



Dalkeith High School

LABOR VINCIT 'Hard Work Prevails'

Dalkeith High School

PE Department

National 4

Factors Impacting

Performance Unit

Guidance Notes

Name:

Outline of your National 4 Course

To complete outcome 1 you must select an **athlete** of your **choice** and **gather** information in relation to their **performance**.

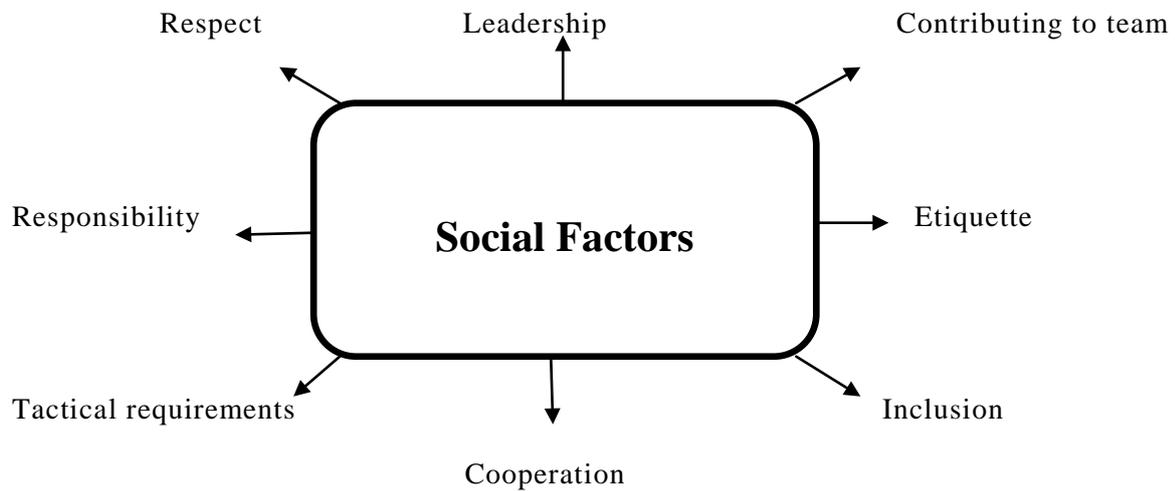
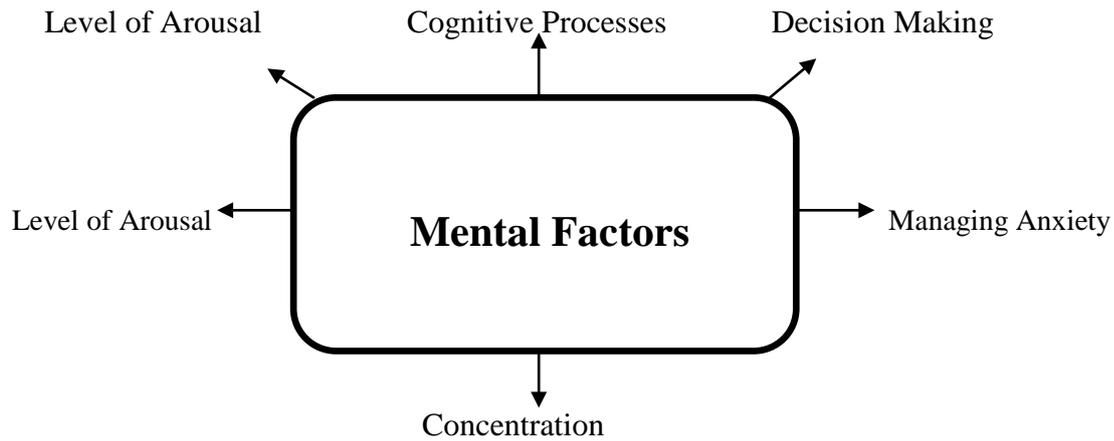
- In order to do this you will have to research **methods of gathering data** and then **describe** the data gathered on this athlete.
- From the data gathered and described you then have to identify and describe **two factors** that you think are affecting the athletes' performance in **positive** or **negative** way.
- Relating to **one of the factors** you will then have to **research and describe an approach** that the athlete could use to **develop** this factor.
- All the information gathered above will be displayed and presented. You can present the information in a number of ways stated below:

