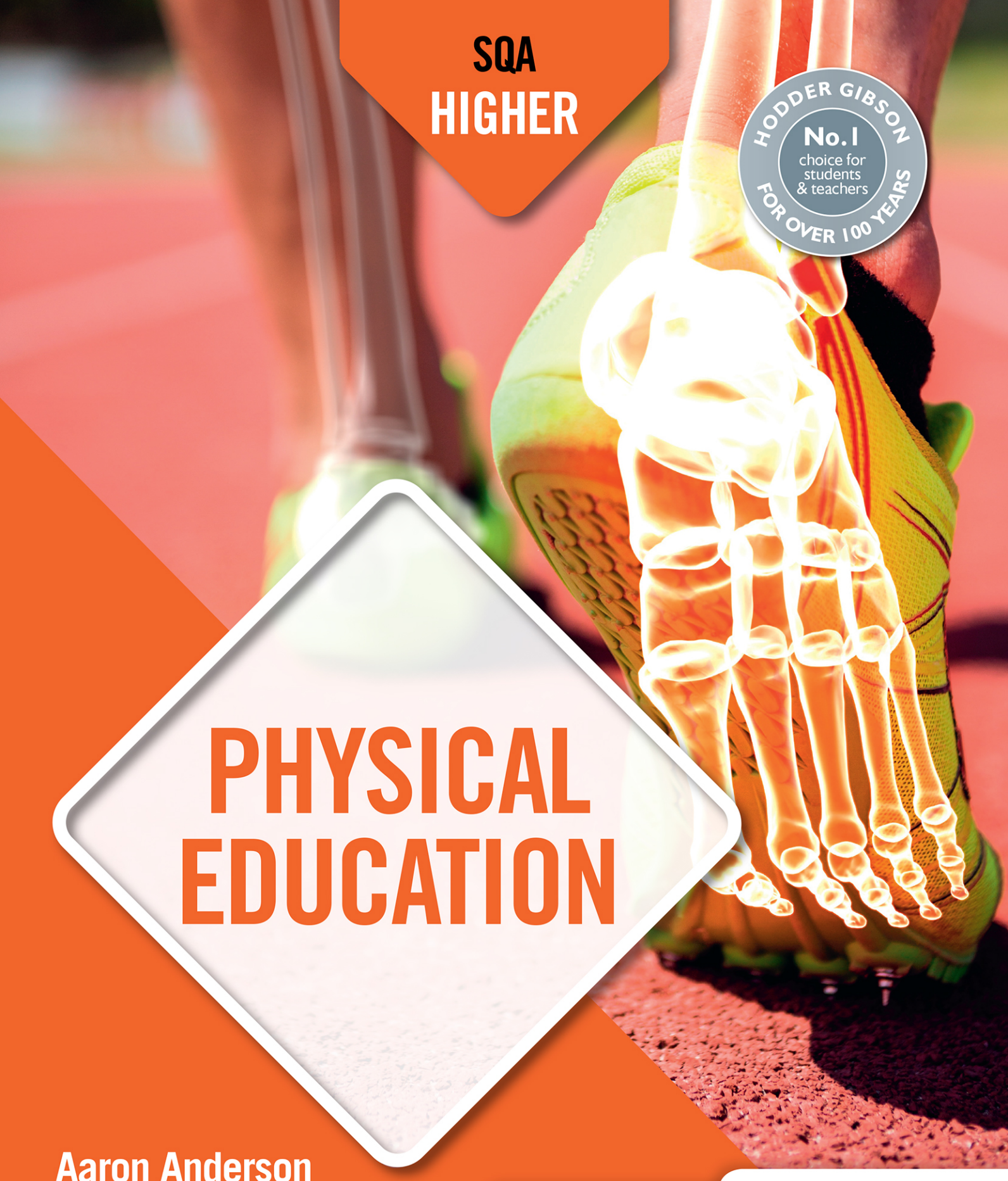
SQA

HIGHER



HODDER GIBSON No.1 choice for students & teachers FOR OVER 100 YEARS

PHYSICAL EDUCATION

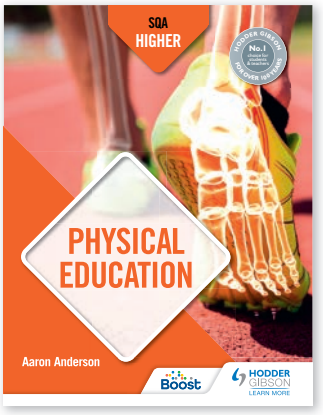
Aaron Anderson

Boost

HODDER GIBSON LEARN MORE

An endorsement of this textbook

"This is an absolutely fantastic resource that will inspire both students and teachers to develop a better understanding of the Higher PE course.



I feel that the book particularly excels in three main areas. Firstly, it is made explicitly clear what is expected for each of the command words, which is always a common difficulty for students. Secondly, the regular tasks provided throughout each chapter will allow students to use retrieval practices with the aim of improving their long-term memory. Finally, the revision paper section of the book is a magnificent resource, with some excellent sample answers for students and teachers to refer to and learn from.

If used correctly and consistently, I feel that this book could be the difference between a C or an A at Higher."

Jonathan MacWhirter, Depute Headteacher
Beeslack Community High School, Edinburgh

Contents

Introduction for teachers

Getting the most from this textbook

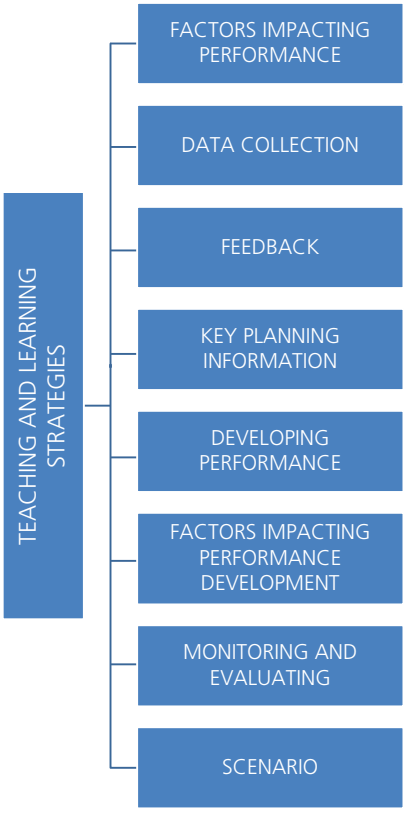
This textbook is designed to help teachers plan, deliver and reflect on their pedagogical practice in the classroom by providing them with a host of teaching and learning strategies that can be used to deliver the theory side of the Higher Physical Education (PE) course.

