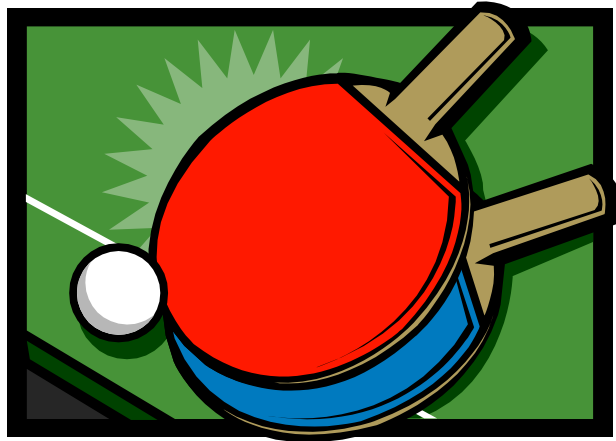
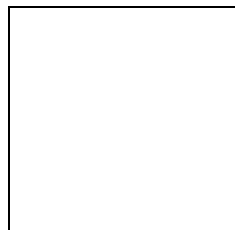


NATIONAL 5 / HIGHER TABLE TENNIS RESOURCE



LOUDOUN ACADEMY
PHYSICAL EDUCATION DEPARTMENT

@loudounpe
www.loudounpe.wordpress.com



CONTENTS

Introduction

- 2 Mental, Emotional, Social and Physical Factors Impacting on Performance Table
- 3 Loudoun Academy Course Overview
- 4 An Introduction To table Tennis

Section A -Features, Definitions and Impact on Performance

- 5 Physical Factor (Skills)
(Accuracy, Consistency, Adjustment and Flair)
- 6-7 Emotional Factor
(Happiness/Sadness, Anger and Fear)

Section B - Gathering and Analysing Data

- 8-16 Physical Factor
(Internal Feedback, Coach/ Teacher Feedback, General Observation Schedule, Focussed Observation Schedule, Scattergram and Video)
- 17-18 Mental Factor
(Questionnaires)

Section C - Approaches to Performance Development

- 19-20 Physical Factor (Skills) - Approaches to Performance Development
(Shadow Practice, Repetition Drills, Conditioned Games and Methods of Learning)
- 21-22 Emotional Factor - Approaches to Performance Development
(Deep Breathing and Positive Self-Talk)

Section D - Personal Development Planning

- 23 Skill Classification
- 34 Goal Setting
- 25-26 Stages of Learning
- 27-28 Principles of Effective Practice
- 29-30 Physical Factor (Skills) - My Development Programme

Section E - Monitoring and Evaluating

- 31 Monitoring Performance Development
- 32 My Training Diary
- 33 Evaluating Performance Development and Future Development Needs

Unit and Course Assessment Help

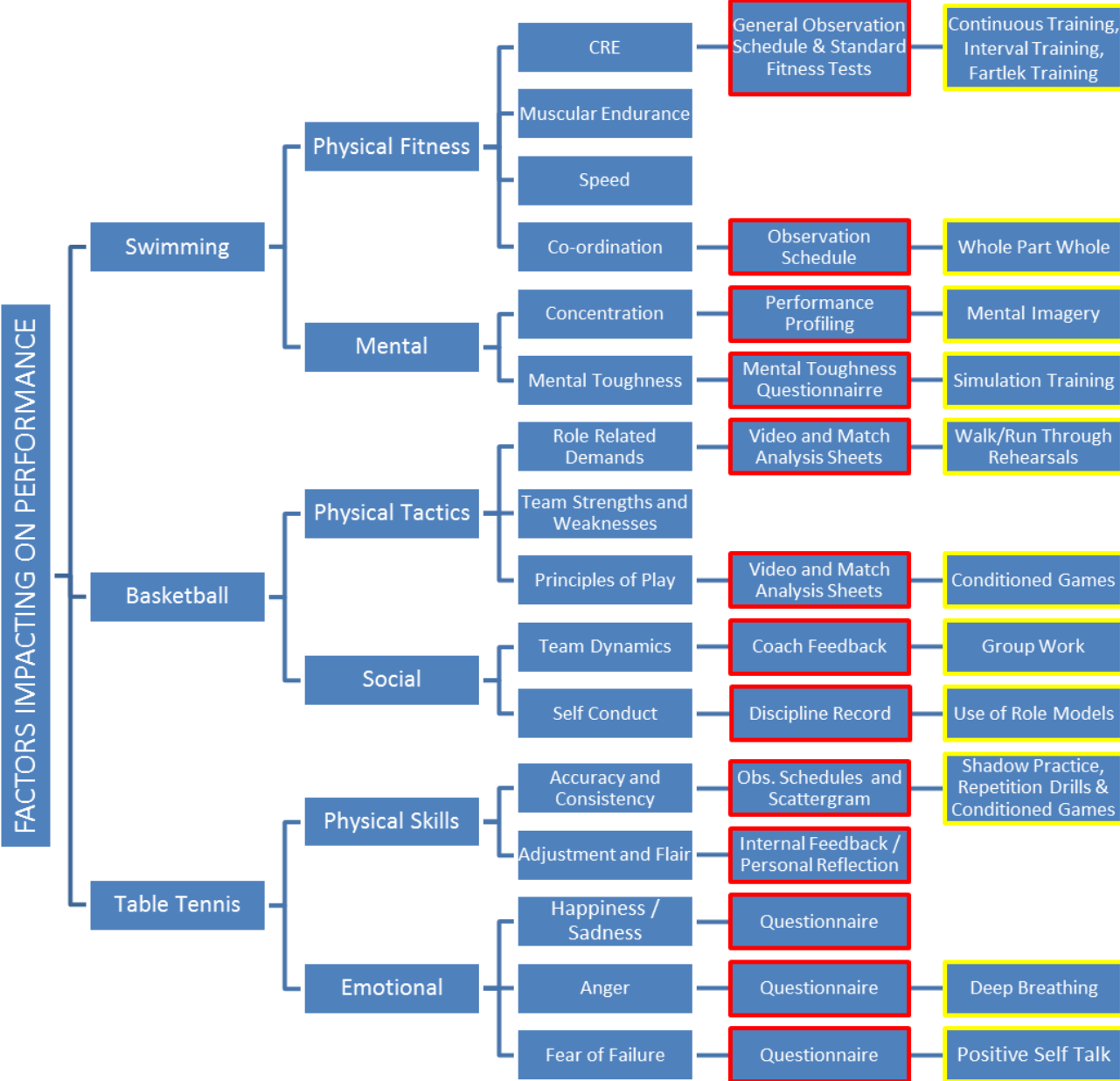
- 34 Command Words

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, Flexibility 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

There are four factors which can affect how well you perform in an activity. In this table tennis block we will focus on various features within the physical (skills) and emotional factors.

