LARBERT HIGH SCHOOL

PHYSICAL EDUCATION

Analysis and Development of Performance
Course Notes

Physical

Badminton

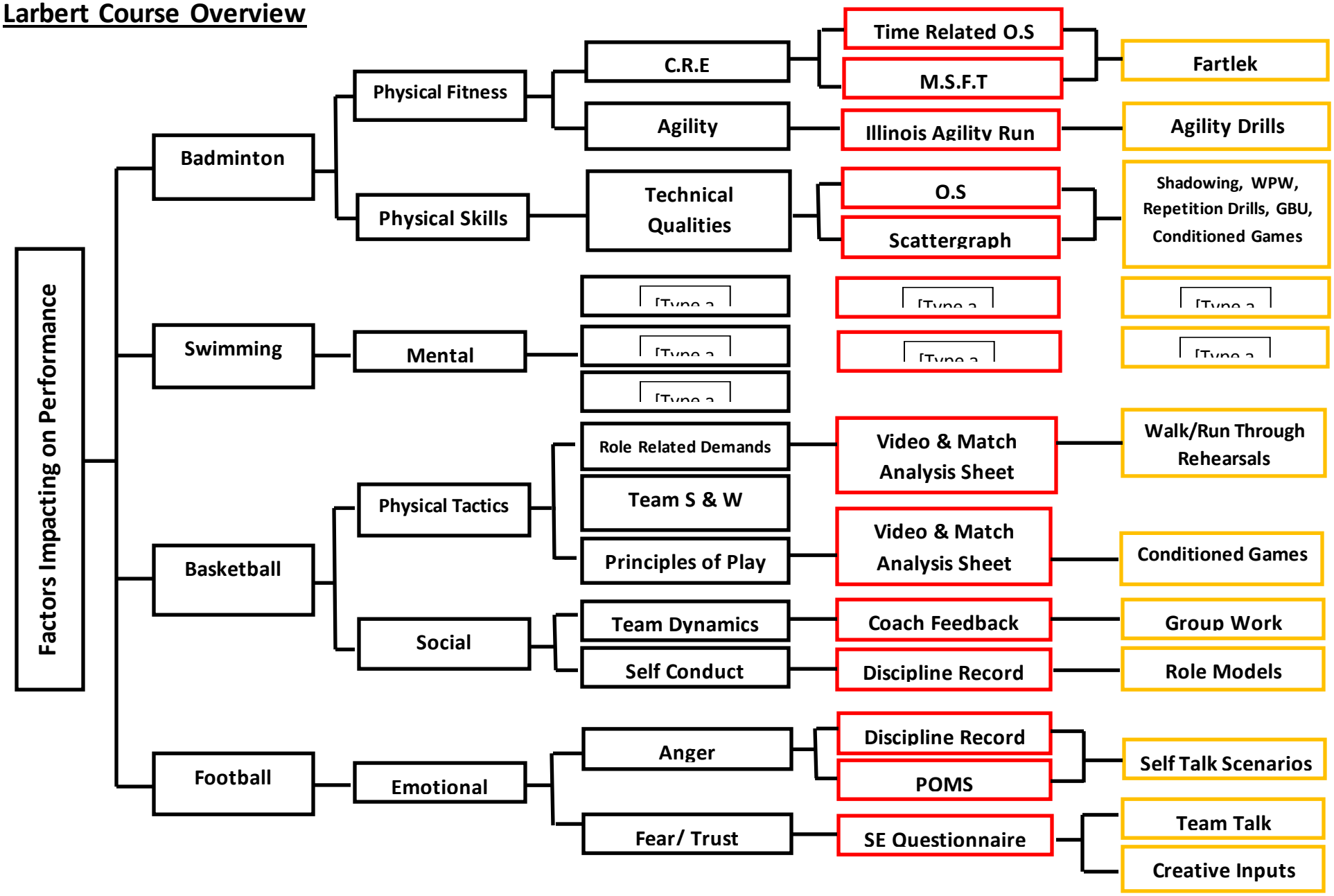
Name: _____

Teacher: _____

MENTAL, EMOTIONAL, SOCIAL AND PHYSICAL FACTORS IMPACTING ON PERFORMANCE TABLE

Mental	Emotional	Social	Physical		
			Fitness	Skills	Tactics
Concentration **Level of Arousal** **Mental Toughness** **Decision Making**	**Happiness / Sadness (affecting confidence and resilience)** **Anger (affecting decision making and self-control)** **Fear (affecting confidence and decision making)**	**Team Dynamics:** Co-operating with others Contributing to a team Relationships Self-Conduct Working in isolation Etiquette Respect for self and others **Environmental Issues:** Barriers to participation	**Physical aspects fitness:** Cardio-Respiratory Endurance Muscular Endurance Speed, Strength, **Skill-related aspects fitness:** Co-ordination, Agility, Reaction Time, Balance	**Skill repertoire** **Technical qualities:** Rhythm, Timing, Consistency **Special qualities:** Imagination, Flair, Creativity **Quality of performance:** Fluency, Effort, Accuracy, Control	**Personal strengths and weaknesses** **Role related Demands** **Team Strengths and Weaknesses** **Principles of play:** Width, Depth, Mobility, Penetration, Support, Communication

Larbert Course Overview



SECTION 1 : PLANNING AND PREPARATION

a) Explain the relevance of two challenges that you face in this single one off performance

Challenge 1

Challenge 2

4 marks

1b) Explain how you will prepare to meet these challenges.

Challenge 1

Challenge 2

4 marks

1.2 EVALUATE THE IMPACT OF POSITIVE AND NEGATIVE FACTORS ON PERFORMANCE

PHYSICAL FACTOR – SKILLS

TECHNICAL QUALITIES

Preparation/Action/Recovery

Skills may be analysed under the terms of Preparation, Action and Recovery.
This means looking at the beginning, middle and end of how a technique is performed.
The Preparation phase is how your body moves into position to perform a technique.
The Action phase is the movement required to perform the main part of the technique.
The Recovery phase is getting into position and regaining your balance after performing the technique.

