature: A N Assessor

Date: 04/07/05

Candidate Name: A Candidate

Candidate Signature: A Candidate

Date: 4/7/2005

You must:

N1.1 Interpret information from two different sources. At least one source must include a table, chart, graph, or diagram.

Evidence must show you can:

1.1.1 Obtain the information you need to meet the purpose of your task; and

1.1.2 identify suitable calculations to get the results you need.

APPLICATION OF NUMBER LEVEL 1 ASSESSMENT RECORD

N1.1 Interpret information from two different sources. At least one source must include a table, chart, graph or diagram.

What was the subject and purpose of the calculation?

To carry out a survey of the ways in which people on the course travel home at weekends and how often they travel.

Did the candidate…	(tick)		Comments and examples
Obtain the information they needed to meet the purpose of their task?	☑ Yes	☐ No	A Candidate has used data from a website to find out about costs of petrol and has used the results of the survey as the other source.
Did the candidate…	**(tick)**		**Comments and examples**
Identify suitable calculations to get the results they needed?	☑ Yes	☐ No	A. Candidate was able to understand that he needed to work out the distance travelled in a given time by public and private transport. He identified the need for ranges and averages and use of percentages for pie charts.

Assessor Name:	AN Assessor	Candidate Name:	A Candidate
Assessor Signature:	A N Assessor	Candidate Signature:	A Candidate
Date:	30/06/05	Date:	30/06/05

You must:

N1.2 Carry out and check calculations to do with:
a. amounts or sizes
b. scales or proportion
c. handling statistics.

Evidence must show you can:

1.2.1 Carry out calculations to the levels of accuracy you have been given; and

1.2.2 check your results make sense.

APPLICATION OF NUMBER LEVEL 1 ASSESSMENT RECORD

N1.2 Carry out and check calculations to do with: (a) amounts or sizes, (b) scales or proportion, (c) handling statistics.

What was the subject and purpose of carrying out and checking calculations?

To carry out a survey of the ways in which people on the course travel home at weekends and how often they travel.

Did the candidate…	(tick)	Comments and examples
Carry out calculations to the levels of accuracy they had been given?	☑ Yes ☐ No	A Candidate calculated distances travelled and times taken. He also calculated costs and times by car and train, representing his findings in pie charts. He also calculated ranges and means for costs and time taken for travel.
Did the candidate…	**(tick)**	**Comments and examples**
Check their results made sense?	☑ Yes ☐ No	There is evidence that A. Candidate checked by estimation and rounding of times taken for travel and for distances travelled to the nearest whole number.

Assessor Name: AN Assessor

Assessor Signature: AN Assessor

Date: 30/06/05

Candidate Name: A Candidate

Candidate Signature: A Candidate

Date: 30/06/05

You must:

N1.3 Interpret the results of your calculations and present your findings – in two different ways using charts or diagrams.

Evidence must show you can:

1.3.1 Choose suitable ways to present your findings; and

1.3.2 use more than one way of presenting your findings; and

1.3.3 present your findings clearly using a chart or diagram; and

1.3.4 describe what your results tell you.

APPLICATION OF NUMBER LEVEL 1 ASSESSMENT RECORD

N1.3 Interpret the results of your calculations and present your findings – in two different ways using charts or diagrams.

What were the results of your calculations?

A report showing the findings of my travel survey.

Did the candidate…	(tick)	Comments and examples
Choose suitable ways to present their findings?	☑ Yes ☐ No	The choice of pie charts was appropriate as it allowed comparison of the numbers of people travelling home each weekend.
Did the candidate…	(tick)	Comments and examples
Use more than one way of presenting their findings?	☑ Yes ☐ No	Diagram and pie charts are effectively used.
Did the candidate…	(tick)	Comments and examples
Present their findings clearly using a chart or diagram	☑ Yes ☐ No	There is a diagram representing locations and relative distances to which people travelled in the UK and there are two pie charts showing how often people travelled home during their course.
Did the candidate…	(tick)	Comments and examples
Describe what their results told them?	☑ Yes ☐ No	The conclusions in the report explain the findings and there are sensible explanations for findings.

Assessor Name: A N Assessor	Candidate Name: A Candidate
Assessor Signature: A N Assessor	Candidate Signature: A Candidate
Date: 30/06/05	Date: 30/06/05

COMMUNICATION LEVEL 2 ASSESSMENT CHECKLIST

C2.1a	C2.1b	C2.2	C2.3
Take part in a group discussion.	Give a talk of at least four minutes.	Read and summarise information from at least two documents about the same subject. Each document must be a minimum of 500 words long.	Write two different types of documents, each one giving different information. One document must be at least 500 words long.
2.1a.1 Make clear and relevant contributions in a way that suits your purpose and situation; and **2.1a.2** respond appropriately to others; and **2.1a.3** help to move the discussion forward.	**2.1b.1** Speak clearly and in a way that suits your subject, purpose and situation; and **2.1b.2** keep to the subject and structure your talk to help listeners follow what you are saying; and **2.1b.3** use appropriate ways to support your main points.	**2.2.1** Select and read relevant documents; and **2.2.2** identify accurately the main points, ideas and lines of reasoning; and **2.2.3** summarise the information to suit your purpose.	**2.3.1** Present relevant information in a format that suits your purpose; and **2.3.2** use a structure and style of writing to suit your purpose; and **2.3.3** spell, punctuate and use grammar accurately; and **2.3.4** make your meaning clear.
Use at least one image, either to obtain information or to convey information, in your discussion, your talk or one of the documents you write to help the audience/reader understand the points you are making.			

LOCATION OF EVIDENCE

Page	List items of evidence and where they are located in the portfolio	C2.1a			C2.1b			C2.2			C2.3			
		1	2	3	1	2	3	1	2	3	1	2	3	4
6	Assessment record of discussion	x	x	x										
7	Assessment record of talk				x	x	x							
22–27	Report on travel survey and information for short talk										x	x	x	x
28	Notes for talk on travel survey				x	x	x							
29–36	Sources 1–3 on D-Day							x	x	x				
37	Leaflet on D-Day							x	x	x	x	x	x	x

Indicate the location of evidence of the following:		
C2.1 Discussion/short talk	Group discussion: 6	Short talk: 7
C2.2 Reading	Reading: 29–36	
C2.3 Writing	Document of 500 words minimum: 22–27	Other document: 37
Use of image	25, 37	

Assessor Declaration: *I confirm that the details above are correct and that the evidence submitted is the candidate's own work and the candidate meets all the requirements for certification of this key skill.*

Assessor Name: AN Assessor

Assessor Signature: AN Assessor

Date: 04/07/05

Candidate Name: A Candidate

Candidate Signature: A Candidate

Date: 04/07/05

Level 2

You must:

C2.1a Take part in a group discussion.

Evidence must show you can:

2.1a.1 Make clear and relevant contributions in a way that suits your purpose and situation; and

2.1a.2 respond appropriately to others; and

2.1a.3 help to move the discussion forward.

COMMUNICATION LEVEL 2 ASSESSMENT RECORD

C2.1a Take part in a group discussion.

What was the subject and purpose of the discussion?

To discuss the role of the British forces during the D-Day landings.

Other people involved: Tom, Dick, Jim, Jahangir

Supporting evidence:

(if available)

Did the candidate…	(tick)	Comments and examples
Make clear and relevant contributions in a way that suited their purpose and situation?	☑ Yes ☐ No	A. Candidate put forward his views about the Army's role on Sword and Gold beaches effectively.
Did the candidate…	**(tick)**	**Comments and examples**
Respond appropriately to others?	☑ Yes ☐ No	He answered Tom's questions about the importance of the paratroopers and the gliders.
Did the candidate…	**(tick)**	**Comments and examples**
Help to move the discussion forward?	☑ Yes ☐ No	He asked others what they thought an acceptable responce would be to any suggestion that the British contribution was small compared to that of the USA.

Assessor Name: AN Assessor	Candidate Name: A Candidate
Assessor Signature: AN Assessor	Candidate Signature: A Candidate
Date: 22/06/05	Date: 22/06/05

Level 2

You must:

C2.1b Give a talk of at least four minutes.

Evidence must show you can:

2.1b.1 Speak clearly and in a way that suits your subject, purpose and situation; and

2.1b.2 keep to the subject and structure your talk to help listeners follow what you are saying; and

2.1b.3 use appropriate ways to support your main points.

COMMUNICATION LEVEL 2 ASSESSMENT RECORD

C2.1b Give a talk of at least four minutes.

What was the subject and purpose of the talk?

The findings of research and survey of costs and time taken to travel home at weekends by people on the course.

Other people involved: The rest of the group formed the audience.

Supporting evidence: Notes on page 28

(if available)

Did the candidate…	(tick)	Comments and examples
Speak clearly and in a way that suited their subject, purpose and situation?	☑ Yes ☐ No	A. Candidate spoke clearly and set out the survey methods and the results so that the methods and results were understood by everyone.
Did the candidate…	**(tick)**	**Comments and examples**
Keep to the subject and structure their talk to help listeners follow what they were saying?	☑ Yes ☐ No	He followed the format set out in his notes and took people through the process of writing the questionnaire and carry out the calculations
Did the candidate…	**(tick)**	**Comments and examples**
Use appropriate ways to support their main points?	☑ Yes ☐ No	A. Candidate used the diagram and pie charts to show the results of the survey. His conclusions were supported by these.

Assessor Name: AN Assessor

Assessor Signature: AN Assessor

Date: 22/06/05

Candidate Name: A Candidate

Candidate Signature: A Candidate

Date: 22/06/05

Level 2

You must:

C2.2 Read and summarise information from at least two documents about the same subject. Each document must be a minimum of 500 words long.

Evidence must show you can:

2.2.1 Select and read relevant documents; and

2.2.2 identify accurately the main points, ideas and lines of reasoning; and

2.2.3 summarise the information to suit your purpose.

COMMUNICATION LEVEL 2 ASSESSMENT RECORD

C2.2 Read and summarise information from at least two documents about the same subject. Each document must be a minimum of 500 words long.

What was the subject and purpose of reading and summarising?

To research the role of British forces during the D-Day landings and to produce a leaflet from the summary.