LOUDOUN ACADEMY COURSE OVERVIEW



AN INTRODUCTION TO TABLE TENNIS

You can watch the video link below to find out the essential Table Tennis Rules.

http://www.youtube.com/watch?v=jjbFbNiG_iY - Essential Table Tennis Rules

Table Tennis Strokes

A player with a high skill repertoire in table tennis will be able to execute all of the following strokes effectively:

Short Serve	<ul style="list-style-type: none">- Normally played with backspin- Inhibits opponent's ability to attack- Increases own chances to attack
--------------------	---

Long Serve	<ul style="list-style-type: none">- Normally played with topspin- Forces opponent further back from table- Provides greater opportunity to exploit angles
-------------------	---

Forehand Push Backhand Push	<ul style="list-style-type: none">- Low trajectory played with backspin- Inhibits opponent's ability to attack- Increases own chances to attack
--	---

Forehand Drive Backhand Drive	<ul style="list-style-type: none">- Attacking stroke with topspin- Most effective when placed deep and/or angled with speed.- Reduces opponent's organisation time- Increases own organisation time- Forces opponent back creating an opportunity to exploit angles
--	---

Smash	<ul style="list-style-type: none">- No (minimal) spin.- Normally played with forehand after a high return to capitalise on opponent's error
--------------	--

Topspin / Backspin / Sidespin

Topspin is rotation of the ball with the top of the ball moving away from the player. Backspin is rotation of the ball with the top of the ball moving towards the player.

Spin can be accomplished by brushing the ball, rather than hitting the ball. Changing the angle of the bat, angle of the swing and/or point of contact with the ball can all help to assist spin. Sidespin is also possible with most strokes and, although more complex, can be very effective.

PHYSICAL FACTOR (SKILLS) - FEATURES, DEFINITIONS & IMPACT ON PERFORMANCE

Accuracy

Definition

Accuracy is the ability to direct a ball, shuttle or any other object used in an activity to a target area with precision.

Impact on Performance

Accuracy is a particularly important feature in most net and wall games. For example, accuracy is required in table tennis by returning the ball to the corner of the table or to the opposite side of the table at which your opponent is standing.

Consistency

Definition

Consistency is the ability to perform skills / movements correctly over and over again.

Impact on Performance

Accuracy and Consistency are both key for an effective performance. For example, a setter in volleyball always being able to set the ball at an appropriate height and place for their team mate to perform a more powerful spike and therefore put the other team under more pressure. In table tennis it is important to consistently serve with accuracy. If your serve is inconsistent you have more chance of faulting or your opponent may find it easier to return the ball with an attacking shot.

Adjustment

Definition

Adjustment is the ability to alter, change or move your body/body parts slightly in order to be in the desired position to perform a skill/action more effectively.

Impact on Performance

Adjustment is an important feature of performance when a performer is required to react quickly to a given situation. In table tennis, you might adjust/alter your footwork to allow you to play a forehand shot as opposed to using a 'weaker' backhand shot. This could benefit your performance as it could allow you to play a more attacking forehand drive shot and put your opponent under pressure.

Flair

Definition

Flair is the ability to instinctively perform uniquely or with style.

Impact on Performance

Having good flair can allow you to deceive an opponent as the skill you execute will be unexpected. No flair may result in your performance becoming predictable making it easy for an opponent to be able to read what you are about to do before you execute the skill. For example, a lack of flair and disguise in your play may lead to an opponent anticipating your return shot in table tennis which will give them more time to plan a winning shot.

EMOTIONAL FACTOR - FEATURES, DEFINITIONS & IMPACT ON PERFORMANCE

Happiness/Sadness

Definition

Happiness / Sadness are emotional states of the mind. Emotions range from feeling content and joy (happy) to a feeling of despair, grief or sorrow (sad).

Impact on Performance

Happiness will affect performance positively and sadness will affect performance negatively. These emotions can have an impact on your confidence and resilience. For example, being in a happy state of mind before playing table tennis will increase your confidence in executing skills and your self-belief in performing them successfully. If you were sad before playing a game of table tennis, your confidence and belief in your ability to perform skills successfully may be low and result in a poorer level of skill execution or the avoidance of playing certain shots. You may also be less resilient and therefore find it harder to make a comeback when behind in a game.

Anger

Definition

A strong, uncomfortable emotion where the individual has normally been offended, denied or mistreated and tends to react through retaliation.

Impact on Performance

Anger in sport can be very useful in the right situation but more often than not it is about how you control your aggression that makes the difference. Anger can have a huge impact on your self-control and decision making. Opponents look to ways of irritating each other in the hope it puts them off a game plan or affects their performance. Anger can be seen in many different forms in sport. It can be something as simple as a player shouting at themselves after a bad shot, physically lashing out or even over exerting themselves in a skill such as increasing the power of their forehand drive. Anger without control will mostly affect performance negatively and will increase the amount of poor decisions made. A player who controls their anger is much more effective. The ability to control anger comes from practicing in competitive drills which apply pressure to your skill level, such as practicing against a much better opponent.



Fear

Description

Fear is an emotion induced by a perceived threat, which causes you to quickly pull away or, in sporting terms, hide.