Activity	Technique	Preparation	Action	Recovery
Badminton	Overhead clear	Move into position under the shuttle, stand side on to the net, hold the non-hitting arm up pointing at the shuttle and racket behind the head.	Transfer the weight from back to front foot as you swing the racket forward. Arm is straight to hit the shuttle.	Follow through down and across the body and move forward back to the ready position. Watch the shuttle, ready for the next shot.

There will be a positive or negative impact on your whole performance depending on how effective you are at each technique in your activity i.e. Badminton – High serve, Overhead clear, smash etc.

PHYSICAL – SKILLS AND TECHNIQUES

TECHNIQUE :- HIGH SERVE

CAUSE –

The shuttle is hit high to the back of the court

POSITIVE EFFECT ON PERFORMANCE	NEGATIVE EFFECT ON PERFORMANCE
My High Serve had a very positive impact on my performance. More than 80% of my serves were played high above my opponent's racket and into the back tramlines. I pushed my opponent right to the back of the court. This made it difficult for him to play an attacking shot back, giving me the initial advantage in the rally and opening up the front of the court for me to further attack into. My opponent also found it difficult to clear the shuttle to the back of my court, also giving me the opportunity to attack their short return shot.	My High Serve had a negative impact on my performance. Although I can get enough height on my serve, I generally play the shuttle too short, with it landing in the middle of the court. The serve is so predictable in trajectory that my opponent is able to anticipate the flight and is in position ready to attack. This gives my opponent the initial advantage in the rally because it gives her time to react and attack my serve with a smash, which I struggle to return. I am also unable to manoeuvre my opponent to the back of the court which would open up the front of the court for me to attack into. Instead I am allowing her to take the dominant central position on her court and to manoeuvre me instead.

TECHNIQUE :- LOW SERVE

CAUSE –

POSITIVE EFFECT ON PERFORMANCE	NEGATIVE EFFECT ON PERFORMANCE

BADMINTON

PHYSICAL – SKILLS AND TECHNIQUES

TECHNIQUE :- OVERHEAD CLEAR

CAUSE –

POSITIVE EFFECT ON PERFORMANCE	NEGATIVE EFFECT ON PERFORMANCE

TECHNIQUE :- DROP SHOT

CAUSE –

POSITIVE EFFECT ON PERFORMANCE	NEGATIVE EFFECT ON PERFORMANCE

BADMINTON

PHYSICAL – SKILLS AND TECHNIQUES

TECHNIQUE :- SMASH

CAUSE –

POSITIVE EFFECT ON PERFORMANCE	NEGATIVE EFFECT ON PERFORMANCE

TECHNIQUE :- BACKHAND OVERHEAD CLEAR

CAUSE –

POSITIVE EFFECT ON PERFORMANCE	NEGATIVE EFFECT ON PERFORMANCE

QUALITY OF PERFORMANCE

Accuracy

Accuracy is the ability to direct a ball, shuttle or any other object used in an activity to a target area with precision. A performer can also demonstrate accuracy performing movements with precision so that they look exactly like a model performance.

Impact on Performance

For example, you could demonstrate accuracy in badminton through returning an overhead clear to the back tramlines on your opponent's side of the court or by placing a penalty flick in hockey accurately to the corner of the goal away from the goalkeeper. A dancer may also demonstrate accuracy by performing a sequence of dance steps in an exact order with precision and correct technique.

ACCURACY
CAUSE –
I can direct the shuttle to a target area with precision.

POSITIVE EFFECT ON PERFORMANCE	NEGATIVE EFFECT ON PERFORMANCE

PHYSICAL FACTOR – FITNESS

PHYSICAL FITNESS – CARDIO-RESPIRATORY ENDURANCE.

Definition

Cardio Respiratory Endurance is the ability of the heart and lungs to provide the working muscles with oxygenated blood for a prolonged period of time.

Impact on Performance

Poor CRE will result in the performer becoming breathless more quickly and unable to keep up with play or maintain a high skill level. Decision making may also be affected and longer rest periods will be needed to aid recovery. For example, Cardio Respiratory Endurance (CRE) is required in order to last the full 90 minutes of the game in football. During the game you will do a lot of work both on and off the ball. You will make repeated runs to support attacks, get into space to receive the ball, make runs with the ball, and chase back to defend etc. The energy required to do this is supplied **aerobically,** which requires your heart, lungs and blood system to supply oxygen to the working muscles throughout the game. Therefore a high level of CRE **delays the onset of fatigue.** This means that your work rate stays high so you can fulfil your role in the team and maintain a high skill level (as fatigue can also affect your control, touch, concentration and decision making).

In Badminton, there is no time limit in the game, so games can continue for a long length of time. The player still has to perform at the highest level for the duration of the game and out their opponent under pressure for the whole game.

CARDIO-RESPIRATORY ENDURANCE

CAUSE –

The ability of the heart and lungs to provide the working muscles with oxygenated blood for a prolonged period of time.

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POSITIVE EFFECT ON PERFORMANCE	NEGATIVE EFFECT ON PERFORMANCE

PHYSICAL FITNESS – AGILITY

Definition

Agility is the ability to change the position of the body quickly, precisely and with control. This uses a combination of speed and flexibility.

Impact on Performance

Agility helps when competing in activities that require you to change direction quickly whilst keeping balanced and in control. It is helpful when participating in racket sports such as squash, tennis and badminton, and also in team games like rugby, basketball, volleyball, hockey and football. For example, Agility is important in football as it enables a player to turn quickly and evade challenges. A player who is agile can also respond quicker to an opposing player, close down or jockey an opponent and he or she is also able to explosively stop, change direction and increase speed again. In Badminton, agility helps a player move around the court reasonably smoothly reaching shuttles at the back and front of the court. A lack of agility would make it difficult for a player to reach shuttles played to different areas of the court causing them to be under pressure or lose the point.

AGILITY

CAUSE –

The ability to change the position of the body quickly, precisely and with control. This uses a combination of speed and flexibility.