Supporting evidence: Sources (pages 29–36) from websites

(if available)

Did the candidate…	(tick)	Comments and examples
Select and read relevant documents?	☑ Yes ☐ No	The materials used were appropriate to get information on the role of Airborne and Infantry divisions on D-Day.
Did the candidate…	**(tick)**	**Comments and examples**
Identify accurately the main points, ideas and lines of reasoning?	☑ Yes ☐ No	The main points were highlighted and the leaflet is a summary of some aspects of D-Day; including personal reflections.
Did the candidate…	**(tick)**	**Comments and examples**
Summarise the information to suit their purpose?	☑ Yes ☐ No	The leaflet is a summary of some of the British contributions to the success of D-Day. Images are well used.

Assessor Name: AN Assessor

Assessor Signature: AN Assessor

Date: 27/06/05

Candidate Name: A Candidate

Candidate Signature: A Candidate

Date: 27/06/05

Level 2

You must:

C2.3 Write two different types of documents, each one giving different information. One document must be at least 500 words long.

Evidence must show you can:

2.3.1 Present relevant information in a format that suits your purpose; and

2.3.2 use a structure and style of writing to suit your purpose; and

2.3.3 spell, punctuate and use grammar accurately; and

2.3.4 make your meaning clear.

COMMUNICATION LEVEL 2 ASSESSMENT RECORD

C2.3 Write two different types of documents, each one giving different information. One document must be at least 500 words long.

What was the subject and purpose of the document?

Description:

Doc. 1: Report of results and conclusions of travel survey (pp22–27)
Doc. 2: Leaflet giving information about British forces during D-Day (p37)

Supporting evidence:

(if available)

Did the candidate…	(tick)	Comments and examples
Present relevant information in a format that suited their purpose?	☑ Yes ☐ No	Doc. 1. Report is clear with all the information needed to understand what was done and what the results were. Doc. 2. Leaflet has useful information for others on the course.
Did the candidate…	**(tick)**	**Comments and examples**
Use a structure and style of writing to suit their purpose?	☑ Yes ☐ No	Doc. 1. Report is well structured and has a formal style and tone. Doc. 2. Leaflet is well set out with limited words and good use of images.
Did the candidate…	**(tick)**	**Comments and examples**
Spell, punctuate and use grammar accurately?	☑ Yes ☐ No	Doc. 1. Accurate use of commas and good sentence construction. Doc. 2. Good use of short sentences. Good spelling.
Did the candidate…	**(tick)**	**Comments and examples**
Make their meaning clear?	☑ Yes ☐ No	Doc. 1. Meaning of the results is clear from the conclusions. Doc. 2. Leaflet is clear in intention and writing.

Assessor Name: AN Assessor	Candidate Name: A Candidate
Assessor Signature: AN Assessor	Candidate Signature: A Candidate
Date: 01/07/05	Date: 01/07/05

PROBLEM SOLVING LEVEL 2 ASSESSMENT CHECKLIST

You must provide at least two examples of meeting the standard for PS2.1, 2.2 and 2.3. Each example should cover a different problem and identify at least two different ways of tackling it (for PS2.1).

PS2.1	PS2.2	PS2.3
Identify a problem, with help from an appropriate person, and identify different ways of tackling it.	Plan and try out at least one way of solving the problem.	Check if the problem has been solved and identify ways to improve problem solving skills.
2.1.1 Provide information to help identify a problem, accurately describing its main features; and **2.1.2** identify how you will know the problem has been solved; and **2.1.3** come up with different ways of tackling the problem.	**2.2.1** Confirm with an appropriate person how you will try to solve the problem; and **2.2.2** plan what you need to do, identifying the methods and resources you will use; and **2.2.3** use your plan effectively, getting support and revising your plan when needed to help tackle the problem.	**2.3.1** Check if the problem has been solved by accurately using the methods you have been given; and **2.3.2** describe clearly the results, including the strengths and weaknesses of how you tackled the problem; and **2.3.3** identify ways of improving your problem solving skills.

LOCATION OF EVIDENCE

Page	List items of evidence and where they are located in the portfolio	PS2.1			PS2.2			PS2.3		
		1	2	3	1	2	3	1	2	3
	Problem 1: To find the quickest and most cost-effective ways for people on my course to travel home at weekends, and the factors which affect their decision to travel									
38	Action plan for carrying out an investigation into people on my course travelling home at weekends	x	x	x						
39	Log of carrying out the survey				x	x	x			
40	Review of the survey							x	x	x
	Problem 2: To design a leaflet about the role of British forces during D-Day									
41	Action plan for producing a leaflet	x	x	x						
42	Log of producing the leaflet				x	x	x			
43	Review of producing the leaflet							x	x	x

Assessor Declaration: *I confirm that the details above are correct and that the evidence submitted is the candidate's own work and the candidate meets all the requirements for certification of this key skill.*

Assessor Name: AN Assessor **Candidate Name:** A Candidate

Assessor Signature: AN Assessor **Candidate Signature:** A Candidate

Date: 30/06/05 **Date:** 30/06/05

Level 2

You must:

PS2.1 Identify a problem, with help from an appropriate person, and identify different ways of tackling it.

Evidence must show you can:

2.1.1 Provide information to help identify a problem, accurately describing its main features; and

2.1.2 identify how you will know the problem has been solved; and

2.1.3 come up with different ways of tackling the problem.

PROBLEM SOLVING LEVEL 2 ASSESSMENT RECORD

PS2.1 Identify a problem, with help from an appropriate person, and identify different ways of tackling it.

Problem 1: To find the quickest and most cost-effective ways for people on my course to travel home at weekends and the factors which affect their decision to travel.	**Problem 2:** To design a leaflet about the role of the British forces during D-Day.

Did the candidate…	(tick)	Comments and examples
Provide information to help identify the problem, accurately describing its main features?	☑ Yes ☐ No	A. Candidate was able to identify different types of information required from the travel survey and the internet.
Did the candidate…	**(tick)**	**Comments and examples**
Identify how they would know the problem had been solved?	☑ Yes ☐ No	A. Candidate was able to identify the outcomes related to their report on the project and to the leaflet.
Did the candidate…	**(tick)**	**Comments and examples**
Come up with different ways of tackling the problem?	☑ Yes ☐ No	Three ways of tackling the problem were identified, although parts of two options were used to get the necessary information.

Assessor Name: AN Assessor	**Candidate Name:** A Candidate
Assessor Signature: AN Assessor	**Candidate Signature:** A Candidate
Date: 22/06/05	**Date:** 22/06/05

Level 2

You must:

PS2.2 Plan and try out at least one way of solving the problem.

Evidence must show you can:

2.2.1 Confirm with an appropriate person how you will try to solve the problem; and

2.2.2 plan what you need to do, identifying the methods and resources you will use; and

2.2.3 use your plan effectively, getting support and revising your plan when needed to help tackle the problem.

PROBLEM SOLVING LEVEL 2 ASSESSMENT RECORD

PS2.2 Plan and try out at least one way of solving the problem.

Problem 1: To find the quickest and most cost-effective ways for people on my course to travel home at weekends and the factors which affect their decision to travel.	**Problem 2:** To design a leaflet about the role of the British forces during D-Day.

Did the candidate…	(tick)		Comments and examples
Confirm with an appropriate person how they would try to solve the problem?	☑ Yes	☐ No	A. Candidate confirmed with me that the methods chosen were sensible and safe.
Did the candidate…	**(tick)**		**Comments and examples**
Plan what they needed to do, identifying the methods and resources they would use?	☑ Yes	☐ No	There is an action plan for solving each problem (p.38 and p.41).
Did the candidate…	**(tick)**		**Comments and examples**
Use their plan effectively, getting support and revising their plan when needed to help tackle the problem?	☑ Yes	☐ No	The plan was followed effectively until production of the report. A. Candidate correctly identified that getting people to participate in the questionnaire would be most difficult and did persuade enough with cups of coffee. He revised the way he used the computer in the second problem and identified further IT skills needed.

Assessor Name:	AN Assessor	**Candidate Name:**	A Candidate
Assessor Signature:	AN Assessor	**Candidate Signature:**	A Candidate
Date:	30/06/05	**Date:**	30/06/05

Level 2

You must:

PS2.3 Check if the problem has been solved and identify ways to improve problem solving skills.

Evidence must show you can:

2.3.1 Check if the problem has been solved by accurately using the methods you have been given; and

2.3.2 describe clearly the results, including the strengths and weaknesses of how you tackled the problem; and

2.3.3 identify ways of improving your problem solving skills.

PROBLEM SOLVING LEVEL 2 ASSESSMENT RECORD

PS2.3 Check with an appropriate person if the problem has been solved and identify ways to improve problem solving skills.

Problem 1: To find the quickest and most cost-effective ways for people on my course to travel home at weekends and the factors which affect their decision to travel.	**Problem 2:** To design a leaflet about the role of the British forces during D-Day.

Did the candidate…	(tick)	Comments and examples
Check if the problem had been solved by accurately using the methods they had been given?	☑ Yes ☐ No	A. Candidate did solve each problem having followed the methods agreed for the questionnaire data and the leaflet.
Describe clearly the results, including the strengths and weaknesses of how they tackled the problem?	☑ Yes ☐ No	He has identified strengths and weaknesses of the approach in both problems, (p.40 and p.43).
Identify ways of improving their problem solving skills?	☑ Yes ☐ No	A. Candidate was able to identify the need to stick to plans and ask for help. He also identified skills which need to be developed for future projects, such as using design software.

Assessor Name: AN Assessor	Candidate Name: A Candidate
Assessor Signature: AN Assessor	Candidate Signature: A Candidate
Date: 30/06/05	Date: 30/06/05

Candidate's evidence

Task 1 Travel Survey

You have been asked to tackle the problem of finding the quickest and most effective means of transport for people to use when travelling to and from the course in Aldershot. As you are in the Royal Logistics Corps, this kind of analysis will be important in your work.

Carry out a survey of 10 people in your group, to identify where each person lives, their travel arrangements and costs, to and from home, to the course. Identify how many times people on the course travel home for weekends. Compare the costs for different people in the group, to identify the range and the average cost on a weekly and monthly basis. Identify the most popular means of travel. What are the main factors which people take into account when choosing how to travel and whether or not to go home at weekends?

Present your findings as a written word-processed report of about 500 words. You will also present your report as a short talk of at least 4 minutes. Use at least one image to support what you say. Your tutor will assess your talk.

Application of number L1 evidence:

This task will allow you to produce evidence for one AoN activity involving calculations to do with amounts or sizes, scales or proportion and statistics.

Keep records of the data you collect and explain how you will use it. You may use spreadsheets to carry out calculations.