It will also allow pupils to test and improve their knowledge of the Higher PE course as they work their way through each task before comparing their responses to the Answers section at the back of the book. Pupils can then consolidate and test their knowledge and understanding further by completing the practice papers in the run-up to the exam.

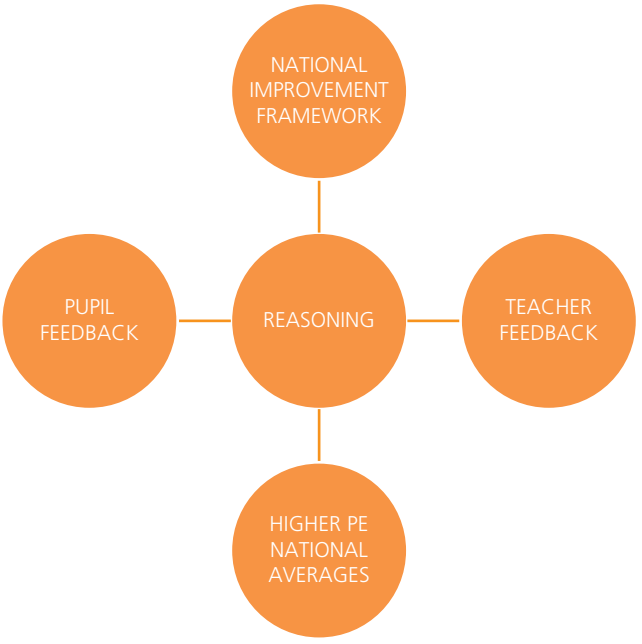
This is not a traditional textbook, in that the learning required for the course is embedded through a multitude of guided discovery tasks that are supplemented with answers at the back to check for progress and understanding. In doing this, pupil's can take ownership of their learning and engage in active learning processes.

What does this textbook do?

This textbook will go through each area of the SQA mandatory knowledge and provide a learning task against each of the five command words in that area. Learners will be asked to identify, describe, explain, analyse and evaluate their understanding in each of the course areas listed below.



Why is the textbook following this approach?



A key driver of the 2020 National Improvement Framework is to develop the literacy skills of learners in and across all subjects.

Two common themes emerged from teacher feedback prior to the publication of this book:

1 Teachers looking for resources to aid delivery of theory-based lessons in a classroom environment.
2 Teachers seeking clarity around the use of command words and strategies for how to answer them in exam-style contexts.

There has been a consistent trend in the Higher PE national averages with the performance element always scoring much higher than the exam element since the inception of the renovated Higher PE course in 2015.

Finally, and most importantly, pupil feedback centred around a lack of confidence in utilising knowledge in theory-based lessons and uncertainty in answering a variety of exam-style questions.

In addressing these key areas, it is hoped that this textbook will improve teacher knowledge and confidence in the classroom, which in turn will lead to more positive learning outcomes for all learners in and through Higher PE.

4 Data collection

Having learned about the factors that lie at the heart of the Higher PE course, it is now time to take each of them through a process called the cycle of analysis (Figure 4.1).

Figure 4.1

At the very start of the cycle, a performer needs to collect data on their performance levels in each factor. This data collection and analysis process involves investigating and researching the strengths and weaknesses of certain selected 'sub-factors'. Figure 4.2 shows why a performer should collect and analyse data before starting a personal development plan (PDP).

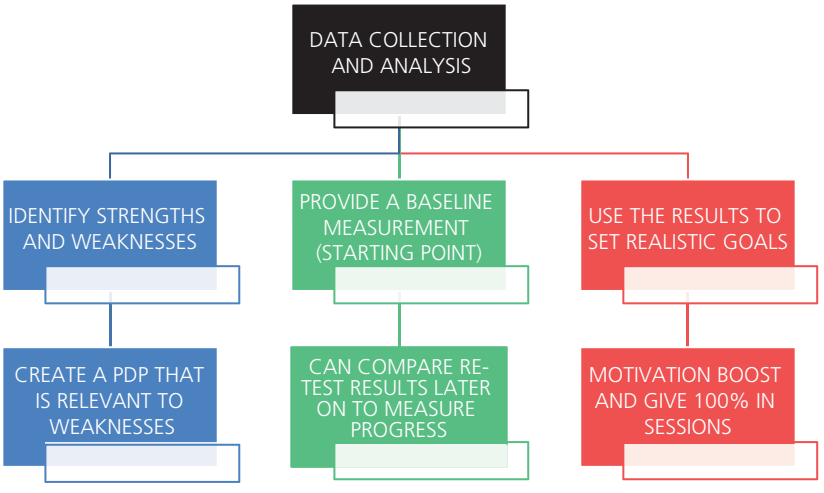


Figure 4.2

LINK

You will explore PDPs in Chapter 6: Key planning information.

Methods

When collecting data on a factor, a performer will use what is known as a method of data collection. As can be seen in Table 4.1, there are many different types of data collection method.

Mental	Emotional	Social	Physical fitness	Physical skill	Physical tactics
Sport competition anxiety test (SCAT)	PPW	Questionnaire	Standardised fitness test*	PPW	Knowledge of results
Questionnaire	Profile of mood status (POMS) test	Communication observation schedule*	Time-related observation schedule	General observation schedule*	Coach feedback
Decision making observation schedule	Questionnaire*	Coach feedback	PPW	Focused observation schedule	Digital analysis*
Performance profiling wheel (PPW)*	Disciplinary record with video analysis *	PPW	Heart rate monitor	Scatter diagram	Match analysis

*The methods highlighted are the methods that will be focused on in this book.

Table 4.1

The method a performer selects is dependent on numerous variables:

- the 'sub-factor(s)' they are interested in
- the activity they participate in
- the classmates they can work with – for example, is there someone with the expertise to observe them and complete a method accurately?
- the facilities available to the performer.

Note: You only need to know two different data collection methods per factor.

It is important that you can apply each of the command words to your selected methods.