Impact on Performance

Fear produces negative thoughts, which can have a direct impact on confidence. Winning and losing is so important in most competitive settings that fear of failure or fear of not performing well is at the forefront of many performers minds. Performers that are full of positive energy and excitement, relishing every challenge, are always the ones that outperform their negative and fearful counterparts. If you fear an opponent then it is likely that your own performance level will drop significantly which will make it easier for your opponent to compete. Having a fear of failure and subsequently low confidence may prevent a performer from pushing themselves outside their comfort zone. All top players take sporting risks even at the potential cost of jeopardising their performance. Risk taking is a fundamental component of being successful and it is only through bold and committed actions that sporting contests are won and lost. In table tennis, fear of failure will impact on your ability to take match-winning risks. The thought of making mistakes in front of class-mates and your teacher may result in you staying inside your comfort zone and playing safe shots. This will cause your performance to be reactive instead of proactive. Instead of taking positive risks, which will empower you to influence the match, you will allow your opponent to take control and dictate play.



PYHSICAL FACTOR (SKILLS) - GATHERING AND ANALYSING DATA

We are going to analyse our Physical Skills by using the following methods:

Internal feedback (Personal Reflection Sheet focussing on Adjustment / Flair)

Internal feedback involves your own thoughts, feelings and sense on your performance. As it is your own thoughts and feelings this type of feedback is continuous and available to you throughout your performance. I also recorded my thoughts and feelings by completing a personal reflection sheet. This involved noting 'Always, Usually, Sometimes or Never' against statements relating to how well I was able to make adjustments and play with flair during the game.

Advantages

- Immediate
- Performer has control of own performance and is not reliant on others. Coaches cannot interfere in a game situation and so internal feedback is important as it might be the only information available to the performer in the game.

Coach (Teacher) Feedback

This is a form of external feedback. It is important that the coach/teacher starts with a positive comment when giving feedback, perhaps some encouragement or some recognition of the parts of the skill that you are carrying out well. This should be followed by highlighting some specific points or areas of the skill that need to be developed.

Advantages

- Provides an independent view
- Experience provides an accurate analysis of performance
- Previous knowledge of performer allows quick analysis if it is a recurring problem
- Coach/Teacher may also be able to identify the strengths and weaknesses of opponent, their game plan, and how it affects you.

General Observation Schedule

This is a table which contains all forehand and backhand strokes along with space to mark the effectiveness of each shot played during the game. An experienced performer/teacher watches the game to ensure data recorded is accurate. Tallies are marked in 3 categories - very effective, fairly effective and ineffective and totals are calculated. Percentages are then worked out to provide statistics on the effectiveness of each stroke with strengths and weaknesses being identified from the data.

Advantages

- Completed in most demanding context of full game situation
- Provides an initial overview of performance on all strokes
- Shows strongest to weakest strokes and therefore allows you to see what stroke is affecting your performance the most
- Information can be used to plan a suitable training programme
- Can be used in conjunction with video to make the gathering of data even more reliable
- It is a permanent record which allows you to look back and compare your results to check for improvements.

Focused Observation Schedule (PAR Analysis sheet)

Focused Observation Schedule compares performance to criteria copied from a 'model performance'. The schedule is broken down into 3 phases - preparation, action and recovery. Each phase then contains subroutines which provide a description of the correct technique. The performer watches a video of them performing their weakest stroke and places a tick against the subroutines that are performed well.

Advantages

- More focussed - allows you to look more closely at one stroke
- Allows comparison to a model performer
- Breaks the skill down further into to specific phases - preparation, action and recovery
- Results are easy and quick to interpret
- Identifies cause of inaccuracy.

Scattergram

This is a type of observation schedule which is used to plot where the ball lands for each attempt of the identified stroke.

Advantages

- More focussed - allows you to look at the accuracy of one stroke
- Results are easy and quick to interpret
- Progress can be measured through setting targets and comparing scores

Video

The video is positioned to ensure that the full court is in view and that all shots are recorded. The recording can then be viewed over and over again and also in slow motion to ensure that no shots are missed when completing the General Observation Schedule. The video can also be paused and slowed down to closely identify problems with technique when completing the Focused Observation Schedule.

Advantages

- Used in conjunction with General and Focused Observation schedules to ensure all shots are recorded.
- For fast games such as table tennis, playback and slow motion will allow you to view performance repeatedly and ensure that you do not miss any skills or details.

Why else should I gather information on my performance?

- Allows me to identify my **strengths / weaknesses**.
- Allows me to make **comparisons** with model performers / other class-mates.
- Allows me to plan my **performance development programme** so that it:
 - is focused on my weakness;
 - has an appropriate starting point;
 - is set at an appropriate level of difficulty;
- Gives me a **permanent record**:
 - that can be accurately repeated;
 - that can be used for monitoring / evaluating later.
- Can **motivate** me to improve.

***DO NOT WRITE ON THIS SHEET**

PERSONAL REFLECTION SHEET (ADJUSTMENT AND FLAIR)

I completed this based on my own internal thoughts and feelings.

My Performance				
			Date:	
	Always	Usually	Sometimes	Never
I am well balanced				
I am relaxed, alert and ready.				
I am able to cover the full table				
My footwork is fluent. I can get to the place at the table where I want to hit the ball with relative ease and with time to play a 'good' shot.				
My footwork is light and quick.				
I am agile. I demonstrate good reach and recovery. I'm able to change direction easily.				
My positioning is good. I recover to 'base' between shots.				
My anticipation is good and my reactions are quick.				
I can use a variety of strokes to make my play unpredictable.				
I can use full or part-power as required to vary my shots.				
I am able to disguise which shot I am going to play.				
I play with my own unique style				

		Service	Push	Drive	Smash
Forehand	Very Effective				
	Fairly Effective				
	Ineffective				
	Total				
	% Very Effective				
	% Fairly Effective				
	% Ineffective				
Backhand	Very Effective				
	Fairly Effective				
	Ineffective				
	Total				
	% Very Effective				
	% Fairly Effective				
	% Ineffective				

***DO NOT WRITE ON THIS SHEET**

FOCUSED OBSERVATION SCHEDULE - PAR ANALYSIS SHEET

Now that you have gathered *general data*, you will *focus* on a specific stroke. You can do this by identifying a weak stroke from your General Observation schedule.