Make sure that you show all your calculations and checking of answers. Include your sources and how you got them.

Present your findings using charts or diagrams. Come to a conclusion based on your findings.

Communication L2 evidence:

Include the written report of 500 words.

The notes from your talk and the image(s) you used should be in your portfolio, together with the assessment record of your talk which will be completed by your tutor.

Problem solving L2 evidence:

Problem 1: The problem agreed with your tutor is to find the quickest and most cost-effective ways of travel home for people on your course and the factors which affect their decision to travel home or not.

Keep a record of at least two ways you have come up with for solving the problem and which one you have chosen.

Keep a log of what you do to try to solve the problem.

From discussions with your tutor, decide whether or not the problem has been solved and how you know this.

In your conclusion, write down what you have learned about problem solving, which will help you in the future to tackle similar problems more successfully.

Task 2

Carry out research into the role of the British Army/Airforce/Navy (as discussed with your tutor) during the Normandy Landings in France on D-Day, 6 June 1944. From the summary you write produce a leaflet for others on your course to understand the impact the British had on the outcome of the invasion.

Communication L2 evidence:

The leaflet you produce.

Keep a record of the sources you include (you can include them in your portfolio) and the way in which you took notes, e.g. by highlighting or underlining. Include the leaflet in your portfolio.

Take part in a discussion about the role of the British forces during D-Day and its likely success without them. Your tutor will assess you to see that you contribute well, listen to others and ask suitable questions.

Problem solving L2 evidence:

Problem 2: The problem agreed with your tutor is to produce a leaflet.

Keep a record of at least two ways you have come up with for solving the problem and which one you have chosen.

Keep a log of what you do to try to solve the problem.

From discussions with your tutor, decide whether or not the problem has been solved and how you know this.

In your conclusion, write down what you have learned about problem solving, which will help you in the future to tackle similar problems more successfully.

Evidence must show you can:

N1.1.1 Obtain the information you need to meet the purpose of your task; and

N1.1.2 identify suitable calculations to get the results you need.

Data collection (1): Travel Survey Questionnaire

Thank you for taking the time to complete this questionnaire.

Please return it to A. Candidate by Thursday 22nd.

1. **Name the town you normally travel to on your weekend leave.**

2. **How many miles is the distance from your home town to Aldershot?**

3. **How many weekends did you go home in the last four weeks?**

4. **How many weekends did you go home over the whole course (26 weeks)?**

5. **What is the cost of your journey by public transport?**

Evidence must show you can:

N1.1.1 Obtain the information you need to meet the purpose of your task.

Data collection (2): Motoring costs from AA website

Read the quick reference guide for an explanation of the headings.

Petrol Car Running Costs, Basic guide for 2005

Running Costs

	Cost New (£s)				
	up to 10000	**10000 to 13000**	**13000 to 20000**	**20000 to 30000**	**over 30000**
Standing charges per annum (£s)					
Road tax	125.0	150.0	165.0	165.0	165.0
Insurance	406.0	426.0	554.0	769.0	1027.0
Cost of capital	269.0	392.0	547.0	803.0	1295.0
Depreciation (at 10,000 miles/annum)	1073.0	1674.0	2255.0	3207.0	5507.0
Breakdown cover	40.0	40.0	40.0	40.0	40.0
Total (£s)	1913.00	2682.00	3561.00	4984.00	8034.00
Standing charges per mile (pence)					
5,000	37.84	52.98	70.32	98.40	158.48
10,000	19.13	26.82	35.61	49.84	80.34
15,000	13.04	18.33	20.98	24.35	29.46
20,000	10.10	14.24	18.94	26.52	42.92
25,000	8.17	11.53	15.33	21.48	34.78
30,000	6.84	9.67	12.85	18.00	29.17
Running costs per mile (pence)					
Petrol*	8.69	9.53	12.22	13.96	16.29
Tyres	0.78	0.98	1.12	1.35	1.85
Service labour costs	2.92	2.83	2.88	3.34	3.76
Replacement parts	1.65	2.09	2.52	3.03	4.45
Parking and tolls	1.8	1.8	1.8	1.8	1.8
Total (pence)	15.84	17.23	20.54	23.48	28.15
* Unleaded petrol @ 86.0p/litre. For every penny more or less, add or subtract	0.1	0.11	0.14	0.16	0.19

Evidence must show you can:

N1.1.1 Obtain the information you need to meet the purpose of your task.

Data collection (3): Information from Autoroute CD-ROM

To show where distance and time come from and the speeds set on option menu ✓

Evidence must show you can:

N1.1.1 Obtain the information you need to meet the purpose of your task.

Data collection (4): Information from thetrainline

to show average (mean) time taken is 8hrs 20mins + 8hrs 03 mins + 7hrs 49mins = 8hrs 49mins = 33 hrs 01 mins

33 hrs 01 mins ÷ 4 = 8hrs 15mins all times to nearest 1/4 hour

AND cost is taken as standard open single

Evidence must show you can:

N1.1.1 Obtain the information you need to meet the purpose of your task; and

N1.2.1 carry out calculations to the levels of accuracy you have been given; and

N1.2.2 check your results make sense.

Data collection (5): Bearings from Liverpool (from Road Atlas map measured with protractor)

A bearing is an angle measured clockwise from the North.

Town	Angle	Bearing
1. Dwygyfylchi	50	320
2. Dundee	75	345
3. Glasgow	68	338
4. Hereford	34	304
5. Invergordon	72	342
6. Loughborough	80	350
7. Nottingham	82	352
8. Nuneaton	70	340
9. Peterhead	83	353
10. Rhondda	16	286

I am going to make a diagram for my report to show the distances from Aldershot.
I will draw the lines at the bearing angles to show direction.
I will draw it to scale.
I will make the longest distance which is approximately 600 miles 20cm on my diagram.
It will be easier to work out the scale if I make the miles into kilometres because cm and km are both metric.
1 mile = 1.6km

Example calculation:

Dwygyfylchi 272.2 x 1.6 = 435.5 = 440 to nearest 10

CHECK (reverse calculation) 435.5 ÷ 1.6 = 272.2

Invergordon 600.8 x 1.6 = 961.3 = 960 to nearest 10

This is the longest distance so my scale will be

20cm = 1000km
10cm = 500km
1cm = 50km
0.2cm = 10km

On my diagram Invergordon is 96 x 0.2 = 19.2cm

Dwygyfylchi is 44 x 0.2 = 8.8cm

CHECK (approximate calculation) 9 ÷ 2 x 10 = 45

Evidence must show you can:

N1.1.1 Obtain the information you need to meet the purpose of your task; and

N1.2.1 carry out calculations to the levels of accuracy you have been given; and

N1.2.2 check your results make sense.

Distance from Aldershot (from Autoroute) and calculations for scale diagram

Town	Miles	Kilometres	Km to nearest 10km	Length of line on scale diagram (cm)
1 Dwygyfylchi	272.2	435.5	440	8.8
2 Dundee	495.7	793.1	790	15.8
3 Glasgow	420.4	672.6	670	13.4
4 Hereford	147.1	235.4	240	4.8
5 Invergordon	600.8	961.3	960	19.2
6 Loughborough	136.5	218.4	150	4.4
7 Nottingham	151.6	242.6	240	4.8
8 Nuneaton	126.2	201.9	200	4
9 Peterhead	598.9	958.2	960	19.2
10 Rhondda	144.9	231.8	230	4.6

A proper scale can be worked out easily because it is all metric.

500km = 500 x 1000m
= 500,000m

500,000m = 500,000 x 100cm
= 50,000,000cm

My scale is 1cm = 500km
The same as 1cm = 50,000,000cm

So my scale is 1:50,000,000

My scale drawing is with the report on page 27.

Evidence must show you can:

C2.3.1 Present relevant information in a format that suits your purpose; and

C2.3.2 use a structure and style of writing to suit your purpose; and

C2.3.3 spell, punctuate and use grammar accurately; and

C2.3.4 make your meaning clear; and

N1.2.1 carry out calculations to the levels of accuracy you have been given; and

N1.2.2 check your results make sense; and

N1.3.1 choose suitable ways to present your findings; and

N1.3.2 use more than one way of presenting your findings; and

N1.3.3 present your findings clearly using a chart or diagram; and

N1.3.4 describe what your results tell you.

Report on Travel Survey and Information for Short Talk

Purpose

I am going to find out about the costs and time spent travelling home for weekend leave by people in my class. I need to find out how many weekends they travelled home and how much time it takes and how much it costs them. I will use this information to compare travelling by train and by car and give a short talk to the class.

Method

I obtained data from four sources:

1. a questionnaire survey of ten people in my class about their travel each weekend
2. the internet – thetrainline.com, a website, for train fares and times (tables)
3. the internet – AA website
4. CD-ROM Autoroute for times and distances for car journeys.

The questionnaire asked people about where they lived, how far it was and how many times they went home at weekends. It also asked them to say how much it cost them. Not everybody could say how much it cost and some people did not know the distance to home, so I needed to check this.

I used the internet to find times and prices. There were many different prices so I talked to my tutor and decided to use the standard single fare for my train costs. The times were not all the same so I took an average time and rounded it to the nearest 1/4 hour.

I used Autoroute to find out distances and times for car journeys. I set the profile for legal speeds and put in a 15 minute break every two hours.

I found the AA recommended average cost per mile for different cars from the AA website and used 18p per mile as most people have older cars and this is a rounded up figure from 17.23p. (See the AA web information sheets for the figures I used on pages 17 and 18.)

I calculated the different numbers of weekends at home by percentages of the class group for the whole course and for the last four weeks.

I worked out average times, speeds and costs for cars and trains using the mean and I also worked out some ranges.

I decided to show the different distances travelled for my talk using a scale network diagram so I measured the bearings of the towns from Aldershot.

Data

1. Numbers of weekends at home (from questionnaire)

	number of people	
Weekends at home	last 4 weeks	whole course
0	3	0
1	1	0
2	1	0
3	3	0
4	2	1
5		3
6		3
7		2
8		1
	10	10

Evidence must show you can:

C2.3.1 Present relevant information in a format that suits your purpose; and

C2.3.2 use a structure and style of writing to suit your purpose; and

C2.3.3 spell, punctuate and use grammar accurately; and

C2.3.4 make your meaning clear; and

N1.2.1 carry out calculations to the levels of accuracy you have been given; and

N1.2.2 check your results make sense; and

N1.3.1 choose suitable ways to present your findings; and

N1.3.2 use more than one way of presenting your findings; and

N1.3.3 present your findings clearly using a chart or diagram; and

N1.3.4 describe what your results tell you.