TIPS

You cannot do two examples of the same method. For example, you cannot do the bleep test and the Illinois agility test as both are standardised fitness tests.

Methods such as the PPW can be used for all factors. Minimise the amount you need to learn and achieve depth.

Data types

Different methods of data collection produce different types of data. This is due to the way in which they are completed and the results they produce. There are two types of data: qualitative and quantitative. Each of these data types sits at either end of a continuum.

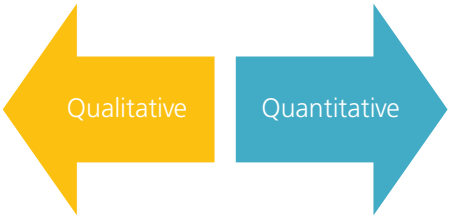


Figure 4.3

Qualitative data

This type of data involves a personal opinion and is subjective in nature. It can be very useful to gather this type of data when investigating mental and emotional factors as only a performer truly knows how they feel. An example of a method that produces qualitative data is a questionnaire. Some of the reasons why a performer should collect qualitative data can be seen in Figure 4.4.

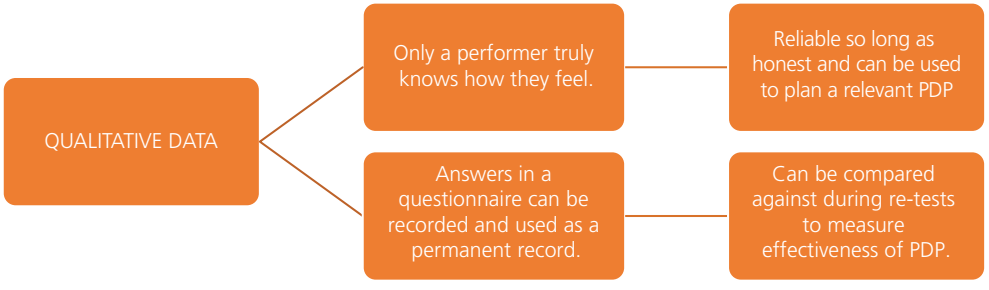


Figure 4.4

Quantitative data

This type of data is more factual and includes a score being attributed to the end result. It can be very useful in terms of accuracy and reliability. An example of a method that produces quantitative data is a standardised fitness test. Some of the reasons why a performer should collect quantitative data can be seen in Figure 4.5.

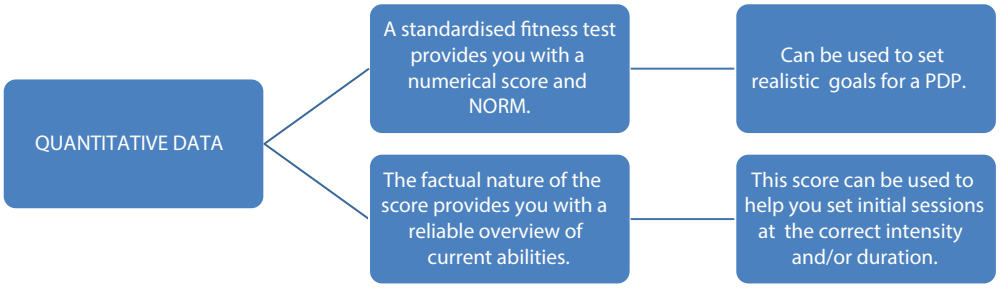


Figure 4.5

However, not all methods are placed at either end of the continuum. A performance profiling wheel (PPW, see p XXX), for example, is qualitative. Even though it produces a score, the score is based upon the opinion of the performer. It can be made more quantitative, though, by combining the method with video analysis. This would involve a performer watching their performance back and then completing the PPW after it. Therefore, there are elements of opinion being based on what actually happened and was observed.

TASK 18 CLOSED READING: DATA TYPES

Having read the above, answer the questions below.

1 Identify a qualitative method of data collection for the emotional factor. (1)
2 Explain why a performer may wish to collect qualitative data when investigating their performance in the emotional factor. (1)
3 Identify a quantitative method of data collection for the physical factor. (1)
4 Explain why a performer may wish to collect quantitative data when investigating their performance in the physical factor. (1)

TIP

Since 'explain' questions are only worth one mark each, you only need to provide one matching cause and effect.

Assessing method suitability

When selecting which method to use, you ultimately want to assess how useful it is in helping you investigate your performance levels in each factor. An acronym you can use to do this is PARV(M) (Figure 4.6).

PRACTICAL
- Is the method easy to use?
- Would it be easy to identify my strengths and weaknesses from the results?

APPROPRIATE
- Does the method actually collect data on the 'sub-factor' I am interested in?
- Does the method come with norms established by sports science research, such as the bleep test?

RELIABLE
- Does it provide me with accurate results that I can trust?
- Are the protocols of the method used the same way everywhere across the world?

VALID
- Can I defend the process of completion?
- Consider: location, observant others, level of opposition, time of completion, comprehension of questions, amongst other variables.

MEASURABLE
- Is the method a permanent record?
- Can it be looked back on at a later date?

Figure 4.6

TASK 19 STICKY NOTES: PARV(M)

Create a table with a heading for each of the letters in PARV(M). Place each sticky note in the correct column.

Figure 4.7

Method of data collection: mental factors

Performance profiling wheel

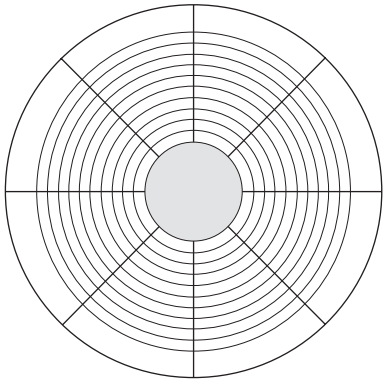


Figure 4.8

The PPW can be used for any factor because you place the appropriate 'sub-factors' on the outside of each section. It is qualitative in that you score yourself out of 10 based on your opinion of your abilities. Let's look at this method in relation to our five command words.

TASK 20 THE PPW AND COMMAND WORDS

1 Identify a method used to collect data on mental factors. (1)

Having identified our method, let's consider how it looks. Your aim here is to create a picture in the examiner's head so they can see the PPW. Pretend they have never seen this method before and be specific. We will start you off…

The PPW is a circle containing eight sections with a mental 'sub-factor' placed around the outside of each section.