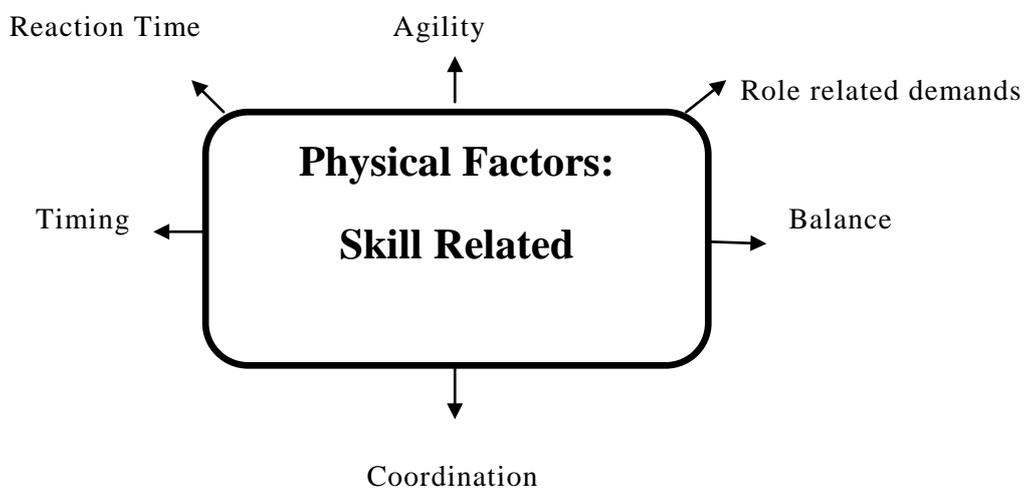
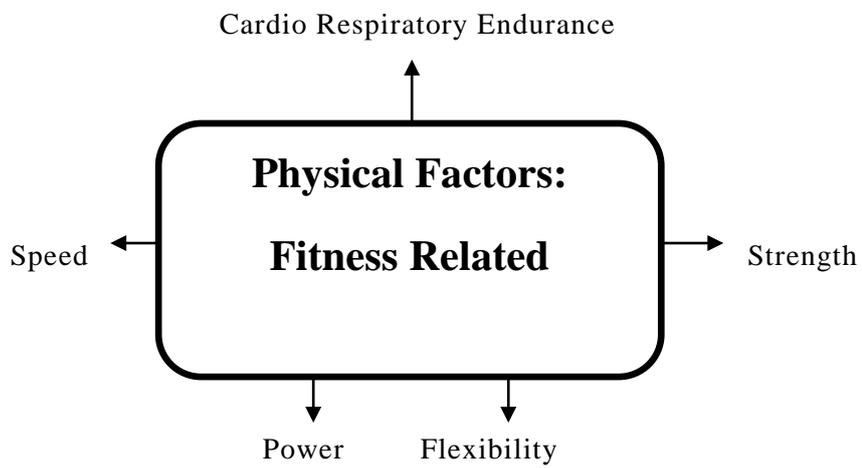
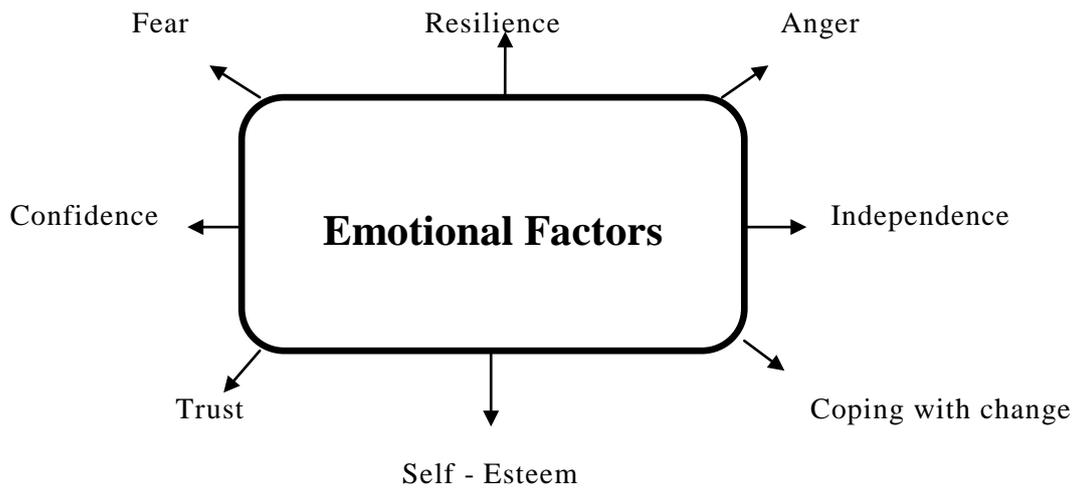
Presentation Method	Tick which method you will use below
Information/Poster Board	
Power Point	
Mind Map	
Graphic Organiser	
Oral Presentation	
Podcast	
Essay	
Leaflet	
Video	