Weak Stroke: _____

In order to construct your PAR Sheet (on next page) follow these instructions:

- Watch a skilled performer - video / classmate / teacher;
- Break the skill down into three *phases*; Preparation, Action and Recovery;
- Break down each phase into further *subroutines*;
 - Try to identify two / three subroutines for each phase.
- Copy subroutines into PAR Sheet;
- PAR Sheet will then be ready to use 😊

Watch back a video of yourself performing the stroke repeatedly and complete the PAR Analysis Sheet. You will be able to:

- View your own performance;
- Pause the video to allow you to observe particular subroutines;
- Watch in slow motion and freeze-frame which makes it easier to observe accurately;
- Rewind any part of the video allowing you to watch it as many times as necessary;
- Keep the video as a permanent record allowing for comparisons at a later date.

*DO NOT WRITE ON THIS SHEET

FOCUSED OBSERVATION SCHEDULE - PAR ANALYSIS SHEET

WEAK STROKE: _____

PHASE OF ACTION	SUBROUTINES	Performance 1 Date:	Performance 2 Date:	Performance 3 Date:
PREPARATION	----- -----			----- -----
ACTION	----- -----			----- -----
RECOVERY	----- -----			----- -----

FOCUSED OBSERVATION SCHEDULE - PAR ANALYSIS SHEET SUBROUTINES

The information below can be used to prepare your PAR Analysis sheets.

Forehand Push

PREPARATION

- Ready Position: Feet shoulder-width apart / knees bent / leaning slightly forward / bat in front of body
- Right foot moves back and left foot adjusts to be in a slightly side-on position

ACTION

- Arm moves back and slightly up, pivoting at the elbow with wrist angled back
- Contact underneath the ball in front of the body

RECOVERY

- Bat follows-through forwards and towards the net
- Recover to ready position

<https://www.youtube.com/watch?v=3D9VWKR-iFc> - Forehand Push in Table Tennis

Backhand Push

PREPARATION

- Ready Position: Feet shoulder-width apart / knees bent / leaning slightly forward / bat in front of body
- Right foot slightly forward

ACTION

- Bat moves back towards the waist
- Wrist is angled slightly back
- Contact underneath the ball directly in front of the body

RECOVERY

- Bat follows-through forward and downward
- Recover to ready position

https://www.youtube.com/watch?v=i_NAMempMvs - Backhand Push in Table Tennis

Forehand Drive

PREPARATION

- Ready Position: Feet shoulder-width apart / knees bent / leaning slightly forward / bat in front of body
- Right foot moves slight back to be in an off square stance

ACTION

- Rotate the body back and down at the right waist and rotate bat arm back and slightly down
- Left knee angled towards the floor, right knee bent with weight on back foot
- Hips, waist and shoulders rotate forward and weight transfers on to front foot
- Contact the top of the ball in a brushing action

RECOVERY

- Bat follows-through forward and up
- Recover to ready position

<https://www.youtube.com/watch?v=Xf5GOG5kA7s> - Table Tennis - Forehand Drive

Backhand Drive

PREPARATION

- Ready Position: Feet shoulder-width apart / knees bent / leaning slightly forward / bat in front of body
- Body square to the table
- Knees bent and leaning slightly forward, bat in front of body

ACTION

- Hips, knees, shoulders and waist rotate to the left and down
- Bat moves back to the left thigh area
- Legs, hips and waist gently rotate forward and up
- Bat moves forward and upward
- Wrist snaps at contact, accelerating through the stroke

RECOVERY

- Follow through - forward and upward
- Recover to ready position

https://www.youtube.com/watch?v=y3cs40Lt5_E - Table Tennis - Backhand Drive

Forehand Smash

PREPARATION

- Ready Position: Feet shoulder-width apart / knees bent / leaning slightly forward / bat in front of body
- Right foot moves back and left foot adjusts into side-on position
- Rotate backwards from waist and rotate bat arm back and slightly down

ACTION

- Transfer weight onto front foot as bat arm moves forward and up
- Rotate forward around waist and contact ball in front of body at highest point

RECOVERY

- Bat follows-through forward and towards the target
- Recover to ready position

<https://www.youtube.com/watch?v=bEcSrzeCGyA> - Forehand Smash - Table Tennis

Backhand Smash

PREPARATION

- Ready Position: Feet shoulder-width apart / knees bent / leaning slightly forward / bat in front of body
- Left foot moves back and right foot adjusts into side-on position
- Rotate bat arm back and slightly down

ACTION

- Transfer weight onto front foot as bat arm moves forward and up
- Rotate forward and contact ball in front of body at highest
- RECOVERY
- Bat follows-through forward and towards the target
- Recover to ready position