2 Describe one other feature of the PPW. (1)

Now that we have painted the picture, we need to give the examiner clear instructions on how this method is completed. It is useful to do this in a chronological order.

3 CLOSED READING: read the following paragraph and bullet-point each descriptive point. (3)

I completed the PPW at home on my own with all electronic devices turned off. I considered my score out of 10 in a mental 'sub-factor' and shaded in the appropriate number of segments. I then repeated this for each of the other 7 mental 'sub-factors' and identified my highest and lowest scores.

Having described our method of data collection, let's now consider some of its benefits and limitations.

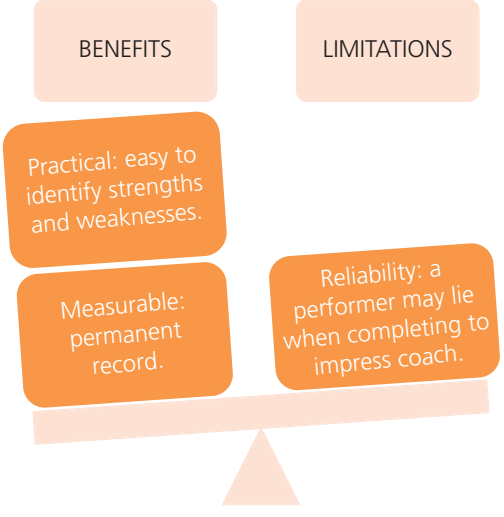


Figure 4.9

4 Referring to the benefits of the PPW, can you now **explain** why this method could be chosen? (2)
5 In regard to the limitation of the PPW, can you **evaluate** one way that it could be ineffective? (1)

Let's finish by looking at an aspect of what makes the PPW work. In doing this, we are analysing this method of data collection.

6 GUIDED DISCOVERY: **analyse** one other important part of this method of data collection.

Pick one of the deconstructed parts below and provide a reason why that part is important AND the impact it then has on the data collected.

- Complete the PPW the same day of a performance.
- Ask a coach to check over your results (particularly on decision making).

Figure 4.10

Method of data collection: emotional factors

Questionnaire

	Not at all	A little	Moderately	Quite a bit	Extremely
Uneasy	0	1	2	3	4
Upset	0	1	2	3	4
Exhilarated	0	1	2	3	4
Irritated	0	1	2	3	4
Pleased	0	1	2	3	4
Tense	0	1	2	3	4
Sad	0	1	2	3	4
Excited	0	1	2	3	4
Furious	0	1	2	3	4
Joyful	0	1	2	3	4
Nervous	0	1	2	3	4
Unhappy	0	1	2	3	4
Enthusiastic	0	1	2	3	4

	Not at all	A little	Moderately	Quite a bit	Extremely
Annoyed	0	1	2	3	4
Cheerful	0	1	2	3	4
Apprehensive	0	1	2	3	4
Disappointed	0	1	2	3	4
Angry	0	1	2	3	4
Energetic	0	1	2	3	4
Happy	0	1	2	3	4
Anxious	0	1	2	3	4
Dejected	0	1	2	3	4

Table 4.2

An example of a questionnaire used to collect data on emotional factors is the sport emotion questionnaire. This questionnaire contains 22 emotive terms that are split into 5 different categories: anxiety, dejection, excitement, anger and happiness. You must consider the extent to which you feel each emotion during a performance and give it a score from '0: not at all' to '4: extremely'.

TASK 21 THE QUESTIONNAIRE AND COMMAND WORDS

1 Identify a method used to collect data on emotional factors. (1)

2 True/False: below are four descriptive statements placed in a randomised order. Go through each of them and consider whether they would be true or false. For those that are false, correct them. (4)

- **a** This questionnaire has 19 emotive terms split into 5 different categories.
- **b** You would complete this questionnaire at home on your own with all electronic devices turned off.
- **c** You would consider the extent to which you feel each emotion during a performance and rank it from 1 to 5.
- **d** You would complete this questionnaire three days after a performance.

3 MATCH UP: in Table 4.3 are three causes and effects that explain why a performer may use this questionnaire. Can you match them up? (3)

CAUSE	EFFECT
I chose the sport emotion questionnaire because it was practical as it was easy to complete.	This meant the memories of my performance were fresh in my head and I was able to accurately complete the questionnaire.
I chose the sport emotion questionnaire because it was valid as I was able to complete it on the day of my performance.	This meant I was able to compare my baseline results with my re-test results to see if I was improving during my PDP.
I chose the sport emotion questionnaire because it was measurable as it was a permanent record.	This meant I made no mistakes in an easy process and my answers were correct.

Table 4.3

When evaluating any aspect of the course, it is important to show both the benefits and limitations. However, it is vital that you do not contradict yourself. For example, if you spoke about the method being effective because you found it easy to complete and it gave you accurate results, you cannot then talk about it being ineffective because you lied and so your results were not accurate.

4 PROBLEM SOLVING: consider the following limitation of this questionnaire. Can you then place it beside a benefit in Table 4.3 that ensures there is no evaluative contradiction? (1)

The sport emotion questionnaire was ineffective because it was hard to understand some of the emotive terms. This was limited because I was unsure what the term meant and simply guessed my response. As a result, my answer to this emotive term was inaccurate.

TIPS

To get around this, write the PARV(M) acronym down the side of your question paper. From here, place a tick next to the letter you consider to be a benefit and a cross next to the letter you consider to be a limitation. Now consider your answer: am I writing something in the cross that contradicts the tick? This will help you plan your answer before you write it.

To overcome this limitation, we can put in place a solution that would make the process more robust. Doing this shows you are analysing the process.

5 FILL IN THE BLANK: analyse why this part has been identified as being an important part to completing the questionnaire. (1)

Figure 4.11

Method of data collection: social factors

Communication observation schedule

FORM OF COMMUNICATION	YES	NO
VERBAL: asking for a pass.		
VERBAL: shouting own name when going to claim a 'loose ball'.		
VERBAL: calling 'man on'.		
VERBAL: organisational shout: zone defence.		
NON-VERBAL: pointing to where you want to receive a pass.		