POSITIVE EFFECT ON PERFORMANCE	NEGATIVE EFFECT ON PERFORMANCE

1.1 ANALYSE METHODS USED TO GATHER DATA

METHODS OF COLLECTING DATA

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PHYSICAL FACTOR

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SKILLS

TECHNICAL QUALITIES	**QUALITY OF PERFORMANCE**
Preparation/Action/Recovery	**Accuracy**

Video Performance
General Observation Schedule
Focused Observation Schedule
Scattergraph

Video Performance

The observer is asked to video the player's performance in a competitive games-like situation i.e. single game. The video is positioned to ensure that the full court is in view and that all the shots are recorded. The video is used in conjunction with the General and Focussed Observation Schedule.

Benefits –

- The player can view and analyse his/her own performance
- Strengths and weaknesses in the whole performance can be analysed (G.O.S)
- Strengths and weaknesses within a skill/technique can be analysed (F.O.S)
- The analysis can be very accurate because you can freeze frame, rewind, stop and use slow-motion.
- The action can be viewed repeatedly
- It gives a permanent record which can be viewed at any time for comparison purposes.

Limitations –

- You need special equipment.
- Attention has to be given to positioning of the video to catch all possible angles of the performance.
- It can be time consuming to complete, especially if there are many players to record (unless multiple video/I-Pads are available).

General and Focused Observation Schedule

A General Observation Schedule (G.O.S) gave me a lot of initial information on a variety of skills and techniques like High Serve, Drop shots and smash etc. This O.S. was a piece of paper with a list of the basic skills and techniques down the left hand side and two columns of effectiveness headed 'effective' and 'not effective'. I watched the video of my Badminton game and ticked the appropriate box, with the effectiveness of the skill being compared to the set criteria for success for each skill. This highlighted which of the skills or techniques were particularly weak and in need of improvement.

I the used the Focused Observation Schedule (F.O.S.), to further analyse the performance of one specific skill. This would be one skill or technique, one which had been identified in the G.O.S as weak i.e. the smash. The F.O.S. is a piece of paper with the technical criteria of the weak skill on it. I laid out the criteria under the headings of preparation, action and recovery. Having watched the video again, the success of each of the technical criteria is measured against the set criteria, with a tick going in the effective or not effective box depending on the performance.

Benefits –

- Simple and easy to use each time
- Permanent, written record, can be viewed at any time
- Lots of personal data collected in a systematic and planned manner
- The analysis is conducted in the same way each time, therefore results are reliable.
- Data collected – accurate – make comparisons of performance – before, during and after development
- Checks that development programme was effective + targets reached
- All the analysis relies mainly on objective judgement.
- Data collected in different ways – all consistently identify the trends in the strengths and weaknesses.
- By using <u>performance setting</u> –
  True reflection of ability – playing against a team better than us = negative results, playing against a team not as good= positive results.
- By using perform in context –
  Meaningful results – perform in the environment of competitive play, facing realistic pressures

Limitations –

- If the performance is fast paced, it may be difficult to keep up and collect all of the information by Schedule alone. Valuable data may be missed and the accuracy of the feedback may be affected.
- It can be time consuming to analyse, particularly if a lot of people have to be analysed.
- When analysing you should play against opponents of similar ability so as to achieve a true reflection of your performance.

Scattergraph

Scattergraphs gave me a very accurate analysis because they measured and visually demonstrated the extent of accuracy of placement of the shuttle.
A Scattergraph is drawing of a Badminton court with the correct lay-out and net laid out on it. The observer plots the landing of the shuttle on the diagram using a cross.

Benefits –

- Simple and easy to use each time
- Permanent, written record, can be viewed at any time
- The analysis is conducted in the same way each time, therefore results are reliable.
- Data collected – accurate – make comparisons of performance – before, during and after development
- Checks that development programme was effective + targets reached
- All the analysis relies mainly on objective judgement.
- Data collected in different ways – all consistently identify the trends in the strengths and weaknesses.

Limitations –

- If the performance is fast paced, it may be difficult to keep up and collect all of the information by Schedule alone. Valuable data may be missed and the accuracy of the feedback may be affected.
- It can be time consuming to analyse, particularly if a lot of people have to be analysed.

GENERAL OBSERVATION SCHEDULE – TECHNIQUES

TECHNIQUES	EFFECTIVE	NOT EFFECTIVE	% SUCCESS	PERFORMANCE CRITERIA
HIGH SERVE				Shuttle played to back tramlines Shuttle played high over opponent's racket
LOW SERVE				Shuttle played low over the net Shuttle just reaches into the front corners of the service box.
OVERHEAD CLEAR				Shuttle played to back tramlines Shuttle played high over opponent's racket
DROP SHOT				Played as a clear/smash in preparation Shuttle played high at first Shuttle drops between the net and short service line
SMASH				Hit shuttle down as hard as possible Hit shuttle down as steeply as possible Outright winning shot/force a weak return
BACKHAND OVERHEAD CLEAR				Played on backhand Shuttle played to back tramlines Shuttle played high over opponent's racket

BADMINTON - FOCUSED OBSERVATION SCHEDULE – HIGH SERVE

PHASE OF ACTION	MODEL PERFORMANCE	1ST PERFORMANCE	2ND PERFORMANCE
PREPERATION	• Stance is side on to net. • Feet are about shoulder width apart. • Weight is on back foot. • Racket is up and back. • Shuttle is held out in front of the body.		
ACTION	• Shuttle is dropped and racket arm swings forward at speed to help generate power. • Action is whip like. • Weight is transferred forward from back to front foot.		
PREPERATION	• Racket swing finishes up with arm crossing in front of body to finish close to non-racket shoulder. • 'Ready position' and 'base' are recovered.		