Factors Impacting Performance

Athletes experience a number of issues that affect their performance in a variety of ways.

These are referred to as 'Factors' and there are broken down into 'Four Sections'.





Outcome 1

1.1 Describe a method you used to identify factors that impacted on performance.

Think about the following to help you complete this section:

- What method will I use to recognise two factors that are impacting on the athletes' performance?
- What will be best suited to gathering data in my activity?

<u>Method of gathering data</u>	<u>Website Link</u>
Video - coaches eye, Ubersense, sports motion	Coaches Eye - https://itunes.apple.com/gb/app/coachs-eye-/id940227676?mt=8 Sport Tagger – https://itunes.apple.com/gb/app/sport-tagger-player-analysis/id579527047?mt=8 Ubersense - https://itunes.apple.com/gb/app/ubersense-coach-slow-motion/id470428362?mt=8
Observation Schedule - Movement analysis/scatter graph/match analysis	http://www.bbc.co.uk/bitesize/higher/pe/skills_techniques/analysis/revision/2/
Standard Testing - <ul style="list-style-type: none"> • Multi Stage Fitness Test • Illinois Agility test • 1 rep max test • Press –Up Test • SCAT Test 	Multi Stage Fitness Test: http://www.brianmac.co.uk/beep.htm Illinois Agility Test: http://www.brianmac.co.uk/illinois.htm 1 Rep Max Test: http://www.brianmac.co.uk/index.htm Press- Up Test: http://www.brianmac.co.uk/pressuptst.htm SCAT Test: http://www.brianmac.co.uk/scat.htm
Feedback - Questionnaire	https://www.surveymonkey.com/s/YLHTJBC
Internal Feedback - internal	http://www.brianmac.co.uk/documents/evalform.pdf

How did you do this?

What do the results tell you about your performance?

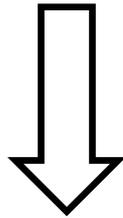
What strengths and areas for development did this highlight?

Outcome 1

1.2 Describe the impact that two factors had on the athletes' performance.

Think about the following to help you complete this section:

- The factors can be affecting the athlete in a **positive** or **negative way**.



- Think about things that they are doing well or badly during the performance.
 - Are they being affected by the crowd?
 - Is the athlete showing good CRE during their performance?
 - How is the pressure of the match/race/point affecting them?
 - Are there any physical factors that are helping the athlete perform well?
Eg. Strength, Coordination?
 - Is the athlete controlling their emotions in an effective way?
 - Does the athletes' concentration affect their performance positively or negatively?
 - Is the athlete carrying out their role in their team effectively?
 - Are they contributing well to their teams' formation or tactic?

Outcome 1

National 4 –Homework Task 1

Before your next lesson you must complete the homework task below:

This will give you the information you need to help you complete Outcome 1.

<https://www.surveymonkey.com/s/Q65TSN9>

Class Task 1

Use the link below to test your knowledge with regards to ‘Factors Impacting Performance.’ The videos relate to athletes performance and how different features can affect them when performing.