Table 4.4

The communication observation schedule comes in the form of a table with a variety of communication forms in the left column. In the observation schedule in Table 4.4 are some of the different verbal and non-verbal communications used in handball. A performer would hand it to a knowledgeable classmate who would observe your performance and place tallies in the appropriate box. The observation should take place against opposition of similar ability across three different games. At the end of the process, strengths and weaknesses of the performer's communication skills should be noted down.

TASK 22 THE COMMUNICATION OBSERVATION SCHEDULE AND COMMAND WORDS

1 Identify a method used to collect data on your performance in the social factor. (1)
2 BE THE EXAMINER: go through the following describe answer and identify areas that could be improved. For each area selected, provide feedback on how to improve the answer. (2)

I used the communication observation schedule to collect data on my communication skills in handball. The communication observation schedule was a table with different forms of communication in the left column and two further columns with yes and no to the right. I would pick any classmate available to watch my performance and tally whether I did or did not perform each form of communication. I would have them do this across three games because it makes my data reliable as it rules out a 'fluke' performance. At the end of the process, they would give me feedback on my strengths and weaknesses.

There are many reasons why a performer would choose to use an observation schedule to collect data on social factors.

3 GUIDED DISCOVERY TASK: Figure 4.12 gives some of the reasons why a performer would choose to use an observation schedule. Can you now provide the effect to each of the 'causes' given? (3)

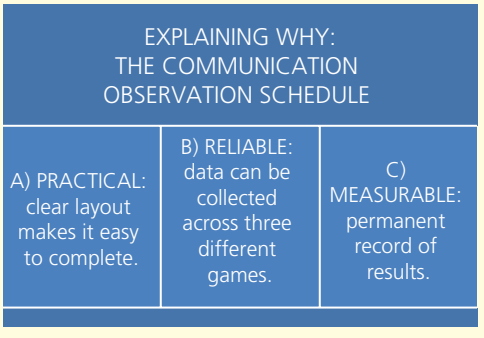


Figure 4.12

However, despite these reasons for using the communication observation schedule, a major limitation of this method is that it can be hard to tell who is talking, so the accuracy of the data could be questioned.

4 TAKE YOUR PICK: pick one of the limitations below and evaluate why it could negatively impact on the data collected. (1)
   a Play against opposition who are too good for your team.
   b Time consuming collecting data across three different games.
5 BUILD THE ANSWER: piece together the answer parts in Table 4.5 to build two analytical answers.

DECONSTRUCT	WHY	IMPACT ON DATA
Combine the observation schedule with digital analysis.	Understand what each form of communication looks/ sounds like in the context of the activity.	Fill out the table correctly to provide a more accurate overview of your strengths and weaknesses.
Have a knowledgeable partner observe your performance.	Overcome the fast-paced nature of the game to ensure nothing is missed.	Get the full picture of performance, which increases the reliability of results.

Table 4.5

Method of data collection: physical factors (fitness)

Standardised fitness test

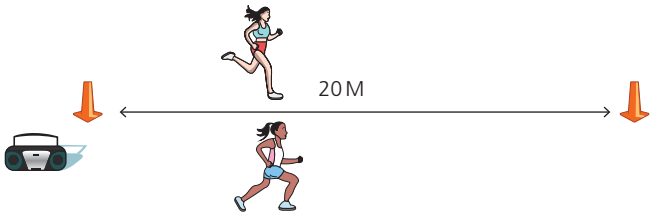


Figure 4.13

Standardised fitness tests are used to assess fitness levels in a variety of physical 'sub-factors'. The T-Test measures one's agility; the press-up test measures a performer's muscular endurance and the bleep test their CRE levels. As we are focusing on CRE as part of the physical factor, we will look at the bleep test in more depth.

TASK 23 THE STANDARDISED FITNESS TEST AND COMMAND WORDS

1 Identify a quantitative method used to collect data on physical factors. (1)
2 DRAW THE PICTURE: based on Figure 4.13, can you describe how the bleep test is set up? (1)

Figure 4.14 shows some other considerations around how to set up and complete the bleep test.

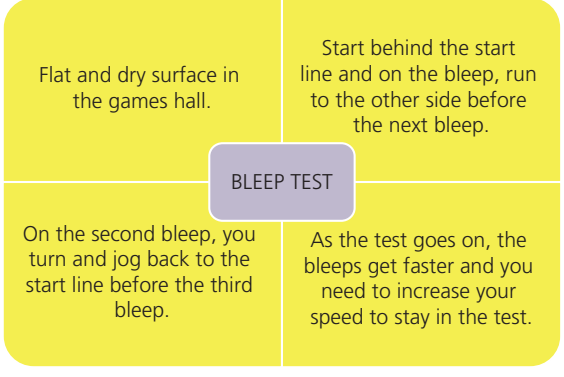


Figure 4.14

3 RESEARCH: a pupil has said that they are *out when they miss any two bleeps during the bleep test*. Research this online to provide feedback on why this descriptive point is incorrect. (1)

4 MIND MAP: Figure 4.15 shows a mind map a pupil has started that helps them explain why they used the bleep test. Some of their answers have a cause and others have an effect. Fill in the missing boxes to help them complete the task. (3)

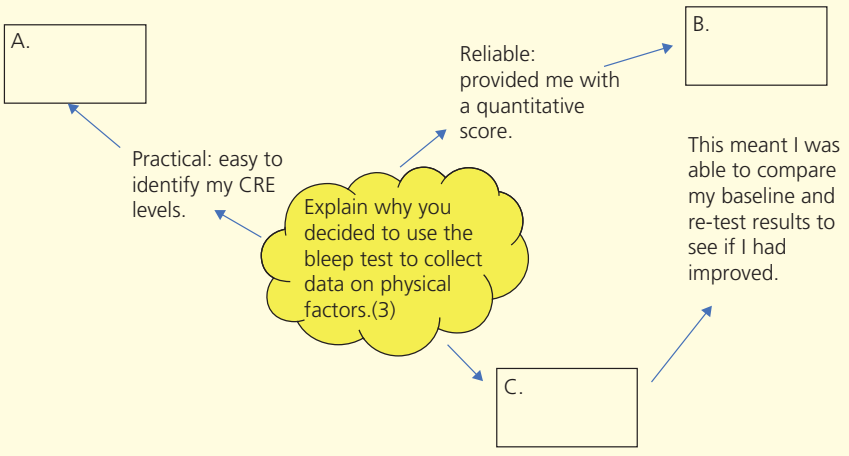


Figure 4.15

5 DIGGING DEEPER: despite it being known that the bleep test provides you with a quantitative, figurative score, can you evaluate how the score achieved can actually be unreliable and therefore limited? (1)