From the data gathered on these sheets write up an analysis of your high serve. For example does your high serve continually reach the tramlines? Are there any specific subroutines that are identified as being faulty? How does this affect the performance of the skill and your overall performance in the game? What are your thoughts and feeling

BADMINTON
FOCUSED OBSERVATION SCHEDULE – OVERHEAD CLEAR

PHASE OF ACTION	MODEL PERFORMANCE	1ST PERFORMANCE	2ND PERFORMANCE
PREPERATION	• Starts from base. • Performer tracks path of shuttle & begins move towards place shuttle will be played from. • While moving body turns side on. • Racket is taken up and back behind head. • Rear shoulder drops. • Front arm balances racket arm (both are raised)		
ACTION	• Shoulder arm and racket are brought forward at speed to generate power. • Action resembles throwing action. • Weight is transferred forward from back to front foot coincide with shuttle impact. • Impact is with open racket face racket shoulder. • Strike is through shuttle and weight transfer continues forward.		
RECOVERY	• Racket comes down and across body in recovery position. • Forward movement at end of action leads to return to 'base' and recovery of 'ready position'.		

BADMINTON
FOCUSED OBSERVATION SCHEDULE – DROP SHOT

PHASES OF ACTION	MODEL PERFORMANCE	1ST PERFORMANCE	2ND PERFORMANCE
PREPERATION	• Starts from base • Tracks shuttle path and begins to move towards place shuttle will be played from. • While moving body turns side on to net • Racket is taken up and back. • Weight shifts mostly onto back foot. • Front arm balances racket arm.		
ACTION	• Shoulder arm and racket are brought forward initially at speed then action is checked. • Action resembles throwing action, and looks like a possible clear or smash up to impact. • Impact is above racket shoulder with fine touch. • Deception of touch happens at last moment. • There is some transfer of weight from back to front foot to coincide with moment of impact.		
RECOVERY	• Racket comes down and across body in recovery phase. • Return to balanced ready position at base		

BADMINTON
FOCUSED OBSERVATION SCHEDULE – SMASH

PHASES	MODEL PERFORMANCE	1ST PERFORMANCE	2ND PERFORMANCE
PREPERATION	• Starts from base • Tracks shuttle path and begins to move towards place shuttle will be played from. • While moving body turns side on to net • Racket is taken up and back. • Weight shifts mostly onto back foot. • Front arm balances racket arm.		
ACTION	• Shoulder arm and racket are brought forward at speed to help produce power. • Movement resembles throwing action. • Action is whip like • Impact is above and in front of racket shoulder. • Racket is angled face down on contact. • Weight is transferred forward from back to front foot to coincide with moment of impact.		
RECOVERY	• Racket comes down and across body in recovery phase. • Return to balanced ready position at base		

BADMINTON
FOCUSED OBSERVATION SCHEDULE – LOW SERVE

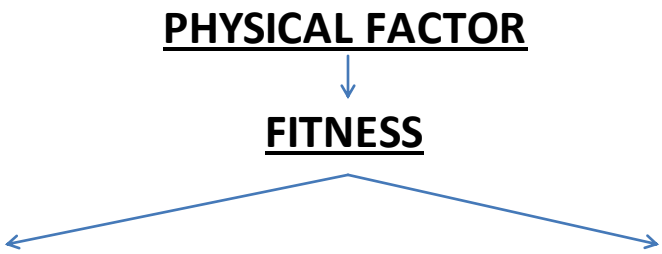
PHASE OF ACTION	MODEL PERFORMANCE	1ST PERFORMANCE	2ND PERFORMANCE
PREPERATION	• Stance is side on to the net. • Shake hands grip. • Feet shoulder width apart with non-racket foot pointing forwards. • Weight is on back foot. • Racket is up and back. • Racket is cocked at the wrist • Shuttle is held out in front of body.		
ACTION	• As shuttle is dropped weight begins to move forward. • Part of each foot remains on the floor. • Racket arm pulled down to contact shuttle below waist height at thigh level. • Racket moves forward, wrist is held back and the speed of the racket is checked. • Whole of the racket head is below waist height at impact point. • Shuttle is guided over the net close to the net cord and fades to front service line. • Racket follow through is short and finishes in line with the serve.		
RECOVERY	• Hips and shoulders roll forward to bring body square to the net. • Racket is brought up to an attacking stance ready to kill a poor lifted reply.		

BADMINTON
FOCUSED OBSERVATION SCHEDULE – BACKHAND CLEAR

PHASE OF ACTION	FEATURES OF 'MODEL PERFORMANCE'	1ST PERFORMANCE	2ND PERFORMANCE
PREPARATION	Starts from base. Performer tracks path of shuttle and begins moving towards place shuttle will be played from. While moving turns back to net. Backhand or thumb up grip Hold racquet arm up – forearm parallel to floor. Racquet head is pointed downward Weight on rear – dominant foot.		
ACTION	Wrist in laid back or cocked position. Elbow leads forward swing. Racquet head trails hand up to contact. Rotate upper body. Reach high – fully extend arm to hit shuttle. Angle racquet face up and outward. Rotate forearm.		
RECOVERY	Racquet head follows through in line with shuttle. Push off dominant foot and return to base.		

BADMINTON – SCATTERGRAPH

	Feeder		
		Performer	



PHYSICAL FITNESS
Cardio-respiratory endurance

SKILL-RELATED FITNESS
Agility

METHODS OF COLLECTING DATA/INFORMATION IN FITNESS –

1. Time-related Observation Schedule
2. Standardised Fitness Tests

Time-related Observation Schedule

A time-related Observation Schedule allows you to gather information on how your level of Cardio-respiratory endurance can affect your performance in Badminton.
This Observation Schedule has the skills, techniques and movement patterns needed to play Badminton down the left hand side with the times of the game, in 5 minute blocks of time, across the top. During the game an observer either completes the Observation Schedule or videos the game so that the player can watch it back later and complete the Observation Schedule themselves.
To complete the Observation Schedule a tick is placed in the appropriate box if the performance is effective and a cross when it is not effective.

Benefits -
Your performance can be tracked over a period of time to see how your skills and movement patterns are affected over the length of the game.
It allows you to collect information at specific times in the game – this will show if there is a decrease in performance at certain times of the game.
It is fairly easy to complete if a video of the performance is used – allowing the data to be accurate.