<https://www.surveymonkey.com/s/BHZ9JF5>

Homework Task 2

Following **Homework task 1**, the work you have completed in class and in your booklet.

Now complete **Homework Task 2** following the link below:

<https://www.surveymonkey.com/s/SKHHP8Z>

Outcome 1

1.3 – Identify a factor that affects a performance & describe an approach to develop this?

Before your next lesson you must complete the homework task below:

<https://www.surveymonkey.com/s/PV5R3WQ>

Think about the following to help you complete this section:

- Focus on one factor – **Physical, Social, Emotional or Mental**.
- How would you train to develop this factor?

<u>Methods of Training</u>	<u>Website Link</u>
Continuous Training	http://www.brianmac.co.uk/conintrn.htm
Shadow Practice	http://www.bbc.co.uk/bitesize/higher/pe/skills_techniques/practice/revision/2/
Mental Rehearsal	http://www.brianmac.co.uk/mental.htm
Circuit Training	http://www.brianmac.co.uk/circuit.htm
Team Building Exercises	https://www.huddle.com/blog/team-building-activities/
Reaction Drills	http://www.brianmac.co.uk/reaction.htm
Interval Training	http://www.brianmac.co.uk/conintrn.htm
Conditioned Games	http://www.bbc.co.uk/bitesize/higher/pe/skills_techniques/practice/revision/2/

- Once you have decided what approach you are going to use, think about exactly how you would use this approach.
- **How long are you going to train for?** Eg. 20 minutes
- **How many times a week will you train?** Eg. 3, 4?
- **How hard are you going train?** Eg. Training zone, HR.

For Example:

- I would use *continuous training* as my approach to develop Lynsey Sharp's *CRE*. I would recommend Lynsey Sharp should run continuously at a steady pace for 30 minutes. She should aim to keep her heart rate in her training zone.
- Continuous training is easy to set up and simple to do, it also suits the demands of the event that Lynsey is competing in and the physical factor she is aiming to improve.

Examples of Methods of Training:

Whole part whole

Whole part whole is used to learn simple skills. It is used when a learner has previous experience of the skill. Technical weaknesses within performance can be identified, isolated and practised in parts and it is easier/quicker to learn the skill.

Activity – Swimming

Skill – Front crawl:

Whole – I attempt the full front crawl stroke. My coach watched my performance and identified that my legs are too far apart when performing the stroke causing me to slow down. Therefore I have identified that my leg action needs practices in order to improve.

Part – I then did 6 breadths of the pool using only my legs. I held a float in my hands straight out in front of me in order to isolate my legs throughout the stroke, concentrating on keep my legs closer together during the action.

Whole – Once I have practiced only using my legs I then performed the full front crawl stroke again. I did 6 breadths of the pool. My coach again gave me feedback regarding my performance if my leg action had improved.

Activity – Athletics

Skill – Long jump:

Whole – I attempted a long jump using a ten step run-up. My coach watched me performance and identified that my run up was too slow and I wasn't getting close enough to the take off board. As a result I was not getting the maximum amount of power required in my jump and I wasn't jumping as far as I could.

Part – I then practised the run up on its own, taking out the jump action. I practised 8 run ups. As a result my foot placement and speed in the run up improved.

Whole – I then attempted the full jump including the jump action. My coach again gave me feedback and told me that my speed and timing were much better after practising improving the overall length of my jump.

Gradual build up

Gradual build up is used when learning a new skill. It allows you to learn a skill which is complex or dangerous. The skill is learned in stages with each stage becoming progressively more difficult. You can master part of the skill and build up confidence before moving on to a more difficult stage and can move back a stage if you are not achieving success.