6 There are numerous aspects a performer must consider when completing the bleep test to ensure it is as valid and reliable as possible. In Figure 4.16, number the six different stages to show two analytical answers that follow the process of: deconstruct – why – impact. (2)

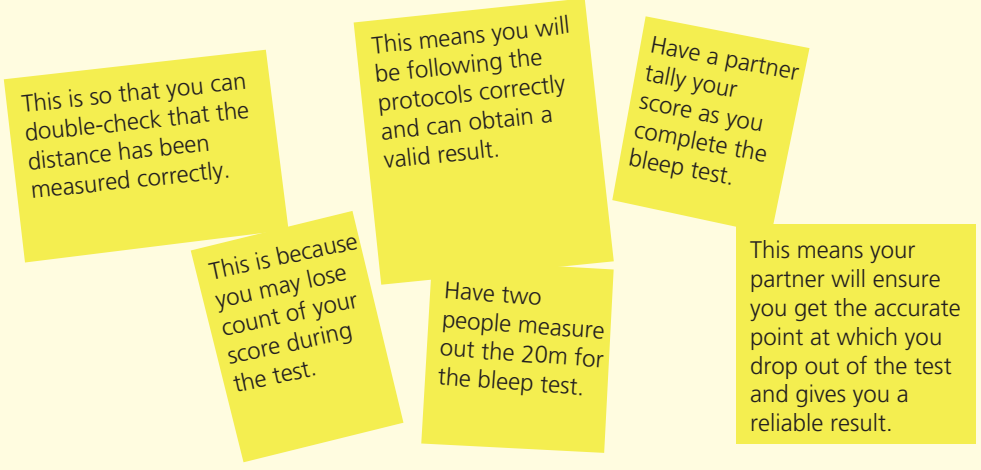


Figure 4.16

TIP

When answering an explain question, ask yourself 'so what?' after you have written the cause to help guide you into the effect.

TIP

Consider the people around you when doing the bleep test.

Method of data collection: physical factors (skill)

General observation schedule (GOS)

	HIGH SERVE	LOW SERVE	OVERHEAD CLEAR	UNDERARM CLEAR	DROP SHOT	SMASH
EFFECTIVE						
INEFFECTIVE						

Table 4.6

The GOS is used to assess the accuracy and consistency of a performer's skill repertoire. Table 4.6 shows an example of a GOS used in badminton; however, it can

be adapted to include the skills and techniques from multiple other activities such as football, basketball and volleyball. The process of completion is very similar to the way the communication observation schedule is completed, so we will now go through Task 24 with reduced guidance in comparison with other sections of this book to test your ability to recall and adapt information.

TASK 24 THE GOS AND COMMAND WORDS

1 Identify a method used to collect data on physical factors. (1)

2 COMPLETE THE DIAGRAM: In Figure 4.17 there are four sections: the look, who, when and how. Complete each area to the best of your ability to help you describe the GOS. Note: the number next to each term indicates how many descriptive points are required in each area. (5)

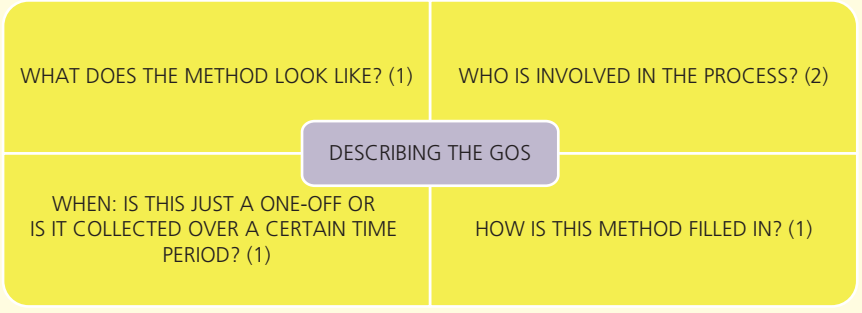


Figure 4.17

3 In this task, you need to read a pupil's explain answer, then rewrite it so that each of their causes and effects fit together. (3)

I chose the GOS because it was practical as it was easy to interpret my results. This meant that I was able to show my 'normal' performance levels as I took on a challenge I would normally face and this gave a realistic overview of skill levels in badminton.

I also chose the GOS because it was practical as it was easy for my partner to complete. This meant I was able to identify my strongest and weakest skills, then create an appropriate PDP to improve my weakness.

Finally, I chose the GOS because it was valid as I played against an opponent who had similar levels of ability to mine. This meant they made no mistakes in an easy process and the data I received was accurate and correct.

4 BENEFITS AND LIMITATIONS: create a table with two headings: Benefits and Limitations. Evaluate the answers in Figure 4.18 and place them in the correct column. (4)

Practical: easy to complete – no mistakes – correct data.

Time-consuming gathering data across three matches – switch off and miss data.

Fast-paced nature of the game – miss shots – do not get the full picture.

Measurable: permanent record – compare to retest results – measure progress.

Figure 4.18

TIP

LOCK AND KEY: when writing out an explain answer, it is important that the cause and effect you include in your answer fits together. Consider this like a lock and key. The cause is the lock and the key the effect. If the key fits in the lock, you open up a mark.

TIP

When writing out your explain answer, try to have a paragraph for each cause and effect. This will help keep your work organised and make it easier for you when re-reading your answers at the end of the exam to see if you have achieved the marks available.

5 FINISH THE ANSWER: look at the deconstructed part of the GOS in Figure 4.19. Can you analyse why this part has been identified and the impact it then has on the data collected?