Limitations –
If the play is fast paced, it is quite difficult to keep up, in addition there are quite a few skills and techniques to watch along with the player's movement patterns. Data may be missed or inaccurately recorded.
It can be time-consuming, viewing the whole game so the Schedule may not be completed and important data could also be missed.

Standardised Fitness Tests

Multi-Stage Fitness Test – Cardio-respiratory endurance

This test measures my current cardio-respiratory endurance level and provides relevant, objective and accurate information on this level. It was relevant because it used standardised test procedures and there was a published table of 'norms' for comparisons to be made if I wanted. The test started with a brisk walk and speed was slowly and progressively increased so that I was running quickly up and down a 20 metre course. The aim of the test was to follow the required pace for as long as possible. Running speed was adjusted by regular beeps from a pre-recorded tape. When I could no longer keep up with the pace, I stopped and recorded the level. Following my C.R.E. training, I used the same test to find out if I had improved. It was important to use the same test before and after training to ensure accurate evidence of improvement.

Benefits

The test is straight forward to perform and only needs a short time to set up.
It is possible to test a number of people at the one time.
It is relevant to the performance of games players in particular because of the regular turning and acceleration.
It is a maximal test which increases its validity.
Increased motivation is possible when others are taking part at the same time.
The score can be compared to classmates, the national average and model performers.
Gives baseline information to compare against at the end of the training programme.
It is valid because it provides statistical data

Limitations

The course has to be measured precisely each time it is administered so as not to invalidate the results.
The surface needs to be non-slippery, with the players wearing appropriate footwear.
Running efficiency and turning technique can negatively affect the performance.
Practice and motivation levels can positively influence the score attainment.
If completed outdoors – environmental conditions can negatively affect the results.
The social dynamics of the group can negatively affect the performance and results.

Norms

Males

Age	Very Poor	Poor	Fair	Average	Good	Very Good	Excellent
12-13yrs	<3.3	3.4 - 5.1	5.2 - 6.4	6.5 - 7.5	7.6 - 8.8	8.9 - 10.9	>10.9
14- 15 yrs	<4.7	4.7 - 6.1	6.2 - 7.4	7.5 - 8.9	8.10 - 9.8	9.9 - 12.2	>12.2
16 - 17 yrs	<5.1	5.1 - 6.8	6.9 - 8.2	8.3 - 9.9	9.10 - 11.3	11.4 - 13.7	>13.7
18 - 25 yrs	<5.2	5.2 - 7.1	7.2 - 8.5	8.6 - 10.1	10.2 - 11.5	11.6 - 13.10	>13.10

Females

Age	Very Poor	Poor	Fair	Average	Good	Very Good	Excellent
12 - 13 yrs	<2.6	2.6 - 3.	3.6 - 5.1	5.2 - 6.1	6.2 - 7.4	7.5 - 9.3	> 9.3
14 - 15 yrs	<3.3	3.4 - 5.2	5.3 - 6.4	6.5 - 7.5	7.6 - 8.7	8.8 - 10.7	>10.7
16 - 17 yrs	<4.2	4.2 - 5.6	5.7 - 7.1	7.2 - 8.4	8.5 - 9.7	9.8 - 11.10	>11.11
18 - 25 yrs	<4.5	4.5 - 5.7	5.8 - 7.2	7.3 - 8.6	8.7 - 10.1	10.2 - 12.7	>12.7

Illinois Agility Test - Agility

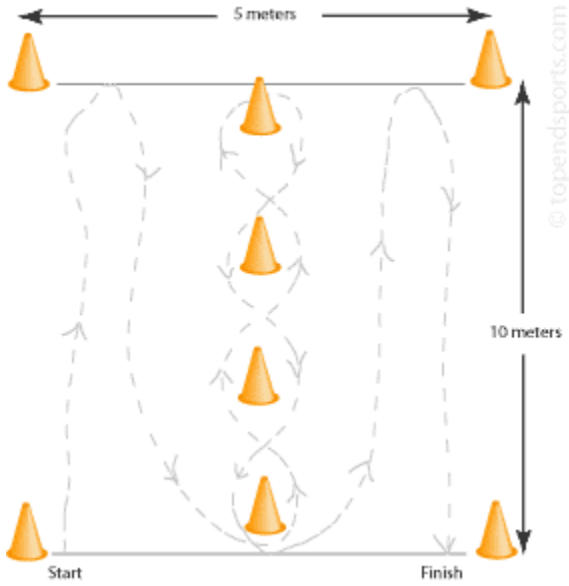
Set-up the course as per the diagram below (The length of the course is 10 metres and the width of the course is 5 metres. Four cones are also used to mark the start, the finish and the two turning points
Another 4 cones are placed down the centre an equal distance of 3.3 metres apart
Participants lie down at the start and put their hands to their sides
On a designated signal, the stopwatch is started and the participants run the course as fast as possible in the direction indicated on the diagram.

Benefits

This test is straight forward to perform and administer.
It requires little in the way of equipment and does not take too long to set up.
It test the players ability to turn in different directions and angles.
It is relevant to the performance of games players in particular because of the regular turning and acceleration.

Limitations

The course has to be measured precisely each time it is administered so as not to invalidate the results.
The surface needs to be non-slippery, with the players wearing appropriate footwear.
The final results can be subject to timing inconsistencies.
The test does not distinguish between left and right turning ability.



Norms

Rating	Male	Female
Excellent	<15.1 seconds	<17.1 seconds
Good	15.1 - 16.1 seconds	17.1 - 18.0 seconds
Average	16.2 - 18.1 seconds	18.1 - 21.8 seconds
Fair	18.2 - 18.3 seconds	21.9 - 23.1 seconds
Poor	>18.4 seconds	> 23.2 seconds

TIME-RELATED OBSERVATION SCHEDULE

TIME	**0 – 5**	**5 – 10**	**10 – 15**	**15 - 20**	**20 - 25**	**25 – 30**	**30 – 35**	**35 – 40**	
SKILLS									
HIGH SERVE									
LOW SERVE									
OVERHEAD CLEAR									
DROP SHOT									
SMASH									
NET PLAY									
BACKHAND CLEAR									
BACKHAND SMASH									
COURT MOVEMENT									
TO SHUTTLE									
TO 'T'									

TIME-RELATED OBSERVATION SCHEDULE – PERSONAL RESULTS

Summary of my strengths and development needs.