An example of gradual build up is as follows:

Activity - Basketball

Skill/technique- Lay-up

Stage of Practice	Teaching Points	Performers Success/Comments
1	<ul style="list-style-type: none">• I practised a jumping shot• No steps• Jump right knee up, weight on left leg• Right arm extended aiming ball for postage stamp on backboard	
2	<ul style="list-style-type: none">• I practised a jumping shot, with a two step run up• Move back from basket• Two steps then shoot• Right foot, left foot, up• Right arm extended, right knee bent, weight on left leg• Aiming for postage stamp on backboard	
3	<ul style="list-style-type: none">• I bounced the ball once and then performed two step run up and jumping shot• Further back from basket again• One bounce, left foot, right foot, left foot, up• Right arm extended aiming for postage stamp	
4	<ul style="list-style-type: none">• I bounced the ball twice and then performed a two step run up and jumping shot• Two bounces of ball• Making sure last two steps are right foot then left foot• Right arm extended	
5	<ul style="list-style-type: none">• I dribbled the ball into perform a full lay-up• Full skill – all of above• Further back from the basket drive in using bounces• Footwork must be correct as approach basket	

Outcome 2

You now need to think about **your own** performance.....

What are your **strengths** and areas that you feel **can be improved**?

What position do you play in your chosen activity or do you have a specific role in your activity?

- **What are things that you do well?**
- **How does this help your performance?**
- **What could you do better to help improve performance?**
- **How does your area of development affect your performance?**

You will also need to research methods of training to create a development plan to help improve your performance.

- **What is the best method of training to help improve your performance?**
- **How many times a week will you train**
- **How long will each session last for?**
- **Depending on the factor you have chosen will you use one method of training or will you use a variety of methods?**

After completing your development plan you then need to think about how you checked your sessions were effective in improving performance.

Outcome 2

2.1 – Identify your strengths and areas for development in your performance.

This section is designed to identify and develop your own **PERSONAL** strengths and areas of development. Fill out the questionnaire below use this to help you identify what you think are your strengths and what you think are your areas of development.

Task 1:

PHYSICAL FACTORS		SOCIAL FACTORS		MENTAL FACTORS		EMOTIONAL FACTORS	
Do you get tired towards the end of your performance?		Do you get along with everyone who is involved in your activity; team mate, coach, referee?		Do you lose concentration at any stage during performance?		Do you ever feel anxious or nervous when performing?	
Yes	No	Yes	No	Yes	No	Yes	No
How do you know?		How do you know?		How do you know?		How do you know?	
Can you successfully carry out all the skills required to perform effectively?		Do you always follow the rules of the activity during performance?		Do you find it easy to make the correct decisions during performance?		Do you lose your temper during performance if you or someone in your team makes a mistake?	
Yes	No	Yes	No	Yes	No	Yes	No
How do you know?		How do you know?		How do you know?		How do you know?	
Do you understand the tactics that will allow you to beat an opponent in your activity?		Is your performance affected because there are limited facilities for you to train?		When performing do you find it easy to remain mentally tough at all times?		Do you always believe that you can perform well in your activity?	
Yes	No	Yes	No	Yes	No	Yes	No
How do you know?		How do you know?		How do you know?		How do you know?	

Outcome 2

2.2 – Preparing and implementing, with some support, a simple development plan to impact positively on a performance.

Chosen area of development:

You must now develop a training programme to help improve this area. When devising this programme, you must consider:

The **PRINCIPLES OF TRAINING** –

These should be matched to an individual's needs and getting the best out of training requires planning. Using these simple principles, you can design a suitable programme.

SPECIFICITY:

Training must be matched to the needs of the sporting activity to improve the factor impacting on performance.

'In Volleyball a performer who wishes to increase their vertical jump should follow a plyometrics (a form of exercise that involves rapid and repeated stretching and contracting of the muscles, designed to increase strength) training programme. This involves a series jumps and rebound jumps that are designed to build leg strength. This is a very important quality for Volleyball players.'

OVERLOAD:

The more regular and challenging the training is, the better the performer becomes.

'After two weeks of a personal development programme that focused on strength the performer was becoming bored because they found it too easy. Instead of lifting 40kg on the bench press, they changed it to 42.5kg because this was harder and a little more challenging.'

PROGRESSION:

Once a target is reached it is time to start adjusting the programme.

'The performer's objective was to win his regional golf championship. This meant that they qualified for the national championships. This meant that they would now need to adjust their goals and increase the range and challenge of their training programme to help them perform at that level.'