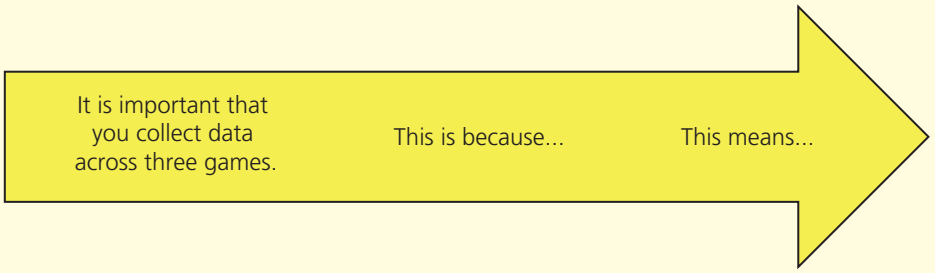


Figure 4.19

Method of data collection: physical factors (skill)

Digital analysis

Figure 4.20

A quantitative method used to collect data on the tactics a team employs is digital analysis. This is when a team's performance is recorded on a video and certain aspects of their play are analysed by the coach. In relation to the content in this book, the coach may be looking at how width is achieved during a fast break in basketball to create and exploit space. Based on what is seen on the video, feedback can be given and plans made on how to improve the performance.

TASK 25 DIGITAL ANALYSIS AND COMMAND WORDS

1 Identify a quantitative method used to collect data on physical factors. (1)
2 DELETION: look at each of the descriptive points below and delete the 'weaker' response, leaving you with three correct descriptive answers. (3)
- The iPad was placed at the side of the games hall at ground level on the centre line. VERSUS The iPad was placed high up on a stand at one end of the games hall.
- A match against a team of similar ability level was recorded on the iPad. VERSUS A match against a team of lesser ability was recorded on the iPad.
- After the match, the coach watched the video alone and provided the team with verbal feedback on their strengths and weaknesses. VERSUS After the match, the coach watched the video and provided the team with verbal feedback on their performance as they showed them when the strengths and weaknesses occurred.

Using digital analysis as a means of collecting data on a performance comes with multiple benefits and limitations.

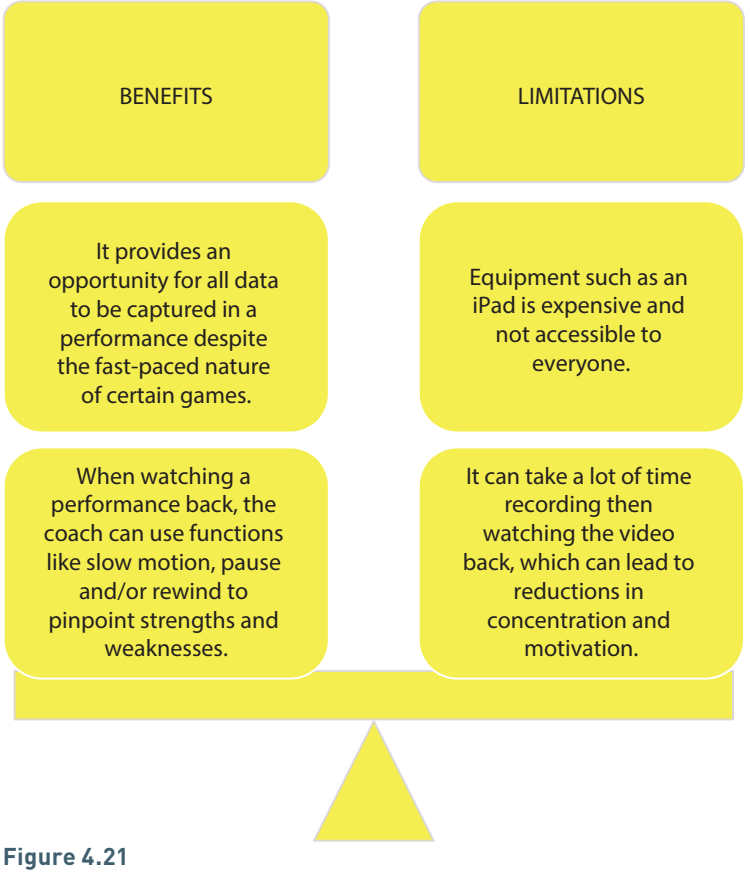


Figure 4.21

TIP

Figure 4.21 does not fully provide causes and effects. Build on this to write enough to pick up 1 mark.

Using Figure 4.21 to help you, can you answer the following questions?

3 Explain why a performer may use this method to collect data on physical factors. (1)

4 A Higher PE pupil has placed an initial judgement of 'slightly effective' on digital analysis. Use this judgement to help guide you to build a 2-mark evaluate answer. (2)

Having considered some of the benefits and limitations of digital analysis, let's analyse an important part to carrying out this method correctly.

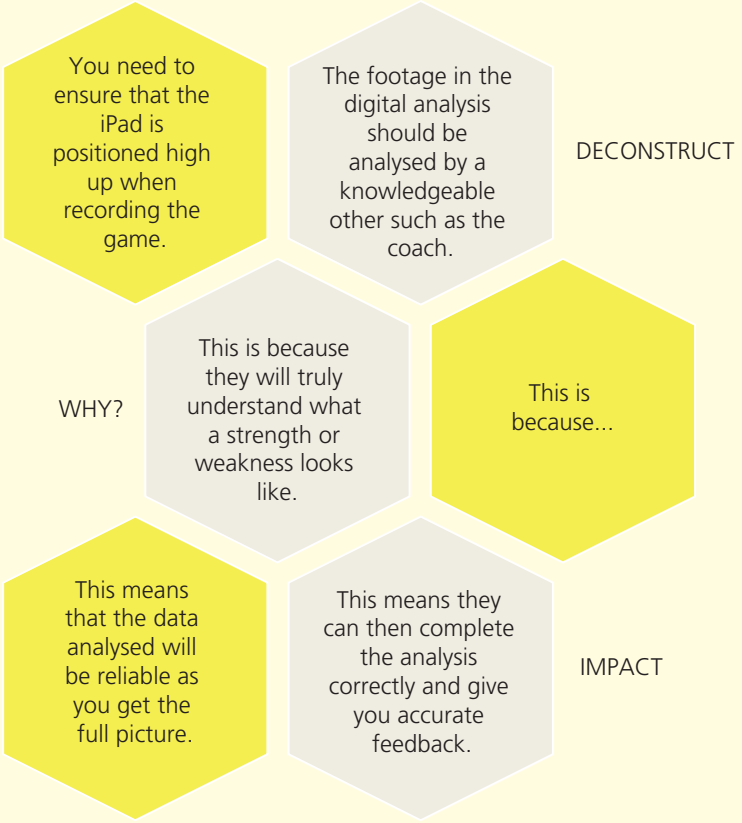


Figure 4.22

5 FILL IN THE BLANK: the yellow pathway is missing the 'why' of the analyse answer. Look at the deconstruct and impact parts of the answer to help guide you in writing an answer for the 'why'. (1)

You may also look at the grey analyse answer to help you with the structure.