STANDARDISED FITNESS TESTS – PERSONAL RESULTS

Aspect of Fitness	Fitness test	Result	Monitor	Review
Cardio-respiratory endurance	Multi-Stage Fitness Test			
Agility	Illinois Agility test			

1.3 EXPLAIN APPROACHES TO IMPROVE PERFORMANCE (Methods of Practice)

METHOD OF PRACTICE	REASONS FOR USING METHOD	BENEFITS	LIMITATIONS
Shadow Practice – practicing a skill without an object to hit	To work on footwork or movement skills in isolation. To focus on one particular aspect of the skill. To gain a feeling for the action as the player is new to the performance. To groove the movement.	Learn the correct technique with no pressure of the shuttle or opponent. Isolate specific subroutines of technique and practice this. Build up subroutines at own pace.	If repeated for too long boredom can have a negative effect on my development. Not using the correct technique – reinforcing poor technique
Whole-part-whole When developing a skill, I will practice and develop one subroutine of the skill and then try the whole skill again.	You can already do the skill/tactic To find a weakness in the whole skill/tactic. To develop one part of the skill/tactic. To improve the whole skill/tactic by improving one particular weakness. Used mainly at associative/autonomous stage of learning.	Learn the correct technique with little pressure. Isolate specific subroutines of technique and practice this. Improves the whole skill by improving one weakness at a time. Build up subroutines at own pace.	If there are a lot of weaknesses, may take some time to improve them at this rate. When focused on one weakness, other weaknesses are not getting any better and may still affect the skill
Repetition/drills Involves performing a skill repeatedly and allows the performer to focus on specific subroutines and develop muscle memory.	To repeat a skill over and over to improve consistency of execution in a controlled environment. To develop knowledge and understanding of skill/tactic. The level of difficulty can be gradually increased as you make progress. To build confidence.	Shuttle is fed directly to worker so little movement required and focus can remain on performing subroutines. Performer knows exactly where the shuttle is going so there is less decision making when playing the net shot Drill can be made more challenging as performance improves by adding in movement (recovering back over the service line after each shot)	If repeated for too long boredom can have a negative effect on my development. Loose interest in trying to improve the skill. Not using the correct technique – reinforcing poor technique

Gradual build-up	The skill/tactic is new or complex or dangerous. Skills can be learned progressively. The complexity of the skill can gradually be increased.	Each part of the skill is introduced, practised and mastered before a new part is introduced. Makes it easier to learn the skill step by step.	The player must master one step before moving on to the next step. The skill will not be improved if the steps are rushed. The player will lose confidence because they will not improve. Motivation level will decrease.
Conditioned rally/games The players might be asked to join together a series of techniques in a rally. The player may be told to put a high shot up mid court for the performer to smash	To work in a game situation but focus on specific skills. To improve decision making skills. To improve problem solving skills To increase motivation/confidence to perform the skill in a game. Used mainly at associative/autonomous stage of learning.	Focus remains on the weak shot but allows the performer to practice other skills. Uses the movement that is required in a game	Rally can break down frequently. High skill level needed to keep shuttle 'live'.

APPROACHES FOR DEVELOPING PERFORMANCE

1. PHYSICAL FITNESS – CARDIO-RESPIRATORY ENDURANCE

Fartlek Training

Fartlek is the Swedish word for 'speed play'. Fartlek training involves training over distances far greater than the actual competition distance. We can vary the pace at which we walk and or run and if wished the type of terrain over which we travel. The emphasis is placed on the enjoyment of running fast but within my ability. This type of training produces aerobic or anaerobic effects. It is beneficial to games players like Basketball and Badminton players because you are involved in short intensive activity followed by brief periods of recovery, similar to the game of Basketball and Badminton itself. A session could include –

15 minutes at 60% of maximum heart rate
Sprint for one lamp post / easy jog for 3 lamp posts
Repeat 10 times
Walk for 90 seconds
5 minute jog at 75% of maximum heart rate.

The further advantages of this type of training is that it can be adapted to the individual's personal fitness needs. It is easy to set up, administer and offers variety to the usual monotony of long continuous jogging. It is particularly effective at improving both aerobic and anaerobic aspects of fitness, so it is suited to a wide range of sports people and activities. This mix of fast and slow work involved in Fartlek Training is particularly suited to Basketball and Badminton. It is also far more fun than normal training because of the variety of speed and differing terrain.

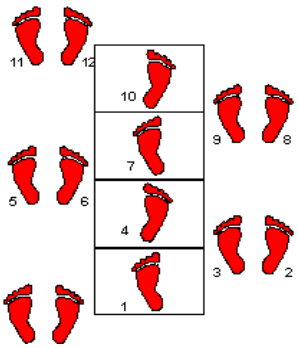
2. SKILL-REALTED FITNESS – AGILITY

Agility Drills

Agility drills are used to practise fundamental movements and then refine these movements. The drills promote a wide range of different foot and movements patterns, some which are common to many sports and others which are unique to that particular sport i.e. Badminton. Through practices, these movements will become 'second nature' and the body will be able to respond quickly to various sport specific patterns.
Improving agility will not only enhance the player's whole performance but also make a contribution to preventing injury. This allows the player to be able to move in and out of difficult manoeuvres that would otherwise be demanding i.e. lunging to the ground at the net to play the shuttle then moving back to the centre 'T' position.
It should be remembered that when doing agility training, the player can learn to anticipate the next move, defeating the purpose of training in agility. So they should also be trained to respond to a directional order i.e. the teacher calling out the directions for an instant response from the player.