<https://www.youtube.com/watch?v=Ohfm0lmsA40> - Backhand Smash - Table Tennis

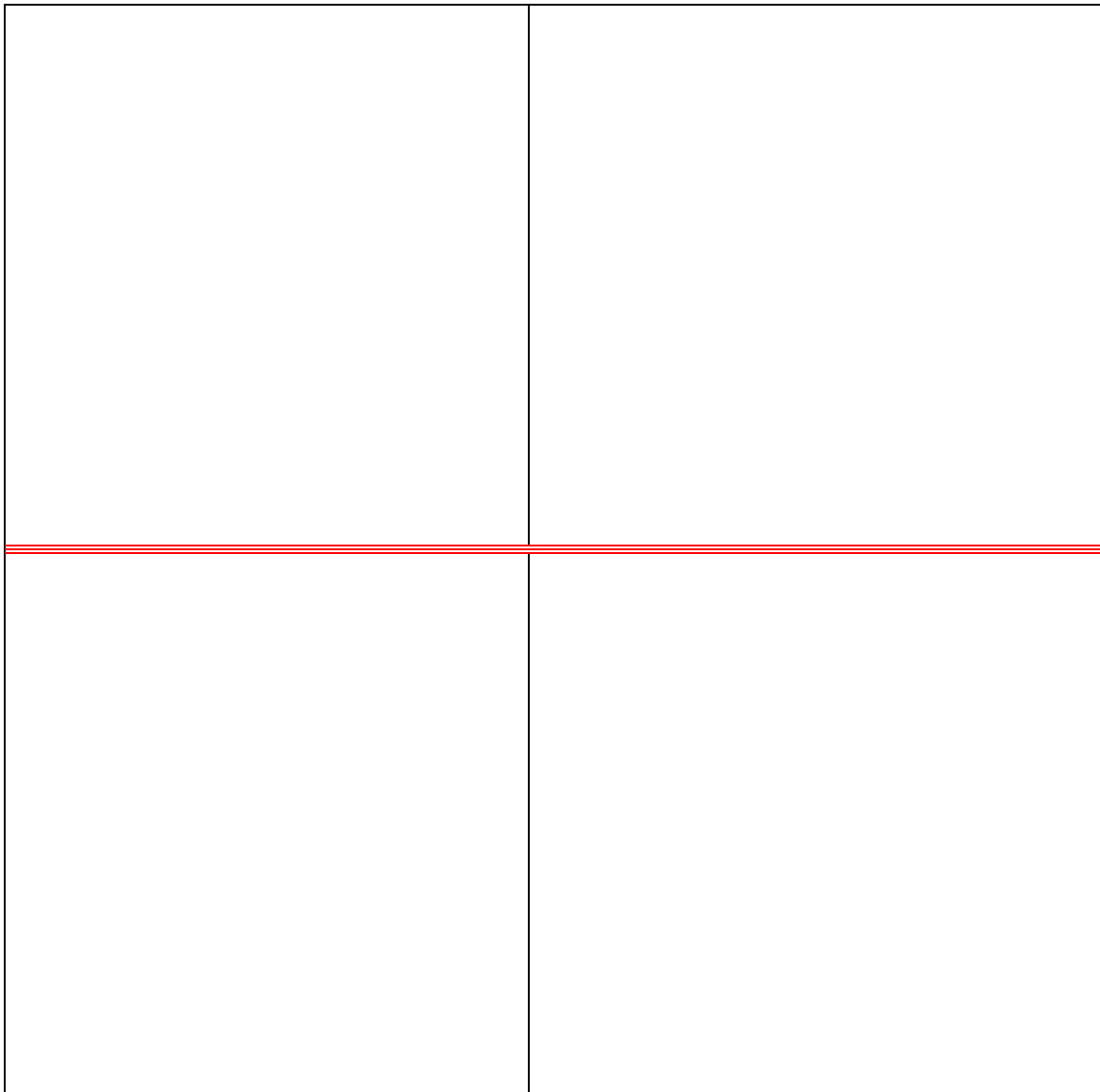
***DO NOT WRITE ON THIS SHEET**

SCATTERGRAM

Place a cross on the diagram below to record where each attempt makes first contact with the table.

(Note: If you have a target zone, please highlight this on the diagram)

Number of attempts - _____



EMOTIONAL FACTOR - GATHERING AND ANALYSING DATA

Questionnaires

A standard way of gathering data on emotional factors is through completing questionnaires. Questionnaires in this context are used to record the performers' feelings.

Emotions in Sport Questionnaire

This is a questionnaire that is used to measure various emotions in sport prior to competition. In this questionnaire the performer is asked to read 20 statements and then circle a response between 0 and 4 to indicate how they feel. Totals are then calculated for each emotion and the figure is then divided by 5 to give a final score. A score of 3 or 4 would suggest that the particular emotion is fairly strong and could therefore have an impact on performance. The Emotions in Sport Questionnaire is a recognised method for gathering information on Happiness, Sadness, Fear and Anger prior to competition.

Advantages

- Recognised sports psychology questionnaires such as the Emotions in Sport Questionnaire have been tested to ensure that they collect valid and reliable information.
- The statements in the questionnaire are easy to understand and the scoring system used is simple. This means that the questionnaire is not too time consuming to complete.
- As the scoring systems are reasonably easy to understand it is easy to identify areas of strength and weaknesses.
- Questionnaires give you a permanent record of your performance which allows you to look back and compare your results to check for improvement during and after your training programme.

Disadvantages

- Questionnaires rely on a performer's own feelings and so the information can only be reliable if the responses are honest. Some performers may not answer honestly through a fear of being judged.



***DO NOT WRITE ON THIS SHEET**

EMOTIONAL FACTOR - GATHERING AND ANALYSING DATA

Emotions in Sport Questionnaire

Below you will find a list of words that describe a range of feelings that performers in sport may experience. Please read each one carefully and indicate on the scale next to each item how you feel **right now, at this moment, in relation to the *upcoming* competition**. There are no right or wrong answers. Do not spend too much time on any one item, but choose the answer which best describes your feelings right now in relation to the upcoming competition.

	Not at all	A little	Moderately	Quite a bit	Extremely
Uneasy	0	1	2	3	4
Upset	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
Nervous	0	1	2	3	4
Unhappy	0	1	2	3	4
Enthusiastic	0	1	2	3	4
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
Happy	0	1	2	3	4
Anxious	0	1	2	3	4
Dejected	0	1	2	3	4

Scoring Instructions	Total
Happiness = (pleased + excited + enthusiastic + cheerful + happy) / 5	
Sadness = (upset + sad + unhappy + disappointed + dejected) / 5	
Anger = (irritated + furious + annoyed + angry + provoked) / 5	
Fear = (uneasy + tense + nervous + apprehensive + anxious) / 5	

PHYSICAL FACTOR (SKILLS) - APPROACHES TO PERFORMANCE DEVELOPMENT

Shadow Practice

This is an approach that involves performing a skill repeatedly with **no ball**, focusing on specific subroutines.