REVERSIBILITY:

Training programmes must allow for injury or rest. If a performer has to take a week off after a difficult tournament or competition it is unlikely that their performance will go into reverse. If it is for a longer period then this will start to affect their performance when the performer returns.

‘An athlete has been carrying out their personal development programme. They are now able to cover 3000 metres when doing the 12min cooper run test. The athlete suffers an injury that stops them training for 4 weeks. On their return they manage to cover 2600 metres. This is because they are not training and their body has started to reverse the previous changes made. If you don’t use it, you lose it!’

The acronym **FITT (Frequency, Intensity, Time, and Type)** is a helpful reminder of the key things to consider when tailoring programmes for individual sporting goals.

When planning a programme, use the **FITT** principles to add the detail:

- **Frequency** - How often to train: I will train on a Monday, Wednesday and Friday
- **Intensity** - How hard to train: I will train at between 65% and 75% of my maximum heart rate (when doing a cardio respiratory endurance training programme)
- **Time** - How long to train for: Each training session will last for 1 hour.
- **Type** - Which approaches to training to use? I will use Fartlek training because I feel comfortable doing it and it suits my activity.

Additional Notes:

:

Using your Evidence booklet, fill out the blank training programme appropriately. Below are examples of training programmes to help you.

2.2 – Preparing and implementing a simple development plan to impact positively on a performance.

Example 1 – Developing CRE in Football:

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
9am-12pm	PE – Circuit training – 10x stations. – 1min work/rest. 2 rounds. Record scores and check for improvement. Football specific – dribble shuttles/ Rest station: keepy-uppies.	PE – Fartlek Training – round football pitch. Varied pace and record how many laps in 30 minutes. Activity specific – 1 side dribble with football	rest	Rest day	rest	Prep for Game of Football – mentally prepare.	Rest Day
12pm – 4pm	Complete training diary – review if scores improving on circuit training	Complete training diary – review fartlek training and track progress.	PE – Continuous training – 30 minute jog. Regular check of HR inside 120-180bpm. Record distance	Rest day	PE - Light Continuous Training – 30 minute jog –low intensity	Game Day	Rest Day
4pm – 9pm	rest		Complete training diary – review continuous training and track distance.	Rest day	rest	Training Diary – Evaluate performance and CRE especially later in game.	Rest Day

Example 2 – Developing Overhead Clear in Badminton

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
9am-12pm	PE – Warm up – OHC Rally with partner. Repetition drills– 10x feed for OHC . record scores in tramlines /10.	PE – Shadow practise. Copy partner to develop movement to back of the court. No pressure. Record how many in 1min	rest	Rest day	rest	Prep for Game	Rest Day
12pm – 4pm	Ladder tournament – short sided games upto 7 points. Evaluate OHC within games	Ladder tournament – short sided games upto 7 points. Evaluate OHC within games.	PE – Conditioned games – every point must start with High Serve →OHC→ OHC then finish point.	Rest day	PE – Shadow Practise. Groove OHC skill.	Game Day	Rest Day
4pm – 9pm	Complete training diary – review if scores improving for repetition drills.	Complete training diary – review shadow practise.	Complete training diary – review conditioned games.	Rest day	rest	Training Diary – Evaluate overall performance and OHC.	Rest Day

Outcome 2

2.3. Monitoring and recording performance development sessions.

Now that you have devised your training programme, you must think about how you want to monitor the progression of your training programme. There are many different methods that can be used to monitor progress and it's extremely important that you record the improvements made by the performer.

BENEFITS OF MONITORING AND RECORDING PERFORMANCES:

Allows for adapting practices – if they are too easy or too difficult.

Reflection on past experiences means a performer can adapt their programmes to prevent repeat occurrences. It provides evidence that will support decisions made. It motivates the performer. They help build a complete picture of a performance at that moment in time.