2. Names of towns (from questionnaire)

Town	Number of people
1) Dwygyfylchi	1
2) Dundee	1
3) Glasgow	1
4) Hereford	1
5) Invergordon	1
6) Loughborough	1
7) Nottingham	1
8) Nuneaton	1
9) Peterhead	1
10) Rhondda	1

3. Miles travelled (from Autoroute CD)

Town	Miles
11. Dwygyfylchi	272.2
12. Dundee	495.7
13. Glasgow	420.4
14. Hereford	147.1
15. Invergordon	600.8
16. Loughborough	136.5
17. Nottingham	151.6
18. Nuneaton	126.2
19. Peterhead	598.9
20. Rhondda	144.9

4. Time taken (from Autoroute and thetrainline)

Town	Miles	Time taken (hrs & mins) (CAR)	Time taken (hrs & mins) (TRAIN)
1. Dwygyfylchi	272.2	05:30	05:15
2. Dundee	495.7	09:45	08:00
3. Glasgow	420.4	07:45	08:15
4. Hereford	147.1	03:15	03:45
5. Invergordon	600.8	13:00	12:00
6. Loughborough	136.5	02:45	03:15
7. Nottingham	151.6	03:00	03:30
8. Nuneaton	126.2	02:45	02:45
9. Peterhead	598.9	13:45	10:30
10. Rhondda	144.9	3:30	3:45

5. Number of weekends home in last 4 weeks (from questionnaire)

Number in last 4 weeks	Number of people
0	3
1	1
2	1
3	3
4	2
Total	10

Evidence must show you can:

C2.3.1 Present relevant information in a format that suits your purpose; and

C2.3.2 use a structure and style of writing to suit your purpose; and

C2.3.3 spell, punctuate and use grammar accurately; and

C2.3.4 make your meaning clear; and

N1.2.1 carry out calculations to the levels of accuracy you have been given; and

N1.2.2 check your results make sense; and

N1.3.1 choose suitable ways to present your findings; and

N1.3.2 use more than one way of presenting your findings; and

N1.3.3 present your findings clearly using a chart or diagram; and

N1.3.4 describe what your results tell you.

6. Total number of weekends home on course (from questionnaire)

Number in 26 weeks	Number of people
0	0
1	0
2	0
3	0
4	1
5	3
6	3
7	2
8	1
9	0
Total	10

7. Cost of journey

		cost (CAR)	cost (TRAIN)
Town	Miles	(£)	(£)
1. Dwygyfylchi	272.2	49.00	108.00
2. Dundee	495.7	89.23	130.00
3. Glasgow	420.4	75.67	122.00
4. Hereford	147.1	26.48	57.00
5. Invergordon	600.8	108.14	142.00
6. Loughborough	136.5	24.57	57.50
7. Nottingham	151.6	27.29	62.50
8. Nuneaton	126.2	22.72	102.50
9. Peterhead	598.9	107.80	134.00
10. Rhondda	144.9	26.08	66.00
Total	3094.3	556.97	981.50

Findings

Most people went home one or three weekends out of four.

Most people went home five or six weekends in 26 weeks.

The range of distances travelled is 475 miles or 760km.

The average distance travelled is 310 miles.

The range of journey time taken is 11hr by car or 9hr 15min by train.

The average journey time is 6hr 30min by car or 6hr 06min by train.

The range of costs per journey is £85.42 by car or £85 by train.

The average cost per journey is £55.70 by car or £98.15 by train.

The average cost per mile is 18p by car or 32p by train.

The average speed of the journeys is 48mph by car or 51mph by train.

Evidence must show you can:

C2.3.1 Present relevant information in a format that suits your purpose; and

C2.3.2 use a structure and style of writing to suit your purpose; and

C2.3.3 spell, punctuate and use grammar accurately; and

C2.3.4 make your meaning clear; and

N1.2.1 carry out calculations to the levels of accuracy you have been given; and

N1.2.2 check your results make sense; and

N1.3.1 choose suitable ways to present your findings; and

N1.3.2 use more than one way of presenting your findings; and

N1.3.3 present your findings clearly using a chart or diagram; and

N1.3.4 describe what your results tell you.

The pie charts show the percentages of people who went home for weekends.

0 weekends = 3/10 people
= 30%

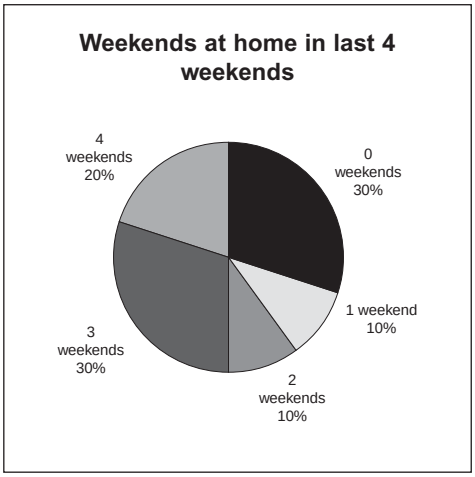
1 weekend = 1/10 people
= 10%

2 weekends = 1/10 people
= 10%

3 weekends = 3/10 people
= 30%

4 weekends = 2/10 people
= 20%

CHECK Total = 100%



0 weekends = 0/10 people
= 0%

1 weekend = 0/10 people
= 0%

2 weekends = 0/10 people
= 0%

3 weekends = 0/10 people
= 0%

4 weekends = 1/10 people
= 10%

5 weekends = 3/10 people
= 30%

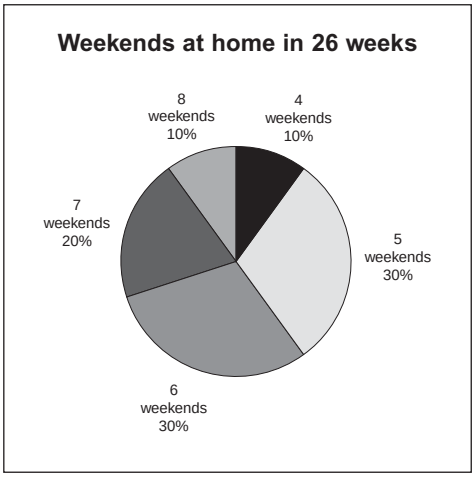
6 weekends = 3/10 people
= 30%

7 weekends = 2/10 people
= 20%

8 weekends = 1/10 people
= 10%

9 weekends = 0/10 people
= 0%

CHECK Total = 100%



Conclusions

My calculations show that there is not much difference in journey time or speed between car and train journeys. There is a big difference in cost with train journeys being nearly twice as expensive as car journeys. There might be cheaper fares for trains available and people do not always pay the full standard fare. There is a big difference in the distances travelled shown by the range so the average journey costs do not really give a good idea of what it costs individuals to go home.

The data is presented as charts and diagrams. The charts help to compare the results more easily for the number of weekends people went home. The diagram allows you to see the relative distances easily on a scale plan to compare how far people travel.

My results show that the people on my course live long distances from Aldershot but they still travel home for weekends. Most people went home 5 or 6 weekends out of the 26 week course.

Evidence must show you can:

C2.3.1 Present relevant information in a format that suits your purpose; and

C2.3.2 use a structure and style of writing to suit your purpose; and

C2.3.3 spell, punctuate and use grammar accurately; and

C2.3.4 make your meaning clear; and

N1.2.1 carry out calculations to the levels of accuracy you have been given; and

N1.2.2 check your results make sense; and

N1.3.1 choose suitable ways to present your findings; and

N1.3.2 use more than one way of presenting your findings; and

N1.3.3 present your findings clearly using a chart or diagram; and

N1.3.4 describe what your results tell you.

Everyone went home at least 4 weekends in the 26 week course and one person went home 8 weekends. In the last 4 weeks, which is near the end of the course, nearly a third of people didn't go home at all. Either they like it here more now, or they are too tired to go home.

It would have been better if I had matched up the distance travelled with the number of times people went home, to see if distance is what stops people going more often. If I did the survey again I would also use more people.

Calculations

		Time taken (CAR)	Time taken (TRAIN)	cost (CAR)	cost (TRAIN)
Town	Miles	hr:min	hr:min	(£)	(£)
1. Dwygyfylchi	272.2	05:30	05:15	49.00	108.00
2. Dundee	495.7	09:45	08:00	89.23	130.00
3. Glasgow	420.4	07:45	07:00	75.67	122.00
4. Hereford	147.1	03:15	03:45	26.48	57.00
5. Invergordon	600.8	13:00	12:00	108.14	142.00
6. Loughborough	136.5	02:45	03:15	24.57	57.50
7. Nottingham	151.6	03:00	03:30	27.29	62.50
8. Nuneaton	126.2	02:45	02:45	22.72	102.50
9. Peterhead	598.9	13:45	10:30	107.80	134.00
10. Rhondda	144.9	03:30	03:45	26.08	66.00
Totals	**3094.3**	**65.00**	**61.00**	**556.97**	**981.50**

Averages (means)

MILES 3094.3 ÷ 10 = 309.43 = 310 rounded to nearest mile
TIMES 65 ÷ 10 = 6.5hr = 6hr:30min (CAR)
61 ÷ 10 = 6.1hr = 6hr:06min (TRAIN)

SPEED = distance ÷ time = 3094.3 ÷ 6.5 = 47.6mph (CAR)
= 3094.3 ÷ 6.1 = 50.7mph (TRAIN)

COST 556.97 ÷ 10 = £55.70 (CAR)
981.50 ÷ 10 = £98.15 (TRAIN)

COST PER MILE £0.18 car
COST PER MILE = 981.50 ÷ 3094.3 = £0.317196 = £0.32
CHECK (different calculation) average cost ÷ average miles = 98.15 ÷ 310 = 0.32

Ranges

MILES 600.8 – 126.2 = 474.6 = 475
KILOMETRES 961.3 – 201.9 = 759.4 = 760
CHECK (different calculation) 475 x 1.6 = 760

JOURNEY TIME 13:45 – 2:45 = 11hr (CAR)
12:00 – 2:45 = 9hr 15mins (TRAIN)

COST 108.14 – 22.72 = £85.42 (CAR)
142 – 57 = £85 (TRAIN)

Examples of other checks Added columns up both ways
Did approximate adding for money 50+90+80+30+110+20+30+20+110+30 = 570