Examples

- No movement - perform stroke on spot
- With movement - return to middle of table after each stroke
- Using mirror - perform stroke while watching performance in mirror

Advantages

- Allows me to work in a closed, self-paced environment where I can focus fully on the specific subroutines of the stroke
- Allows me to practice under less pressure as no ball is used
- Develops 'muscle memory'
- Helps me understand how the skill feels (internal feedback)

Disadvantages

- As there is no ball, it can become quite boring

Repetition Drills

This approach, as the name suggests, involves **performing a skill repeatedly** and allows the performer to focus on specific subroutines and develop muscle memory. I may practice very small parts of the skill or the entire skill repeatedly. The following practices are all examples of repetition drills:

Examples

- Hand Feed - Involves a hand feed which makes it easier for me to hit the ball and allows me to focus on subroutines(s);
- Bat Feed - Involves a bat feed which means that the feed will be lower, faster and with some spin, which is more game-like;
- Continuous Rally - Involves playing my weak stroke continuously while my classmate tries to maintain the rally or alternatively we both play the weak stroke continuously.
- Combination Rally - Involves a rally which follows a continuous, predetermined stroke pattern. Combinations of straight and diagonal strokes can also be very useful with this practice.
- Pressure Drill - A practice which involves increased level of pressure e.g. a more game like feed - multi feed / varied feed/ etc.

Advantages

- Allows you to practice in a controlled environment e.g. hand feeds
- Allows you to focus on specific parts of your performance e.g. improving accuracy through bat feeds
- Allows you to consider feedback you receive after every feed. E.g. hand/bat feeds
- The level of difficulty can be gradually increased as you make progress e.g. continuous rally to continuous rally
- Combination and pressure drills allows you to link skills together making the practice more game like

Conditioned Games

This approach involves playing a competitive game but with conditions in place that encourages you to focus on your weak stroke or specific part of your performance. Conditioned games usually involve certain **adaptations** to the **formal rules** of the game.

Examples

- Double points - Players get 2 points for winning rally with weak stroke
- Weak Stroke Return - Service must be returned by weak stroke before rally continues
- Forehand Only - Players must move around the table in order to use only forehand
- Backhand Only - Players must move around the table in order to use only backhand
- Topspin Only - No backspin is allowed
- Backspin Only - No topspin is allowed
- Half Court Singles - Shorten the table by playing across the width of the table or make the table more narrow by from edge to middle line

Advantages

- Practice will reflect the demanding context of a game
- Allows you to focus on other aspects of play such as making quick decisions and responding quickly
- Conditions encourage you to focus on weak stroke or a specific part of your performance

Methods of Learning

Gradual Build Up

Gradual build-up is a useful practice method for learning complex skills. It allows you to develop confidence whilst ensuring quality as it involves:

- breaking down a skill into smaller, simpler parts;
- practicing one individual part of the skill in isolation;
- increasing the complexity by adding another part of the skill;
- repeating process until I can effectively perform the entire skill.

Whole-Part-Whole

Whole-part-whole is normally used by performers who already have some experience of the activity. It is most effective when you can perform the whole skill already to a reasonable standard. The method involves:

- performing the entire skill and analysing your performance;
- isolating one part of a skill that is a weakness;
- practicing the isolated part of the skill individually;
- performing the entire skill again.

For example, **Shadow practice** is a type of whole/part/whole learning that can be used in Table Tennis. The movement patterns are learned without the distraction of the ball or the game.

Whole Skill *The Method of Learning mostly used in Table Tennis*

With skills in which parts are synchronised in time, whole skill practice is favoured with the performer concentrating the whole performance of the stroke.

EMOTIONAL FACTOR - APPROACHES TO PERFORMANCE DEVELOPMENT

Both of the negative emotions of **fear** and **anger** we have been looking at can be improved using similar types of training. This training can improve decision-making, confidence, and self-control qualities. By identifying what it is that triggers a loss of control of the emotions, you can organise and prepare for what you should do in a 'trigger' situation. In this way anger and fear can be controlled to some extent.

Approaches to dealing with triggers

First of all, you need to identify as many triggers as possible that make you lose focus on your performance. Then identify any common triggers and think of whether these happen because of someone else or if they are down to you. Developing skills to identify when things start to go wrong, and then deliberately making sure the response to these situations is appropriate, is a worthwhile intention to help manage anger or fear. This establishes the link between 'triggers and responses'.

Training for minimising the impact of these negative emotions should begin within class practice sessions. Dealing with 'triggers' in a less competitive environment allows you to get more experience identifying changes in the way you feel. It also allows you to have a little more time to compose yourself and put in place your new 'response'.

Approach: Deep Breathing

Deep breathing is a recognised approach to help manage anger and fear. Lots of practice in less competitive / less challenging environments will be required in order for this approach to help. The technique of filling the lungs completely then releasing the air very slowly while concentrating on controlling the breathing muscles is an excellent way to change the focus from what just went wrong to bring the mind back under control. This type of training should be included at the beginning of each training session to make sure the performer is able to carry out the approach properly. This clears the mind of mistakes and allows appropriate decisions to be made.

Example

The new response to losing three points in a row in table tennis would be to take a step back from the table and take three deep breaths before commencing play. It sounds simple, but trying to put in place a new response to the frustration of feeling that you are not in control is a challenge.

Advantages

- It is easy to understand and use
- Requires no specialised equipment
- If performed correctly can impact positively on emotions and overall performance

Disadvantages

- Some performers may not take it seriously
- May cause performer to feel awkward

Approach: Positive Self-Talk

This approach can be used to help manage anger or fear. To do this you must develop alternate positive responses to negative triggers. When participating in an activity it is easy to think negatively about your ability to perform well. These negative thoughts reduce your chance of performing to your potential and reduce your confidence in your ability. These negative thoughts are common even in top performers. The difference is that top performers learn how to deal with these thoughts through using positive self-talk. This technique is simple. Whenever you are faced with a stressful situation and have a negative thought about your performance or yourself turn it around and replace that thought with a positive one. This could involve saying key words to yourself to help you to stay in control. These words are often called cue words.

Cue Words

Cue words are words or phrases that performers use to make them feel a certain way.

Examples

- Words like “calm”, “relax” and “easy” are often used to help a performer relax during performance
- Performers may use a phrase such as “watch the ball” to remind themselves of what to focus on during performance, or they may simply use a word such as “focus” if they feel themselves losing concentration
- Phrases such as “I am a very good shooter” might be used to try and increase confidence in certain situations
- Cue words/phrases such as “go for it” and “you can do this” are commonly used by performers in order to get up for a performance.