Model performers

A model performer is someone who demonstrates a consistently high standard of performance in their activity. In regard to the Higher PE course, we can consider certain athletes to be model performers in each factor. This is because you are unlikely to find one athlete who excels in all four factors. When collecting data, we may compare our performance levels with those of a model performer. A data collection method that does this is the focused observation schedule, where a model performer's sub-routines are listed and compared.

CASE STUDY

Figure 4.23

Mental: Simone Biles consistently shows excellent levels of concentration and has managed to control her anxieties in a range of high-pressure situations.

Emotional: Lionel Messi is consistently fouled yet always controls his anger. He also exudes confidence in taking risks and shows resilience to continue taking penalty kicks despite missing previously.

Social: Tom Brady is known to be an excellent organiser when setting up and carrying out set plays in his role as a quarterback. His communication skills allow him to excel here and have led to him being named as captain on numerous occasions.

Physical: Serena Williams demonstrates great levels of power in her performance as a tennis player. She allies this with an exemplary high skill level and broad repertoire that sees her execute skills with both accuracy and consistency.

TASK 26

Evaluate your performance levels in a factor of your choice in comparison to a model performer. (2)

TIP

When answering this question, it is vital that each 'sub-factor' you refer to contains a comparison of what a model performer does and what you then do. Support this with evidence from the performance. For example:

Like a model performer, my agility levels are of a very high standard when attacking in basketball. This means that like a model performer, I am able to fake to go one way and quickly change direction to go the other way to get past my opponent into space.

A model performer does not have to be an elite athlete, however. This is because a performer may lose confidence in their abilities when comparing themselves with someone of such a high standard, as they ultimately fall below that level. Other examples of model performers that you may compare your abilities with are:

- classmates
- team captains.

As Figure 4.24 shows, there are many reasons why an appropriate classmate may be chosen as a model performer, as referred to during the data collection stage.

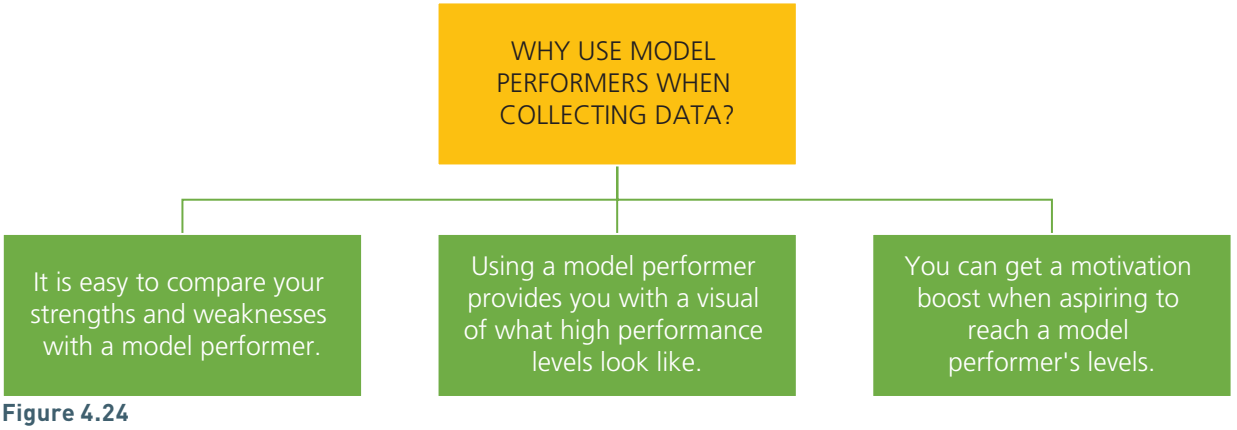


Figure 4.24

TASK 27 RECAP

1 True/False: you should use the same model performer for each of the four factors. (1)
2 Consider your response to Question 1. Justify the answer you gave. (1)
3 Identify a method of data collection for the physical factor in which a pupil compares their abilities with those of a model performer. (1)
4 What advice would you give a pupil who is struggling to structure an answer to the following question: Evaluate your performance levels in the emotional factor in comparison to a model performer. (1)
5 Explain why using an elite athlete as a model performer could be limiting. (1)
6 A pupil is considering using a classmate as a model performer when collecting data on their performance in the physical factor. Explain why they should do this. (2)

Perform to the very best of your ability in Higher PE as you master the theory and overcome the challenges of the exam.

This highly visual textbook contains dozens of diagrams that make it easier to understand and remember the content.

- **Be guided through each area of the course.** All the mandatory knowledge, skills and specification points are structured into a logical sequence for students and teachers.
- **Get to grips with the command words.** Find out what each of the five command words is asking you to do and then use the strategies provided to answer questions across each area of the course.
- **Learn through practice.** Enjoy an active approach to theory, applying and developing your knowledge through lots of dynamic and varied tasks, rather than lots of reading.
- **Feel confident about the exam.** Tips throughout the book explain how to answer questions effectively. End-of-chapter exam-style questions and two practice papers help you to revise and prepare for the exam.
- **Check your understanding.** Over 30 pages of detailed answers for all tasks, exam-style questions and practice papers are included at the back of the book, to support independent learning.

About the author

Aaron Anderson is an experienced PE Teacher and is currently the Vice President of the Scottish Association of Teachers of Physical Education (SATPE). He has previously written content on Higher PE for BBC Bitesize and SATPE Pupil Notes. In addition to his teaching responsibilities, Aaron works for the SQA as a Marker and External Verifier.

> ***I feel that this book could be the difference between a C or an A at Higher.***
>
> Jonathan MacWhirter, Depute Headteacher
> Beeslack Community High School, Edinburgh

HODDER GIBSON
t: 01235 827827
e: education@hachette.co.uk
w: hoddergibson.co.uk

ISBN 978-1-5104-8452-8
9 781510 484528
FSC