Evidence must show you can:

C2.3.1 Present relevant information in a format that suits your purpose; and

C2.3.2 use a structure and style of writing to suit your purpose; and

C2.3.3 spell, punctuate and use grammar accurately; and

C2.3.4 make your meaning clear; and

N1.2.1 carry out calculations to the levels of accuracy you have been given; and

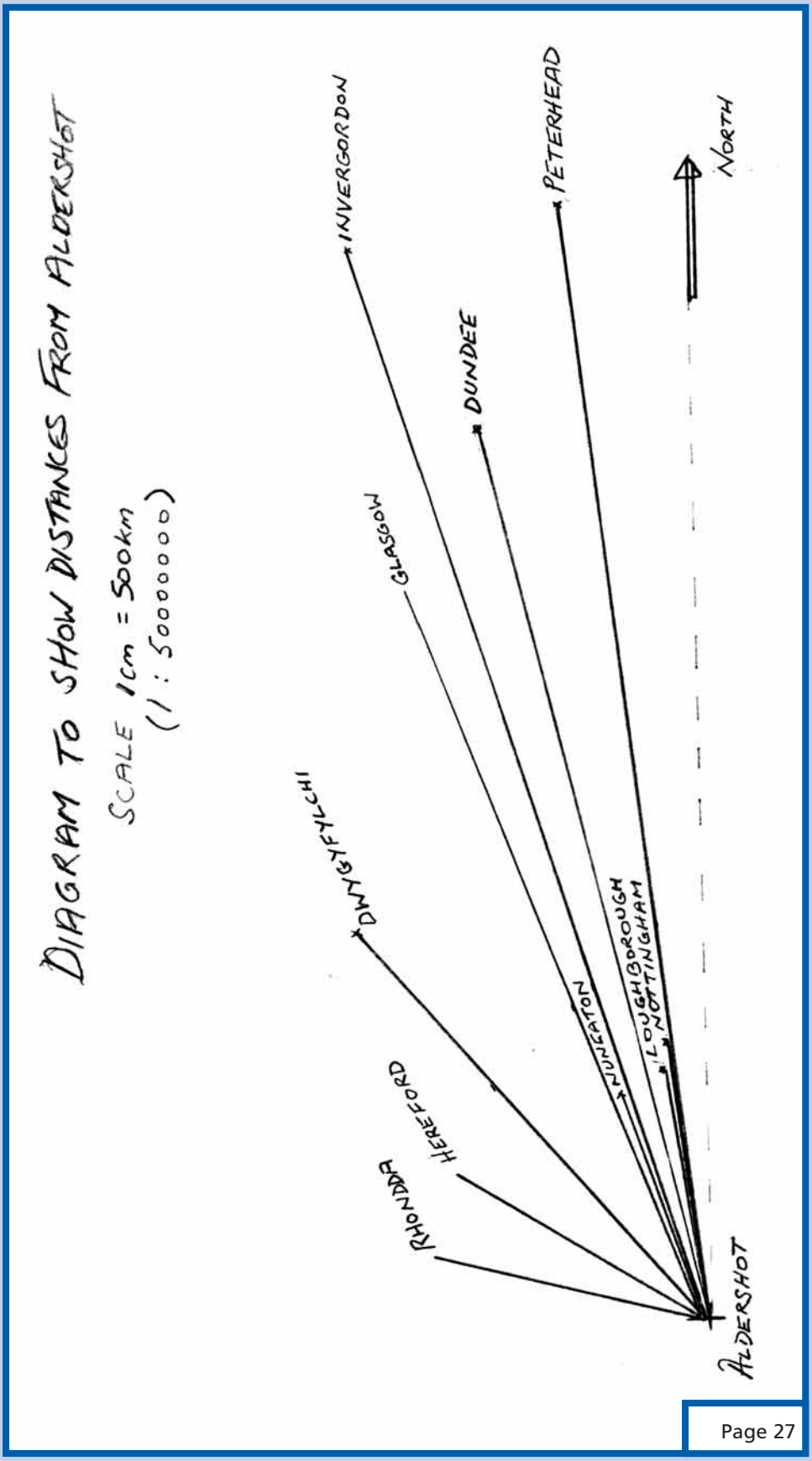
N1.2.2 check your results make sense; and

N1.3.1 choose suitable ways to present your findings; and

N1.3.2 use more than one way of presenting your findings; and

N1.3.3 present your findings clearly using a chart or diagram; and

N1.3.4 describe what your results tell you.



Evidence must show you can:

2.1b.1 Speak clearly and in a way that suits your subject, purpose and situation; and

2.1b.2 keep to the subject and structure your talk to help listeners follow what you are saying; and

2.1b.3 use appropriate ways to support your main points.

My notes for talk on Travel Survey

1. Say what the task was -
   - survey
   - 10 people
   - Travel distances
   - Costs
   - Time

2. Say what I did -
   - Questionnaire
   - who I asked
   - Results

3. Say what I found out -
   - Pie Charts (show)
   - Diagram (Show)
   - Conclusions - Public transport quicker the further you travel
     Average miles per hour is 26 - not fast
     Most people went home 5 or 6 weekends out of 26
     Less people went home at the end of the course

Observation of talk on Travel Survey

I confirm that A. Candidate gave a talk lasting five minutes on the way in which he carried out his travel survey and the results and conclusions in his report.

A.N. Assessor. 22/06/05.

Evidence must show you can:

C2.2.1 Select and read relevant documents; and

C2.2.2 identify accurately the main points, ideas and lines of reasoning; and

C2.2.3 summarise the information to suit your purpose.

D-Day - The Normandy Landings

Source 1

D-Day – The Normandy Landings

Airborne troops led the D-Day landings in a combined parachute and glider assault, to throw a net of protection around the Normandy beaches, where a massive invasion force would sweep ashore and advance into Europe.

Among their initial objectives, the British airborne units were to destroy a German gun battery that threatened the lives of seaborne troops, and protect the left flank of the sea assault by seizing strategic points, which would prevent the enemy from reaching the beaches.

Intro

Preparations had been going on for three years prior to the invasion of Normandy, with new roles being created and units formed, including the 6th Airborne Division on May 18, 1943. The number 'six' being chosen to hoodwink the enemy and fool them into believing that Britain already had five airborne divisions, when in fact it had just two, the Ist and 6th, under General Browning.

Operation Overlord 'D-Day' on June 6, 1944, involved the massed troops of two Allied armies pouring into France to drive the Germans out of the country, after the 6th Airborne division had dropped and captured key points, including a heavily fortified gun battery.

Intro

The division, which had been born in 1943, was under the command of General Gale, and included glider and parachute troops from many different regiments, all wearing the distinctive red beret of airborne forces.

There were now ten glider squadrons operating under the control of No. 38 group RAF, and today, at the end of the old runway at Harwell, now the Atomic Research Establishment, a memorial marks the spot where the first gliders left for D-Day.

Bad weather had delayed the invasion by 24 hours, but late on the night of June 5, the force of Dakotas and Horsa gliders towed by RAF bombers took off for the invasion of Normandy.

First in were the pathfinders of 22nd Independent Parachute company, with Lt De La Tour being the first man on the ground. They were tasked to mark the drop zone and guide the parachute and glider units in using special Eureka beacons.

Few were dropped accurately, as the Germans had flooded the low-lying ground around the Orne and Dives rivers, destroying many identifying features which had been given to pilots as 'markers' during the intense pre-flight brief.

Unit planning had been very detailed, especially by the 9 Para, who had been tasked to silence the Merville gun battery before the landings started. If they didn't succeed they would be shelled themselves, by the warship HMS Arethusa.

British airborne

The huge guns at Merville were just miles from the beaches of Sword, Juno and Gold, where the seaborne assault was to take place and posed the greatest threat to the invasion. Buried under 12ft-thick concrete, the four 75mm guns had the capability to engage Royal Navy warships out at sea and sink landing craft heading for the beaches.

RAF bombers had tried several times to destroy the concrete bunkers at Merville, but their precision bombing made no impression; now the task had been given to the Paras.

The 6th Airborne division was 8,500 strong and included the 3rd and 5th Parachute Brigades, as well as the 6th Air Landing Brigade of glider borne troops, who had been training at Netheravon. Their role was to seize or destroy several bridges over two rivers and the Caen canal, silence enemy positions in the area and secure the eastern flank of the beaches. Here the British Second Army was to come ashore, just a few hours later.

British airborne

The 3rd Parachute Brigade had to land in the very heart of the enemy's defences and destroy the Troarn, Varaville, Robehomme and Bures bridges across the Dives river, while its 9th battalion hit Merville. At the same time, their colleagues in the 5th Parachute Brigade were given a similar task and briefed to hold the bridges north of the village of Ranville spanning the River Orne and the Caen canal, as well as preparing a landing zone for the glider troops.

More than 200 gliders were towed up into the skies of Britain during the night of June 5, along with a huge force of Dakota aircraft heading for what should have been, the most planned military action of the war.

Flak started to hit the aircraft and as pilots took avoiding action weaving across the sky, some Paras already hooked up and waiting to jump, were tossed out of the doors.

British airborne

The entire force of 9 Para had been dropped off their DZ and Lt Col Otway could only assemble 150 men to commence

http://www.army.mod.uk/para/history/normandy.htm 08/11/2005

Evidence must show you can:

C2.2.1 Select and read relevant documents; and

C2.2.2 identify accurately the main points, ideas and lines of reasoning; and

C2.2.3 summarise the information to suit your purpose.

Battle of Normandy - Wikipedia, the free encyclopedia

Battle of Normandy

Source 2

Introduction

From Wikipedia, the free encyclopedia.
(Redirected from Normandy Landings)

The **Battle of Normandy** was fought in 1944 between the German forces occupying Western Europe and the invading Allied forces as part of the larger conflict of World War II. Sixty years later, the Normandy invasion, codenamed *Operation Overlord*, remains the largest seaborne invasion in history, involving almost three million troops crossing the English Channel from England to Normandy in occupied France.

Twelve Allied nations provided units that participated in the invasion: Australia, Belgium, Canada, Czechoslovakia, France, Greece, the Netherlands, New Zealand, Norway, Poland, the United Kingdom and the United States.

The Normandy invasion began with overnight paratrooper and glider landings, massive air and naval bombardments, and an early morning amphibious assault on June 6, "D-day". The battle for Normandy continued for more than two months, with campaigns to establish, expand, and eventually break out of the Allied beachheads. It concluded with the liberation of Paris and the fall of the Chambois pocket.