<u>Method of gathering data</u>	<u>Website Link</u>
Video - coaches eye, ubersense, sports motion	Coaches Eye - https://itunes.apple.com/gb/app/coachs-eye-+/id940227676?mt=8 Sport Tagger – https://itunes.apple.com/gb/app/sport-tagger-player-analysis/id579527047?mt=8 Ubersense - https://itunes.apple.com/gb/app/ubersense-coach-slow-motion/id470428362?mt=8
Observation Schedule - Movement analysis/scatter graph/match analysis	http://www.bbc.co.uk/bitesize/higher/pe/skills_techniques/analysis/revision/2/
Standard Testing - <ul style="list-style-type: none"> • Multi Stage Fitness Test • Illinois Agility test • 1 rep max test • Press –Up Test • SCAT Test 	<p>Multi Stage Fitness Test: http://www.brianmac.co.uk/beep.htm</p> <p>Illinois Agility Test: http://www.brianmac.co.uk/illinois.htm</p> <p>1 Rep Max Test: http://www.brianmac.co.uk/index.htm</p> <p>Press- Up Test: http://www.brianmac.co.uk/pressuptst.htm</p> <p>SCAT Test: http://www.brianmac.co.uk/scat.htm</p>
Feedback - Questionnaire	https://www.surveymonkey.com/s/YLHTJBC
Internal Feedback - internal	http://www.brianmac.co.uk/documents/evalform.pdf
Training Diary – Thoughts & Feelings	http://www.fitstream.com/articles/training-journal-a45 http://www.vertex42.com/Files/pdfs/2/printable-running-log.pdf http://www.vertex42.com/Files/pdfs/2/Workout-Log.pdf

From the three methods of data selected above. Which one is the most appropriate for you and why? Make some important notes about how you want to monitor your training programme:

Using your Evidence booklet, fill out section 2.3 appropriately to complete the outcome.

Quick Quiz

Tick which is the right answer to the following questions below

Which of these is not a method used to gather data on performance?	
Questionnaire	
Gradual Build Up	
Video	

Questionnaires are a good way to gather data because?	
The questions asked will be specific to my needs	
They are really difficult to do	
They take a lot of time to complete	

Which of the following is important when gathering data on your performance?	
I play different opponents all the time	
When gathering data we do the same tests and try to keep the variable factors to a minimum to ensure validity and reliability.	
I ask different people to do my observation schedule every time	

Which is the best method to gather data on anxiety levels?	
Video analysis	
30m sprint test	
Sport Competition Anxiety Test	

Why is video analysis an effective method to gather data?	
It allows an individual to pause, rewind and watch a performance as many times as they need to identify their strengths and development needs	
It helps an individual select the correct training intensity	
It is an effective method of practice	

Why is using a General Observation Schedule a good way to gather data?	
It will reveal if a player has concentrated throughout the full game	
Helps a player perform all the skills to a high level throughout the full game	
It provides a permanent record which a player can use to compare previous performances and look for improvements	

Outcome 3

This section involves you looking back at your development plan and thinking about the following:

Circle the appropriate method for you below

<i>Who will I ask for feedback or what will I use for feedback to check if my performance has improved as a result of my programme?</i>			
My coach	My partner used in training practices	Video analysis	Movement analysis

Fill in the table below:

<i>How effective has my performance development plan been?</i>			
Did I like the practices within my programme?	Was I motivated when completing them?	Did I feel that they weren't the best practice suited to me?	If the practices weren't best suited to me why?

<i>Did my performance improve?</i>	
How did I know it had improved?	Did this show in test results?

What exactly has shown me that my performance has improved?

What are my next steps following this programme of work?

Outcome 3

3.2 – Reviewing the effectiveness of the development plan in supporting my performance development.

In order to help you answer this you must think about the following questions regarding your development programme:

1. How effective has my performance development plan been? Have I seen an improvement in performance – if so then give evidence to show this below:

E.g. My development plan has been successful as I have seen an improvement in my performance during my badminton matches. I am now able to play my overhead clear with more success as I am now winning points as my opponent is unable to return my shot.

2. Did I like/enjoy the practices I did within my programme? If so then why did you like them give evidence to show this below. If you didn't like them, explain why.

E.g. I enjoyed the shadow practices within my training programme as I found them easy to follow. I felt comfortable using this practice as I was able to practice the full skill without any pressure. As a result my overhead clear technique improved.

3. Where the practices I selected in my programme well suited to me? If they weren't the best practice – why? If they were suited to you give evidence to explain why.