There are a huge range of agility drills that can be used and can be grouped into the following categories -

1. **Ladder Drills**



2. Hurdle Drills

3. Cone Drills

PERFORMANCE DEVELOPMENT PLAN (2.1)

FACTOR 1	Factor: Impact on Performance: Targets: Methods of Practice you wish to use and why: How do you plan on monitoring your progress:
FACTOR R 2	Factor: Impact on Performance: Targets: Methods of Practice you wish to use and why: How do you plan on monitoring your progress:

2.2 METHODS TO RECORD AND MONITOR DEVELOPMENT

It is very important that you monitor and evaluate your performance during your training programme. It is crucial to your performance development because it ensures that -

- the content and methods of training/practice were suitable.
- the programme was neither too demanding nor not demanding enough.
- you can continue to identify strengths and weaknesses of the whole programme
- it allows you to make comparisons between your recent performance and that of the original performance, to see if development had taken place.
- you can make adaptations to your programme, so that you can adapt the Frequency, Intensity and or Duration to your precise needs.
- your objectives were being achieved
- you know if further training was needed to continue improvements
- it is used as a motivational tool, especially if you are improving, which will make you want to continue working
- you can reset you objectives to continue with development.

MONITORING METHODS –

There are two main ways of monitoring and evaluating performance –

- **TRAINING DIARY**
- **REPEATING THE METHODS OF DATA COLLECTION USED.**

TRAINING DIARY

A training diary allows you to take notes on your performance development, you will be able to see how you trained on a particular day, what were your results, thoughts and feelings on that days training and plan what steps you are going to take next. This can all be recorded in one area.

REPEATING THE METHODS OF DATA COLLECTION USED.

This means repeating the use of –

- Focused Observation Schedule
- Scattergraph
- The Time-related Observation Schedule
- The Standardised Fitness Tests i.e. the Multi-Stage Fitness Test and/or the Illinois Agility Test

By comparing the original performance with further performances, you will be able to gain valuable information about your progress i.e. what progress you have made, how much progress you have made and specifically where progress has been made.

You must ensure that you follow the exact same procedures as you did in the original analysis - for example using the same methods of data collection, the same conditions, the same way of testing and the same people to help if possible. In this way you will be able to collect accurate and valid information to make your comparisons with.

PERFORMANCE DEVELOPMENT PROGRAMME (2.3)

Session / Week	Description of training completed	Feelings before, during and after session	Next steps / Plan for next session
1			
2			
3			

PERFORMANCE DEVELOPMENT PROGRAMME (2.3)

Session / Week	Description of training completed	Feelings before, during and after session	Next steps / Plan for next session
4			
5			
6			

2.4 EVALUATION OF PERFORMANCE

Having monitored my performance during the development programme, I am now in a position to evaluate my progress and achievements from the information collected. I will then also be in a position to identify my future development needs.

I will consider the information collected and describe the progress under the following headings –

Have I improved?

Why have I improved?

What evidence do I have to support these claims?

FACTOR	**METHODS OF MONITORING**	**EVALUATION OF PERFORMANCE –** **Have I improved?** **Why have I improved?** **What evidence do I have to support this?**
PHYSICAL: **SKILL**	**TRAINING DIARY** **FOCUSED OBSERVATION SCHEDULE** **SCATTERGRAPH**	

FACTOR	METHODS OF MONITORING	EVALUATION OF PERFORMANCE – Have I improved? Why have I improved? What evidence do I have to support this?
PHYSICAL: FITNESS	**TIME-RELATED OBSERVATION SCHEDULE** **MULTI-STAGE FITNESS TEST** **ILLINOIS AGILITY TEST** **(STANDARDISED FITNESS TESTS)**	

2.5 FUTURE DEVELOPMENT NEEDS

I have now evaluated my performance after finishing a development programme. It is important that I keep looking for areas of my performance that still need improvement, how I will go about this improvement and the impact it should have on my whole performance.

FACTOR	IMPACT ON PERFORMANCE	FUTURE DEVELOPMENT NEED

APPENDIX 1 - SKILLS

APPROACHES TO IMPROVING PERFORMANCE - THE PRINCIPLES OF EFFECTIVE PRACTICE

The Principles of Effective Practice are used to ensure that the development programmme of a weak skill or technique is effective and meaningful to the performance. There are 4 Principles of Effective Practice –

1. Identify strengths and weaknesses
2. Set objectives
3. Consider the work/rest interval
4. Practices show gradual progression in difficulty.

First the performer's strengths and weaknesses are identified by using Observation Schedules (General and Focused) and the Scattergraph. This made sure that the practices were based on the performer's current level of ability allowing them to be realistic and achievable.

Second, the performer will set objectives and be aware of what they wanted to achieve for each individual sessions, the whole programme and the whole year's work. This allows the performer to stay focused on what they want to achieve. When the performer sets the objectives, they must ensure that they are specific to them, to their ability, their experience and to what they wanted to achieve in the game. In addition, they must set measurable objectives for improvement by using the results of the O.S./Scattergraph this shows the extent of their improvement. They should also make a point in discussing and agreeing their objectives with the teacher, which allowed them to work together co-operatively. The teacher also helped to make realistic objectives which would be achievable so that the performer stayed motivated to continue with the development. The objectives should also be time-phased i.e. have short term objectives for the sessions, medium term objectives for the programme and long term objectives for the years development. The performer also knew that the objectives should be exciting so they stayed interested in what they were doing and pleased when they achieved success. Last they made sure that they recorded all the objectives in a written record, in this way they would be more likely to keep on target.

The third principle of considering the work/rest interval is also important to the performer and the success of their development programme. They should take into account that practices should be short but challenging. If the sessions are too long or hard, tiredness and boredom would set in, their performance would deteriorate and they would become demotivated.

The last principle was that practices should show progression in difficulty. As the performance improves, more demanding practices are needed in the programme. In addition, practices should become more games-like as the performance improves.