Scottish Athlete Lynsey Sharp repeated the phrase ‘**Get out strong, commit**’ before competing in the 800m final in front of a home crowd at the Glasgow 2014 Commonwealth Games. Lynsey did just that putting in a brave performance to win a Silver Medal for Scotland.



Advantages

- It is easy to use in practice and during competition
- Requires no specialised equipment
- It is specific to your needs and performance
- If performed correctly can impact positively on emotions and overall performance

Disadvantages

- It requires a certain level of self-belief for it to work
- Some performers may not take it seriously
- May cause performer to feel awkward
- Performers must be focused in order for approach to impact positively on performance

SKILL CLASSIFICATION - PERFORMANCE DEVELOPMENT PLANNING

Skill A skill describes the purpose of linked sequences of movements.

Technique A technique is a way of executing a skill. When developing a skill, a performer will attempt to improve aspects of their technique.

Closed / Open skills

Skills exist on a continuum (a line) between closed and open: those which are unpredictable are open; those which you are in charge of carrying out are closed.

Closed ←-----→ Open

With **closed** skills, the performer is in control of all the factors which affect the execution of the skill. An example of a closed skill in table tennis is **servicing**:

- I am in control of the ball
- I am in control of when I serve
- The net is always the same height / table is always the same size
- There is no wind, rain, etc.

With **open** skills, the performer is not in control of all the factors. The performer is not in control of the timing involved or other factors that affect the execution of the skill. For example, when performing a forehand drive in table tennis the following factors can vary:

- where I am in relation to the table
- the height of the ball and the distance of the ball from the table
- the speed, direction and trajectory of the ball
- where my opponent is in relation to the table

Simple / Complex skills

A number of factors determine whether a skill is predominantly **simple** or **complex**. These include: the amount of information to be processed; the number of decisions to be made, the speed at which information processing and decision-making requires to occur, the accuracy involved and the amount and type of feedback which is available.

Simple skills: A relatively simple skill will require few of the factors mentioned above.

Complex skills: A more complex skill includes many of the factors mentioned above.

Simple skills are relatively straightforward to learn and require little decision making. For example, a serve in table tennis is relatively simple as it involves the straightforward repetition of a set of movements with a relatively low level of coordination and decision making.

In table tennis a smash is a relatively complex skill. The skill is made up of many different parts (subroutines). The shot requires timing in order to link the parts of the skill together effectively. For example, the correct footwork is needed to get into position. Many different sequential movements are also required in playing the shot.

GOAL SETTING - PERFORMANCE DEVELOPMENT PLANNING

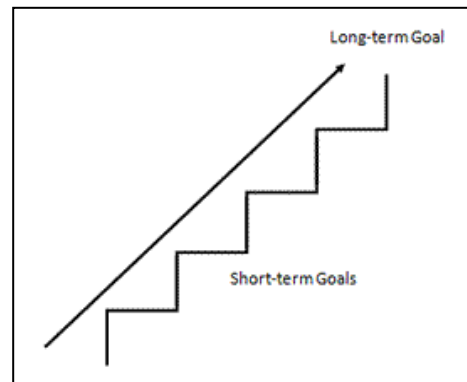
Goal Setting

When you are planning and implementing a personal development plan, it is important to set yourself goals as they provide direction and can be used to measure progress. Setting goals will help you to:

- Create a focus for your training
- Increase motivation and determination
- Prioritise and get more out of your time
- Get better results
- Monitor progress

Short and Long Term Goals

When goal setting, it is important that you have a clear idea of what you want to achieve. Teams and individual athletes usually set long-term goals by the end of the season or year. Likewise, at the start of your personal development plan you should have a clear idea of what you want to achieve by the end of your plan. To achieve these long-term goals, you need a series of short term goals to help you to.



Examples

An example of a realistic short term target could be to develop a specific weak subroutine (e.g. follow through) within your identified weak stroke.

An example of a realistic long-term target could be to develop your skill repertoire in table tennis to a level that will improve your overall performance to win the school championships.

THINK S.M.A.R.T.E.R

To set effective goals they should be S.M.A.R.T.E.R goals. This means they should be:

Specific - Your goals should be clear and precise. They should reflect your ability and experience within your chosen activity.

Measurable - Goals must be easily measurable so that you can assess whether or not they are improving or have been successful.

Agreed - Your goals need to be approved by a teacher or coach. This means you are fully supported by someone with experience and knowledge in your chosen activity.

Realistic - Realistic goals are more likely to be achieved and you are, therefore, more likely to stay motivated throughout your personal development plan. Setting unrealistic goals will result in lack of success and, ultimately, in a drop in morale.

Time-Phased - Your goals should be progressive. Planning short-term goals will ensure progress and help you achieve your long-term goals.

Exciting - Make sure your goals are rewarding and enjoyable. This approach will maintain motivation and prevent you becoming bored.

Recorded - It is essential to write down your goals not only does this increase commitment, it also serves as a form of contract. It also helps to monitor progress.

There are three important stages in learning and developing skills: the **planning** (cognitive) stage, the **practice** (associative) stage and the **automatic** (autonomous) stage.

The stages of learning are a progressive process and each stage merges into the next. As your skill level develops you will gradually progress from the planning stage to the practice stage to the automatic stage. During your training programme you may move back a stage if you have progressed too quickly.

You should be aware of the...

...characteristics at each stage of learning

...types of feedback most appropriate at each stage of learning

...practices most appropriate at each stage of learning

Planning / Cognitive Stage of Learning

At this stage...

- There is a limited understanding of how the skill should be played
- Thoughts are focussed on basic, individual subroutines
- There is little control or fluency
- Movement patterns are awkward and uncoordinated
- Execution of the skill is inconsistent with many errors
- Decision making during performance is very poor

- The performer is mainly reliant on consistent, positive, external feedback
- The performer relies very little on internal feedback

Practices at this stage should be more basic and focus on individual subroutines of the weak stroke. Pupils will need to get a mental picture of the skill or technique in order to understand the basics of what is to be learned. They should involve little or no pressure. Appropriate practices at this stage include...