E.g. The practices I used in my development programme were well suited to me as I can now see an improvement in my overhead clear technique. I enjoyed the practices I did within my programme. The variety of practices I used kept me motivated throughout my development programme to continue to improve my technique.

Outcome 3

3.1 – Seeking feedback from others.

Think about the following:

Using a survey as feedback is an effective way to receive information on your performance and the improvements you have made during your training programme.

The link below will provide you with an example of a survey that you can use to collect feedback on your performance.

<https://www.surveymonkey.com/s/YLHTJBC>

Using survey monkey you can create your own survey relating to your performance and the development area that you were trying to improve.

The survey should include:

- ✓ 5 questions
- ✓ Be completed by 10 of your classmates.
- ✓ Collect answers from a range of people not just your friends group to gain a variety of answers & more reliability to your data.

Looking at the answers from that you received from the questionnaire think about the following:

- ❖ *How did you receive feedback regarding your performance improvements?*
- ❖ *What did their feedback tell you regarding your performance?*

Outcome 3

3.3 – Reflecting on performance progress based on all information gathered.

What did the information gathered on your performance say before your development programme?

After retesting performance and monitoring performance what do your results tell you now?

Compare information gathered before and after development programme

Summarise the initial data you collected and compare this with your results from your re-test data. What does this tell you about your development plan?
<i>E.g.' I collected my initial data using the bleep test. The bleep test results showed that I scored level 8.1, which when compared to the national norm table put me the 'good' category. After my training programme, I re-tested this and saw an increase of 2 levels to 10.1. This then put me the 'very good' category. This shows that my development plan has been successful as I increased my CRE levels.'</i>
Summarise the feedback from others. What does the information gathered tell you?
<i>E.g.' When I was performing an overhead clear, I had one of my friends observe me, using an observation schedule. The information gathered told me that I didn't turn side onto the net. This was preventing me from hitting the shuttle with power. Additionally, the schedule told me that I do not return back the middle after I have played a shot. This then affected my future shots as I was not ready or prepared.'</i>
Looking at all the information you have gathered, can you see an improvement? If so, please describe how you know this, providing evidence.
<i>Eg. Reflecting on the information gathered from my initial bleep test and my retest scores I can see that my CRE has improved as I am now reaching level 10.1 compared to my first test where I only reached level 8.1 During my retest I also felt better within myself and didn't feel as tired as quickly allowing me to push further and reach a higher level. Therefore during my role as a central midfielder in hockey I was able to last for the whole game without feeling too tired and having to be subbed off the pitch.</i>

Outcome 3

3.4 – Identify future developments needs.

Now that you have re-tested your performance?

It is important that throughout your training you re-test at regular intervals to ensure that progress is being made (approximately every 4 weeks).

By re-testing you can find out if your programme needs to be adjusted in order to maintain improvement.

Without changing your programme **Eg. Making it harder every 4 weeks.** You may improve to a certain point and then stay the same because your body is not being challenged and made to work harder.

Comparing your **re-test results** with your **initial tests** will identify what adjustments may need to be made to your programme and what your new **strengths** and **weaknesses** may be.

It is important that throughout and at the end of your programme to repeat the **same specific Standard Tests** to check for improvement against your previous results and to compare yourself again with the **National Norms**. You should also analyse whether or not it has improved your overall performance by **re-completing the same** methods you used to gather information within the activity.

Complete the table below thinking about your own testing and re-testing results:

<i>What do the results tell you about the success of your development programme?</i>	<i>Did you improve? How do you know?</i>	<i>Did your results show you have stayed at the same level? If so how do you know?</i>	<i>What other aspects of performance can you now look to improve?</i>

Added Value Checklist:

<i>Name</i>	<i>1.1 Prepare mentally, emotionally, socially or physically for performance</i>	<i>1.2 Select and apply appropriate knowledge and skills during performance.</i>	<i>1.3 Follow rules or guidelines and accept decisions.</i>	<i>1.4 Use safe practice, showing etiquette and managing emotions.</i>	<i>1.5 Carry out roles and responsibilities appropriately during the performance.</i>