APPENDIX 2 - FITNESS

APPROACHES TO IMPROVING PERFORMANCE - THE IMPORTANCE OF ASSESSING YOUR LEVEL OF FITNESS BEFORE TRAINING

It is important to assess my level of cardio-respiratory endurance and agility, before planning a training programme, so that I can establish what my pre-training fitness levels are and identify what the fitness needs are, that I need to work on. I did this through two methods, firstly a Time-related Observation Schedule and secondly through a standardised Fitness Test (The Multi-Stage Fitness Test and Illinois Agility Test). The Observation Schedule identified a marked deterioration in most skills and techniques and in my court movement as the game continued. This identified a problem with my cardio-respiratory endurance level and the Multi-Stage Fitness Test confirmed a very low score in this aspect of fitness, in addition to my low level of agility discovered through using the Illinois Agility test. Knowledge of my pre-training fitness provides me with a 'bench-mark' to work from, allowing me to set realistic targets for my training programme, targets which I could achieve but would still make for a suitably challenging training programme. This information also helps me by allowing me to plan for realistic use of frequency, intensity and duration of the training sessions so that I can make suitably challenging demands on myself but within safe limits. Also by knowing my starting level of cardio-respiratory endurance and agility, I knew by the use of the table of norms how much I needed to improve by. One of the most important aspects of initially collecting data was that during the programme I would be able to monitor the success of the training schedule and after the programme I would be able to compare my results using once more the Time-related Observation Schedule, the Multi-Stage Fitness Test and the Illinois Agility test, to find out how if I had improved, how much I had improved by and specifically where I had made the improvement. Lastly, if I had more than one fitness need, the information I collected before I started can also help me to prioritise my most urgent training needs.

APPENDIX 3 - FITNESS

APPROACHES TO IMPROVING PERFORMANCE - THE PRINCIPLES OF TRAINING

The Principles of Training are used to ensure that all training programmes will be safe and effective, no matter which subfactor they are trying to improve.

There are four Principles of Training, **Specificity, Progressive Overload, Adaptation and Reversibility.**

Using the Principles of Training to improve Cardio-respiratory endurance –

First, I ensured that by concentrating on developing cardio-respiratory endurance, I would improve my performance gradually, so that the training programme was straight away relevant to my needs, the activity itself and the role I play within the team (SPECIFICITY). I tested my initial level of fitness through a Time-related Observation Schedule and a Fitness Test using a standardised test i.e. The Multi-Stage Fitness Test. This showed my strengths and weaknesses, provided baseline information for monitoring training, gave me my initial starting levels, the ability to compare performances during and after training and comparisons to other performers results i.e. national norms.

Using PROGRESSIVE OVERLOAD I needed to make my body work harder than usual, so I planned to set up a training programme to develop cardio-respiratory endurance. Then by using the aspects of Frequency, Intensity and Duration I set up a safe but effective programme. I was to train 3 times a week (FREQUENCY), I would work continuously, ensuring that my pulse rate stayed within my personal training zones, which is 70 – 85% of your maximum heart rate, worked out by using the Karvonen Formula, for the set period of time i.e. 20 minutes(INTENSITY). My personal training zone was between beats a minute. In addition, my whole training programme was to last for 2 months (DURATION).

After monitoring during my training and reviewing my training progress at the end of the programme, I would need to use the principle of ADAPTATION. My body will react to the training load by increasing its ability to cope with these loads. So the body as to be made to work harder again to ensure that my cardio-respiratory fitness level keeps increasing and improvement continues. So to ensure that this happened, I increased the Frequency of my training to four times a week and the Duration by working for 25 minutes in each session. I still made sure I kept my pulse rate within my Training Zone during my training so that I trained at a safe and effective manner.

In the final principle of REVERSIBILITY, I was to remember that if I stopped training, my fitness level would deteriorate to the original level before I started training. The shorter time I have trained for, the quicker I would return to this original level and conversely the longer I had trained for, the longer it takes to return to this fitness level. But I was motivated to continue with my training for the three months because I could see the results of my fitness level and performance level increasing within the game situation.

APPENDIX 4 - FITNESS

APPROACHES TO IMPROVING PERFORMANCE
SETTING PERSONAL GOALS BEFORE TRAINING

When planning a training programme it is important to set specific goals for the development of your current levels of performance. It gives you something to work towards, a target. When setting goals I used set principles to guide me. Firstly I made goals specific, specific to me, my ability and my experience in the activity. It made me focus of what I wanted to achieve. Secondly, I made sure my targets were measurable to check if improvement was being made by using Time-related Observation Schedules and Standardised Fitness Tests to evaluate my performance. Thirdly, I discussed and agreed my goals with the teacher, we made sure that they were realistic and achievable, otherwise they would be impossible to reach and my lead to disappointment. Therefore, in my case, I was clear where I was going and motivation remained high. Fourthly, my goals were time-phased, in other words I set short, medium and long term goals to achieve. Next I knew I was interested in achieving my goals and when I did I was pleased and excited. At all times I made a written record of what I wanted to achieve to refer back to and keep me focused.

It is important to set short, medium and long term goals so that you have something that can be measured. Write in the boxes below your time-phased goals for your training programme.

SECTION 3 : EVALUATION

3a) Analyse the effectiveness of your planning and preparation for the two challenges explained in 1(a)

Evaluation of Challenge 1

Evaluation of Challenge 2

6 marks

3b) Evaluate at least one strength of, and at least one area for development, from your performance.

6 marks

HWB Profiling

What parts of this unit/block I have performed well in…

How have you shown you can plan and organise?

Where have you shown problem solving skills?

When have you used oral communication?

When have you used written communication?

How have you used literacy across learning?

How have you used numeracy across learning?

When have you successfully worked with others?

When have you shown leadership?

In my performance I still need to work on…

How will I be able to achieve this?

Parental Signature:

Date:

Comment:

Senior Learning Conversations

Name

Date of Meeting

My teacher and I have identified the following strengths;

Within this area it has been agreed that I need to continue to work on..

From the list below we discussed the following skills as my strengths…

From the list below we discussed the following skills as areas to work on…

Planning & organizing
Problem solving
Customer handling
Team working
Other technical and practical
Oral communication
Written communication
Strategic management
Computer literacy/using IT
Literacy
Using numbers
Thinking skills
Health and wellbeing across learning
Working with others
Leadership
Personal learning planning and career
Enterprise and employability
Physical coordination and movement
Additional IT or software
Numeracy