Battle of Normandy

A United States Coast Guard LCVP disembarks troops at Omaha Beach

Conflict: World War II, Western Front	
Date: June 6, 1944 – August 25, 1944	
Place: Normandy, France	
Outcome: Allied victory	
Combatants	
Allied Powers	Nazi Germany
Commanders	
Dwight D. Eisenhower (Supreme Allied Commander) Bernard Montgomery (land) Bertram Ramsay (sea) Trafford Leigh-Mallory (air)	Gerd von Rundstedt (OB WEST) Erwin Rommel (Heeresgruppe B)
Strength	
326,000 (by June 11)	?
Casualties	
53,700 dead, 18,000 missing, 155,000 wounded	about 200,000 dead, wounded and missing, 200,000 captured

Normandy

Sword – Juno – Gold – Omaha – Utah – Pointe du Hoc – Villers-Bocage – Epsom – Goodwood – Spring – Cobra – Bluecoat – Lüttich – Totalize – Tractable – Falaise – Brest – Paris

Contents

Prelude

Allied preparations

http://en.wikipedia.org/wiki/Normandy_Landings 08/11/2005

Evidence must show you can:

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inland so that the primary enemy line of advance could be determined, and *then* a counter-attack in force could be launched to blunt it.

Field Marshall Erwin Rommel (center) discusses the upcoming Allied invasion of France with Colonel General Johannes Blaskowitz and Field Marshall Gerd von Rundstedt.

The operational debate reflected the differing experiences in the war of the key decision-makers. Rundstedt and Guderian gained the bulk of their command experience when the *Luftwaffe* controlled the skies over the battlefield or, in the vast expanses of the Eastern Front, where neither side was able to claim air superiority over the entire front when these two commanders last had a combat command. Rommel's experiences, however, were vastly different, and would turn out in hindsight to seem far more applicable. Rundstedt and Guderian apparently never considered Allied airpower in terms of the *Luftwaffe's* heyday in 1939–1941, of which Allied air power was now several magnitudes greater. Rommel, however, having fought the Allies in the Western Desert Campaign under a decidedly unfavourable air power disparity, knew the stark reality of the Allied tactical bombers' capabilities.

In attempting to resolve the dispute, Hitler split the six available *Panzer* divisions in northern France, and allocated three directly to Rommel. The remaining three were placed a good distance back from the beaches, and could not be released without the direct approval of Hitler's operations staff. The air defences of the north French coast comprised just 169 fighter aircraft, since airfields in northern France had been seriously pummelled by incessant Anglo-American air attacks.

Uncertainty about the Allied landing place also upset German plans. In order to sustain an offensive, the Allies would have to take a deep-water port, or land at Pas de Calais and simply use the shorter shipping route to make up for the slower offloading. This being the case an invasion would have to take place near Brest, France, Cherbourg or le Havre, the only ports within easy shipping and aircraft range of bases in England. (In retrospect Brest was rather unlikely; it was out of range of the RAF, heavily defended due to the large U-Boat bases there, and far from the interior of France.) This meant that the forces would almost certainly be landing near Cherbourg-le Havre or Pas de Calais (which are only a short distance from each other), yet the German forces were spread throughout western France to counter an invasion at many different points.[1]

Rommel inspected the shoreline defences, known as the Atlantic Wall, and ordered many improvements before D-Day. Some bunkers were still under construction when Allied forces landed.

The Allied invasion plan

The order of battle was

Operation Overlord – The Bomber Offensive and German depositions 6 June 1944.

D-day assault routes into Normandy.

approximately as follows, east to west:

Image 4

Evidence must show you can:

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C2.2.2 identify accurately the main points, ideas and lines of reasoning; and

C2.2.3 summarise the information to suit your purpose.

reputation for ferocity and war crimes in the coming battle. Some of the area behind Utah beach had been flooded by the Germans as a precaution against parachute assault.

The landings

The French Resistance

The BBC in its French service from London would regularly transmit hundreds of personal messages. Only a few of them were really significant. A few days before D-Day, the commanding officers of the Resistance heard the first line of Verlaine's poem, Chanson d'Automne, *"Les sanglots longs des violons de l'automne"* (*Long sobs of autumn violins*) which meant that the "day" was imminent. When the second line *"blesse mon coeur d'une langueur monotone"* (*wound my heart with a montonous langour*) was heard, the Resistance knew that the invasion would take place within the next 48 hours. They then knew it was time to go about their respective pre assigned missions, which included destroying selected water towers, telephone lines, roads and railways.

Pathfinders synchronising their watches in front of an Armstrong Whitworth Albemarle.

Image 1

Airborne landings

The British 6th Airborne Division was the first full unit to go into action, at sixteen minutes past midnight, in *Operation Tonga*. One set of objectives was Pegasus Bridge and other bridges on the rivers at the east flank of the landing area. The bridges were very quickly captured by glider forces and held until relieved by the Commandos later on D-Day. Another objective was a large gun battery at Merville. Although this larger glider and paratroop force was widely scattered, the battery was destroyed. However, the diminished assault team suffered 50% casualties in the attack.

The 82nd (Operation Detroit) and 101st Airborne (Operation Chicago) were less fortunate in quickly completing their main objectives. Partly due to inexperienced piloting and difficult terrain, many units were widely scattered and unable to rally. Efforts of the early wave of pathfinder teams to mark the landing zones were largely ineffective. Some paratroopers drowned when they landed in the sea or in deliberately flooded areas. After 24 hours, only 2,500 of the 6,000 men in 101st had assembled. Many continued to roam and fight behind enemy lines for days. The 82nd occupied the town of Sainte-Mère-Église early in the morning of June 6, giving it the claim of the first town liberated in the invasion.

Sword Beach

Main article: Sword Beach

On Sword Beach, the regular British infantry got ashore with light casualties. They had advanced about five miles (8 km) by the end of the day but failed to make some of the deliberately testing targets set by Montgomery. In particular, Caen, a major objective, was still in German hands by the end of D-Day.

1 Special Services Brigade went ashore in the second wave led by No.4 Commando with the two French Troops first, as agreed amongst themselves. The British and French of No.4 Commando had separate targets in Ouistreham: the French a blockhouse and the Casino, and the British two batteries which overlooked the beach. The blockhouse proved too strong for the Commando's PIAT (Projector Infantry Anti Tank) guns, but the Casino was taken with the aid of a Centaur tank. The British Commandos achieved both battery objectives only to find the gun mounts empty and the guns removed. Leaving the mopping-up procedure to the infantry, the Commandos withdrew from Ouistreham to join the other members of 1 SAS Brigade (Nos. 3, 6 and 45), in moving inland to join-up with the 6th Airborne.

Juno Beach

Main article: Juno Beach

Evidence must show you can:

C2.2.1 Select and read relevant documents; and

C2.2.2 identify accurately the main points, ideas and lines of reasoning; and

C2.2.3 summarise the information to suit your purpose.

The Canadian forces that landed on Juno Beach faced 11 heavy batteries of 155 mm guns and 9 medium batteries of 75 mm guns, as well as machine-gun nests, pillboxes, other concrete fortifications, and a seawall twice the height of the one at Omaha Beach. The first wave suffered 50 percent casualties, the second highest of the five D-Day beachheads (the highest was Omaha Beach).

HMS Warspite during D-Day

Despite the obstacles, within hours the Canadians were off the beach and beginning their advance inland. The 6th Canadian Armoured Regiment (1st Hussars) was the only Allied unit to meet its June 6 objectives, when it crossed the Caen–Bayeux highway 15 km inland.

By the end of D-Day, 14,000 Canadians had been successfully landed, and the 3rd Canadian Division had penetrated further into France than any other Allied force, despite having faced such strong resistance at the beachhead. The 21st *Panzer* division launched the first D-Day counter-attack between Sword and Juno beaches, and the Canadians held against several stiff counter-attacks by the 12th SS Panzer Division *Hitlerjugend* on June 7 and 8.

Gold Beach

Main article: Gold Beach

At Gold Beach, the casualties were also quite heavy, partly because the swimming Sherman DD tanks were delayed, and the Germans had strongly fortified a village on the beach. However, the 50th division overcame its difficulties and advanced almost to the outskirts of Bayeux by the end of the day. With the exception of the Canadians at Juno Beach, no division came closer to its objectives than the 50th.

No.47 (RM) Commando was the last British Commando unit to land and came ashore on *Gold* east of Le Hamel. Their task was to proceed inland then turn right (west) and make a ten-mile (16 km) march through enemy territory to attack the coastal harbour of Port en Bessin from the rear. This small port, on the British extreme right, was well sheltered in the chalk cliffs and significant in that it was to be a prime early harbour for supplies to be brought in including fuel by underwater pipe from tankers moored offshore.

Omaha Beach

Main article: Omaha Beach

Omaha Beach was the bloodiest landing beach on D-Day. The U.S. 1st Infantry Division and U.S. 29th Infantry Division faced the German 352nd Division, some of the best trained on the beaches. Omaha was the most heavily fortified beach, and pre-landing bombardment of the bunkers was ineffective. Almost all of the swimming DD tanks swamped en route to the beach. The official record stated that "within 10 minutes of the ramps being lowered, [the leading] company had become inert, leaderless and almost incapable of action. Every officer and sergeant had been killed or wounded [...] It had become a struggle for survival and rescue". There were about 2,500 killed, most in the first few hours. Commanders considered abandoning the beachhead, but some survivors regrouped and pressed inland.

Troops in an LCVP landing craft approach Omaha beach June 6, 1944.

Pointe du Hoc

Main article: Pointe du Hoc

Evidence must show you can:

C2.2.1 Select and read relevant documents; and

C2.2.2 identify accurately the main points, ideas and lines of reasoning; and

C2.2.3 summarise the information to suit your purpose.

The massive, concrete cliff-top gun emplacement at Pointe du Hoc was the target of the U.S. 2nd Ranger battalion. The task of the 225 men, led by Lt. Col. James Earl Rudder, was to scale the 30-metre cliffs under enemy fire with ropes and ladders, and then attack and destroy the guns, which were thought to command the Omaha and Utah landing areas. The emplacement was successfully reached, and the guns, which had been moved out (probably during the preceding bombardment), were found and destroyed.

Utah Beach

Main article: Utah Beach

Casualties on Utah Beach, the westernmost landing zone, were 197 out of around 23,000 landed, the lightest of any beach. The U.S. 4th Infantry Division was able to press inland relatively easily and succeeded in linking up with parts of the airborne divisions, which had helped secure the beachhead and confuse the enemy prior to the landings, with heavy casualties.

After the landings

How the beachheads were supplied on D-Day. Photo taken 6 June 1944 by Stack SC190631 public domain.

Landing supplies at Normandy.

Image 3

Once the beachhead was established, two artificial Mulberry Harbours were towed across the English Channel in segments and made operational around D+3. One was constructed at Arromanches by British forces, the other at Omaha Beach by American forces. The Omaha harbour was destroyed in severe storms around D+13. Around 9,000 tons of material was landed daily at the Arromanches harbour until the end of August 1944, by which time the ports of Antwerp and Cherbourg had been secured by the Allies, and had begun to return to service.

The build-up of Omaha Beach: reinforcements of men and equipment moving inland.

The German defenders positioned on the beaches put up relatively light resistance, being ill-trained and short on transport and equipment, and having been subject to a week of intense bombardment. An exception was the 352nd Infantry division, moved earlier by Rommel from St. Lo, which defended Omaha beach. The tenacity of the 352nd's defence, and perhaps also the indication by Allied intelligence that there would be only two 2 battalions of the 716th Division there, was responsible for Omaha's high casualty rate. Other German commanders took several hours to be sure that the reports they were receiving indicated a landing in force, rather than a series of raids. Their communication difficulties were made worse by the absence of several key commanders. The scattering of the American parachutists also

Evidence must show you can:

C2.2.1 Select and read relevant documents; and

C2.2.2 identify accurately the main points, ideas and lines of reasoning; and

C2.2.3 summarise the information to suit your purpose.

Jump menu

Once upon a time,
the planning of the greatest seaborne invasion ever took place.
Four years in the preparation, Operation Overlord, the Allied invasion of Normandy on 6 June 1944, marked the beginning of the end of World War II and the eventual liberation of Europe

Image 2

Memories of D-Day: The Air Forces and Airborne Troops

Source 3

British troops at Pegasus Bridge after its capture (IWM B 5288)

D-Day could not have happened without support from the air. The Royal Air Force, United States Army Air Force, and other Allied air force units and personnel provided protection and support as the fleet crossed the English Channel and as the troops landed on the beaches. Airborne troops landed by glider and parachute on both flanks of the beach landings, to defend against German counter-attacks.

Mr E. Purchese was a medic in the Parachute Regiment, and landed by air on the east side of the main beach landings:
"My unit was 225th Para Field Ambulance, 5th Para Brigade, 6th Airborne Division. We were at Keevil Camp for a week before the invasion, being briefed in detail for our drop near the River Orne. Take off was about 23.00 hours on 5th June. After running into tracer fire, which was returned by our rear gunner, as we crossed the French coast we dropped at about 01.00 hours near Ranville. We made our way to a pre-arranged rendezvous, thence to Ranville where villagers in the dark (approximately 03.50 hours) whispered 'Bonjour' ['Hello'] from bedroom windows. We arrived at a chateau (picked previously from aerial photographs). Our second-in-command knocked and asked if there were any Germans inside. There were, and four or five surrendered and were made prisoners. We then entered and set up our various departments. I was in a surgical team, and we started operating about the time of the main seaborne landing, which was announced to us by a thunderous barrage from the Navy. We operated all day and had two hours sleep early on 7th June. We used a landing light from a glider for the surgeon to see by. Many lives were saved by plasma, the bottles slung from rigging lines cut from parachutes. We also had some of the first penicillin used for troops."
[Warren Tute Collection, D-Day Museum]

Mr R. G. Lloyd was also a member of 6th Airborne Division:
"I was in the 12th Parachute Regiment, 6th Airborne Division, and we took off in converted Stirling bombers from airfields in various parts of southern England at about 21.30 hours on the 5th June 1944. Our flight across the Channel

Add this site to your favourites

Evidence must show you can:

C2.2.1 Select and read relevant documents; and

C2.2.2 identify accurately the main points, ideas and lines of reasoning; and

C2.2.3 summarise the information to suit your purpose.

went off without incident, thanks to the supremacy of the Allied air forces. Incidentally our aircraft had a Canadian crew. In the very early hours of D-Day we were dropped a few miles inland behind the Normandy beaches. As I left the aircraft I could see some light flak coming up, slowly it seemed, like long strings of flaming sausages.
After landing safely in open country, my first impression was not what I expected. It was very quiet. After releasing myself from my parachute and retrieving my kitbag which contained a small radio set, I commenced my stealthy walk towards what I thought should be our rendezvous. I found a crossroads and a few of my comrades. We discovered later that like many of our division, we had been scattered far and wide in the darkness, and so had not time to get to the rendezvous. We then made our way in a small party across open country to our objective, where about 100 of our unit were already in position. From now on, enemy opposition increased, and for a few hours we had a very hectic time. Shells passed overhead – this was H.M.S. Warspite firing her big guns at targets well inland. We could hear the noise of the beach invasion. Daylight came. Yes! This was D-Day and I was in Normandy."
flak = fire from anti-aircraft guns.
[Warren Tute Collection, D-Day Museum]

Mr C.J. Woodward served in the RAF, and witnessed the assembly of the gliders that would carry the Airborne troops over to Normandy:
"I was the pilot of a Stirling aircraft of 161 Squadron on a mission dropping spies behind enemy lines on the night preceding D-Day. We had had a special briefing in which it was emphasised as being critically essential that there should be absolute radio silence, no matter what we saw. We were on our way out from Tempsford in Bedfordshire. At about 3,000 feet we were suddenly confronted by the most awesome sight. The whole night sky, high above and filling the whole area in front, was filled with myriads of red, blue and white lights rotating very slowly like one vast coloured whirlpool. It seemed impossible not to be engulfed, and we were without lights. Although we knew that something was going on, we were not aware that the French landings were imminent, so there was no explanation of the phenomenon. It was, of course, the gliders and their tug aircraft marshalling in the area, I believe, of Benson. All the members of my crew except the rear gunner crowded into the cockpit in amazed disbelief. Because of the dead quiet of the radio silence, the sight was unbelievably uncanny. Suddenly the spell was split wide open. 'What the f...g hell are all those bleedin' lights?' It was a Canadian voice, and he must have accidentally pressed his transmitting button in his excitement. I have always wondered what any German listening watch who picked up that transmission must have thought."

Evidence must show you can:

C2.2.1 Select and read relevant documents; and

C2.2.2 identify accurately the main points, ideas and lines of reasoning; and

C2.2.3 summarise the information to suit your purpose; and

C2.3.1 present relevant information in a format that suits your purpose; and

C2.3.2 use a structure and style of writing to suit your purpose; and

C2.3.3 spell, punctuate and use grammar accurately; and

C2.3.4 make your meaning clear.

British Forces during D-Day, 6 June 1944

The Battle of Normandy was called Operation Overlord. It was led by airborne troops which were to destroy German guns and capture strategic crossing places to protect the troops landing on the beaches. Massive air and naval bombardments started the invasion. Overlord involved twelve Allied nations, 3 million troops and lasted over two months. It started on D-Day in 1944, when massive numbers of troops landed in France by air and sea to drive the Germans out.

The **British Airborne divisions** towed over 200 gliders into position to drop paratroopers at strategic positions. The Germans had destroyed many landmarks by flooding the low-lying areas, so many men were nowhere near their target. R Lloyd was with **6th Airborne Division** when dropped behind the Normandy beaches some distance from his objective. His unit came under heavy fire for many hours.

British troops held **Pegasus Bridge** for days while under heavy attack. Arthur Brock of the Royal Engineers found himself in the thick of the fighting for the bridge. His life was saved by his army pay book in his pocket into which shrapnel splinters were stuck.

The large gun battery at Melville was also a key objective which was destroyed by glider and paratroopers.

The British Infantry was to land at **Sword** and **Gold Beaches.**

Sword Beach: The infantry came ashore with light casualties compared to some of the other beaches. Some key targets remained with British and French Commandos targeting a blockhouse and batteries overlooking the beach.

Gold Beach: The casualties were quite heavy here, because the Shermann DD tanks designed to swim were delayed. The beach was heavily fortified but the 50th Division advanced to the outskirts of Bayeux by the end of the day. The 47 Royal marines Commando unit came ashore last and took the small Port en Bessin which was essential for supplies to be brought ashore.

Evidence must show you can:

PS2.1.1 Provide information to help identify a problem, accurately describing its main features; and

PS2.1.2 identify how you will know the problem has been solved; and

PS2.1.3 come up with different ways of tackling the problem.

PLAN ➔ Do ➔ Review

PS2.1 Identify a problem, with help from an appropriate person, and identify different ways of tackling it.

What is the problem you helped to identify?
The problem was to find the quickest and most cost effective ways of travelling home at weekends for people on our course and what factors affect their decision to travel home. To do this I need to collect information about where they travel to, how long it takes and how much it costs.

What are the problem's main features? *(e.g. what is known and not known about it, how it affects you and other people)* I knew that I needed to ask about ten people how often they go home, how they travel, how long it takes and what it costs. I also know that I would need to look up costs of fares and mileage because they might not always have known that.

How will you know that you have solved it? *(e.g. the results that people expect, the checking methods you could use)*
I will have the data I need to do my calculations and I will be able to write my reports and make my presentation of my findings.

What are the risks, or other factors that might affect the way you tackle the problem? *(e.g. the likelihood of things going wrong, time and expertise needed, health and safety rules)*
I need to make sure what people tell me in the questionnaire is correct. I need to look up the correct sources on the internet. I will need to keep the survey anonymous.

What have you found out about how similar problems have been solved?
I know that this type of problem is an important part of my job in the Royal Logistics Corps. I have done a survey before so I can look at that to help with my problem.

Who have you talked to about the problem? Name: **Role/job:**

Give at least two different ways of tackling the problem:

1. To get a group of my classmates together and ask them questions about costs and distances for travelling home.
2. To collect information about distances to places, costs of travel and times from the internet.
3. To carry out a survey of some of my classmates using a written questionnaire.

I confirm the candidate has:

- *identified the problem, described its main features, and how to show success in solving it*
- *come up with different ways of tackling the problem.*

Witness/assessor *(signature)*: AN Assessor **Date:** 14/06/05.
(e.g. tutor, supervisor, course leader)

Candidate Name: A Candidate

Level 2

Evidence must show you can:

PS2.2.1 Confirm with an appropriate person how you will try to solve the problem; and

PS2.2.2 plan what you need to do, identifying the methods and resources you will use; and

PS2.2.3 use your plan effectively, getting support and revising your plan when needed to help tackle the problem.

PLAN → DO → Review

PS2.2 Plan and try out at least one way of solving the problem.

Which way have you chosen to try to solve the problem?
2. Find information I need from the web and 3. To do a written questionnaire

Who has confirmed that this is OK?

Name: An Assessor **Role/job:** Tutor.

Plan of what you need to do:
(outline the steps, methods, materials, tools, information and support)

Sequence of steps:	Resources/help:
1. Decide what I want to ask 2. Write the questionnaire 3. Type it up 4. Try it out on a couple of people to see if they understand the questions 5. Change the questions if I need to 6. Ask 10 people to fill it in 7. Analyse their answers decide on calculations to do 8. Do calculations 9. Find information on costs from internet 10. Write report 11. Present findings	Other people in my class Computer and web pages Two classmates Calculator or spreadsheet Notes for presentation or powerpoint.

What Health and Safety procedures do you have to follow?
Follow the guidance on health and safety for using computers.
Make sure everyone knows the questionnaire will be anonymous

What difficulties do you think there might be, and how will you get round them?
(e.g. how will you get more resources, who will help you)
I might have trouble getting people to fill in the form, but I could offer them something for doing it e.g. a cup of coffee while they do it. I also need to get the right information about the costs from the internet

I confirm that the candidate agreed what they would do, and tried out their plan, getting support and revising the plan when needed.

Witness/assessor *(signature)*: AN Assessor **Date:** 22/06/05
(e.g. tutor, supervisor, course leader)

Candidate Name: A Candidate

Level 2

Evidence must show you can:

PS2.3.1 Check if the problem has been solved by accurately using the methods you have been given; and

PS2.3.2 describe clearly the results, including the strengths and weaknesses of how you tackled the problem; and

PS2.3.3 identify ways of improving your problem solving skills.

Plan ➔ Do ➔ REVIEW

PS2.3 Check if the problem has been solved and identify ways to improve problem solving skills.

Did you solve the problem? Yes ☒ Partly ☐ No ☐

What support did you ask for when using your plan?
I asked my tutor about the questions before I tried them out. I ashed the IT person about using spreadsheets then decided against them.

Did you revise your plan? Yes ☒ No ☐ **If yes, what did you do?**
I had to change the 10 people as one person was sick. I had to try to do the report quickly as I did not leave enough time at the end. Some of the calculations were more difficult than I thought, so I had to ask another tutor to check my pie charts

How did you check the problem had been solved?
(e.g. the methods you were given, and what you actually did to check)
I had the results of the calculations I needed to give the presentation and write the report. I had to check my calculations for accuracy. I could see which journeys took longest and cost most.

For each stage of tackling the problem, describe the strengths and weaknesses of your approach

Stages of problem solving:	Strengths of your approach *(e.g. plenty of time allowed for testing results)*	Weaknesses of your approach *(e.g. plan needed more detail)*
1. Identifying problem and different ways of tackling it	I found the problem was easy to understand and I come up with three ways of tackling it. I ended up using parts of 2 and 3.	I needed to think about who would help me more and what calculations I would need to do. I had to use 2 and 3 so they are part of the same way
2. Planning and trying out one way of solving the problem	I decided on the questionnaire because it was the most practical in the time allowed to get the information to compare	I could have ashed more help from my course tutor about the maths at the beginning as this would have saved me time later
3. Checking if problem solved	I knew that the problem had been solved because I had the data I needed to be able to write the report and give the talk.	I could have been clearer about how I was going to present the data at the start and could have thought more about it in my planning

In what ways can you improve your problem solving skills?
I need to leave enough time to do each job. I need to think through the best way to do calculations and I need to be able to use spreadsheets for another survey in future

I confirm the candidate checked that the problem had been solved, and has effectively reviewed their approach to problem solving.

Witness/assessor *(signature)*: AN Assessor **Date:** 22/06/05.
(e.g. tutor, supervisor, course leader)

Candidate Name: A Candidate

Level 2

Evidence must show you can:

PS2.1.1 Provide information to help identify a problem, accurately describing its main features; and

PS2.1.2 identify how you will know the problem has been solved; and

PS2.1.3 come up with different ways of tackling the problem.

PLAN → Do → Review

PS2.1 Identify a problem, with help from an appropriate person, and identify different ways of tackling it.

What is the problem you helped to identify? I wanted to design a leaflet on the Army during D-Day. It has to be one side of A4 and it has to have images as well as writing.

What are the problem's main features?
(e.g. what is known and not known about it, how it affects you and other people)
I need to decide on the information needed for a leaflet. I need to decide how to design it and whether to produce it on the computer.

How will you know that you have solved it?
(e.g. the results that people expect, the checking methods you could use)
I will have a leaflet which is one side of A4 and it will have the information on it about the Army during D-Day. I will write it for people of my age in my group.

What are the risks, or other factors that might affect the way you tackle the problem?
(e.g. the likelihood of things going wrong, time and expertise needed, health and safety rules)
I will need to have IT skills if I use the computer and will need to use it safely. I will need to get the information checked to make sure it is true. I will need to find some good images to use, so will choose sources with pictures.

What have you found out about how similar problems have been solved?
The course tutor has told us that we will work on our own to design the leaflet but we can share ideas in a group at the beginning. I have done projects on my own and in a group before. I have designed an advert before. I will need to use reliable internet sources for the information.

Who have you talked to about the problem? Name: An Assessor **Role/job:** Tutor

Give at least two different ways of tackling the problem:

1. To work on my own to decide what information is needed and to design the leaflet myself using the computer.
2. To look at other leaflets and copy the design of one of them using the computer on my own.
3. To start off in a group to share ideas and then to work on my own design the leaflet on the computer.

I confirm the candidate has:

- *identified the problem, described its main features, and how to show success in solving it*
- *come up with different ways of tackling the problem.*

Witness/assessor *(signature)*: AN Assessor **Date:** 22/06/05
(e.g. tutor, supervisor, course leader)

Candidate Name: A Candidate

Evidence must show you can:

PS2.2.1 Confirm with an appropriate person how you will try to solve the problem; and

PS2.2.2 plan what you need to do, identifying the methods and resources you will use; and

PS2.2.3 use your plan effectively, getting support and revising your plan when needed to help tackle the problem.

PLAN → DO → Review

PS2.2 Plan and try out at least one way of solving the problem.

Which way have you chosen to try to solve the problem?
To start off in a group to share ideas and then to work on my own to design my own leaflet on the computer

Who has confirmed that this is OK? **Name:** An Assessor **Role/job:** Tutor

Plan of what you need to do:
(outline the steps, methods, materials, tools, information and support)

Sequence of steps:	Resources/help:
1. To have a brainstorm for ideas	Others in the group
2. To decide on one aspect of O-Day for the leaflet	Tutor
3. To find out information I need using the internet	Computer
4. To choose good sources with pictures	Internet
5. To produce the leaflet using the computer	Paper
To get someone in my group	
6. to read it and make sure they understand it.	

What Health and Safety procedures do you have to follow?
Using the computer safely
Make sure the internet sources are not copyright.

What difficulties do you think there might be, and how will you get round them?
(e.g. how will you get more resources, who will help you)
I have to decide on the design and layout and have decided to use the computer as I have done a course. I think it will be difficult to get all the information I have on one side of A4. It may be difficult to make sure we all do different things after we share ideas.

I confirm that the candidate agreed what they would do, and tried out their plan, getting support and revising the plan when needed.

Witness/assessor *(signature)*: AN Assessor. **Date:** 27/06/05.
(e.g. tutor, supervisor, course leader)

Candidate Name: A Candidate

Evidence must show you can:

PS2.3.1 Check if the problem has been solved by accurately using the methods you have been given; and

PS2.3.2 describe clearly the results, including the strengths and weaknesses of how you tackled the problem; and

PS2.3.3 identify ways of improving your problem solving skills.

Plan ➔ Do ➔ REVIEW

PS2.3 Check if the problem has been solved and identify ways to improve problem solving skills.

Did you solve the problem? Yes ☒ Partly ☐ No ☐

What support did you ask for when using your plan?
I asked others in the group for ideas. We shared ideas and information at the start. I got help from my tutor about the layout.

Did you revise your plan? Yes ☒ No ☐ **If yes, what did you do?**
I thought I would do everything on the computer but I ended up doing the layout in rough with paper and pencil to see how it would look.

How did you check the problem had been solved?
(e.g. the methods you were given, and what you actually did to check)
I produced a leaflet which my tutor checked. I made sure what I said was easy to read by asking someone on my course. I knew that it had to be one side of A4 and that it had to have images.

For each stage of tackling the problem, describe the strengths and weaknesses of your approach

Stages of problem solving:	Strengths of your approach *(e.g. plenty of time allowed for testing results)*	Weaknesses of your approach *(e.g. plan needed more detail)*
1. Identifying problem and different ways of tackling it	I had ideas from others about different aspects to choose from. I then did the design myself.	I should have thought the design process before going straight to the computer
2. Planning and trying out one way of solving the problem	I got a better leaflet by trying different layouts. I was then able to use the computer better because I was clear what it would look like	My plan was in steps but I should have included the times and dates. I could still improve my computer skills.
3. Checking if problem solved	I asked my tutor and someone on my course for feedback on the leaflet.	I should have asked more than one person on my course.

In what ways can you improve your problem solving skills? I need to think things through before really getting started as I wasted time on the first day after the brainstorm. I did leave enough time for the rest of the steps I needed to carry out. I checked with my tutor that what I had written was ok before I spent time on the computer adding pictures.

I confirm the candidate checked that the problem had been solved, and has effectively reviewed their approach to problem solving.

Witness/assessor *(signature)*: A.N. Assessor. **Date:** 27/06/05.
(e.g. tutor, supervisor, course leader)

Candidate Name: A Candidate

About this booklet

Who is it for?	Key skills candidates, practitioners, assessors and moderators, external verifiers and others involved in the delivery of key skills, key skills awarding bodies and the Key Skills Support Programme
What does it include?	Exemplification of the requirements for key skills portfolios
Related materials	*The key skills qualifications standards and guidance* (2004) (QCA/04/1272)
For more information	The Key Skills Team (020 7509 5611; keyskills@qca.org.uk)

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