Shadow Practice

The fact that no ball is involved means that there is no pressure to make contact or to be concerned about accuracy of shot placement. This allows the performer to focus solely on the subroutines of the skill.

Hand/Bat Feed (Repetition drills)

As the ball is fed consistently and directly to the performer there is no movement required and focus can remain on the subroutines of the weak stroke. As the performer knows exactly where the ball is going there is little decision making involved which allows them to concentrate on the correct action of the stroke.

Practice / Associative Stage of Learning

At this stage...

- All subroutines are linked together
- Performance will look more skilled, with some control and fluency
- There is a good understanding of how the skill should be played
- The skill should be performed more consistently with fewer errors
- Focus will remain on weak stroke
- Some good decision making will be used during performance

- The performer is still reliant on external types of feedback
- The performer can begin to rely more on internal feedback

It is important to compare your performance with a 'model' in order to detect and correct error in your execution of strokes. Practices at this stage should be repetitive to allow you to become more consistent in performing the stroke successfully. Pressure should gradually increase as you improve. Appropriate practices at this stage include...

Continuous / Combination Rally (Repetition drills)

These drills allow the focus to remain on the weak stroke, whilst adding a certain degree of pressure and becoming slightly more game-like.

Automatic / Autonomous Stage of Learning

At this stage...

- Performance looks skilled, controlled and fluent
- There is a very clear understanding of how the skill should be played
- Skills are applied with a high degree of consistency
- Few errors are evident and there is a high success rate
- There is a feeling of having plenty of time when applying skills
- Subroutines are 'automatic' allowing thoughts to be focused elsewhere e.g. position, opponent's position, where to hit ball, etc.
- A full range of skills is evident
- A high level of decision making is used throughout performance

- The performer is less reliant on external types of feedback
- The performer relies more on internal feedback

Practices at this stage should be as game-like as possible, while still focusing on the weak stroke. They should involve decision making, increased pressure, movement and combinations of strokes. Appropriate practices include...

Pressure Practices (Repetition Drills)

Pressure is added by extra feeders and can be increased / decreased depending on the performer.

Conditioned Games

This method of practice involves imposing a rule on the game to encourage the use of a particular shot.

PRINCIPLES OF EFFECTIVE PRACTICE - PERFORMANCE DEVELOPMENT PLANNING

The principles of effective practice give structure and progression to a performance development programme and also ensure that improvements are made over time. There are 7 principles of effective practice:

Intensity of Practice
Work-to-Rest Ratio
Achievable Progressive Stages
Strengths and Weaknesses
Awareness of a Model Performer
Clear Objectives
Effect of Boredom and Fatigue

Intensity of Practice

The approach to performance development must be the correct intensity in relation to the stage of learning. For example, Drills used at the **cognitive** stage should be more basic and focused on individual subroutines of the weak stroke (shadow practice). Also as the performer's skill level and experience increases, the intensity of the practices should become more challenging.

Work-to-Rest Ratio

Practice must have appropriate periods of work and rest...

- If work periods are too long, fatigue and boredom could set in which will reduce the quality of practice and encourage bad habits in performance
- If work periods are too short then practice will have less of an effect on performance
- If rest periods are too long then the body can begin to 'cool down' increasing the risk of injury and reducing the performer's ability to perform to the best of their ability
- If rest periods are too short then the performer will not recover fully, which would also cause a reduction in the quality of practice

For example, a 2 hour training session without breaks may tire out the performer and result in a drop in concentration and performance levels. Equally, a 5 minute session will have little effect on the individual's acquisition or improvement of a weak stroke.

Achievable Progressive Stages

As the performer's skill level increases, it is vital that the intensity of practices is also increased. If practices are progressed too slowly then the performer can get bored. If practices are progressed too quickly then the quality will decrease as the level of intensity will be too high for the performer. Applying this principle will also ensure that the performer's confidence is not affected.

Strengths and Weaknesses

Practices should focus on improving your weak stroke. For example, at the automatic stage of learning a performer will still focus on the development of their weak stroke by adding conditions to games to encourage use of the stroke. During some practices it is also useful to be aware of strengths in order to allow the performer to remain focused on the weak stroke. For example, during combination rallies it would be sensible to design a pattern of strokes that includes the performer's stronger strokes combined with their weak stroke. This means that they can still focus on the weak stroke, not worrying about how to perform the other strokes.

Awareness of a Model Performer

Watching a model performer during the cognitive stage of learning will allow you to get a mental picture of how the skill should be performed. Making comparisons to a model performer during the associative stage of learning will allow you to detect and correct errors in your technique. Model Performers are also useful for providing feedback as you can learn from their experience and expertise.

Clear Objectives

Setting clear objectives can help with motivation and monitoring of performance development. Each session should have an aim. This will provide a focus during the session and will also help you to reflect on the success of the session when completing your training diary afterwards.

Effect of Boredom and Fatigue

The correct Intensity and Work to Rest Ratio within a session will help prevent fatigue. It is also important to make sure that your programme is varied to prevent boredom. For example, including different approaches within a session will keep your interest and aid motivation.



***DO NOT WRITE ON THIS SHEET**

PHYSICAL FACTOR - MY PERFORMANCE DEVELOPMENT PROGRAMME

Identify a stroke in Table Tennis and draw up an appropriate performance development programme. You must consider the following:

- Approaches to Performance Development
- Goal Setting
- Your Stage of Learning
- Principles of Effective Practice

Week 1	Aim:
	Description:
	Repeat the above training session 3 times in week 1
Week 2	Aim:
	Description:
	Repeat the above training session 3 times in week 2
Week 3	Aim:
	Description:
	Repeat the above training session 3 times in week 3

***DO NOT WRITE ON THIS SHEET**

PHYSICAL FACTOR - MY PERFORMANCE DEVELOPMENT PROGRAMME (CONTINUED)

Week 4	Aim:
	Description:
	Repeat the above training session 3 times in week 4
Week 5	Aim:
	Description:
	Repeat the above training session 3 times in week 5
Week 6	Aim:
	Description:
	Repeat the above training session 3 times in week 6

MONITORING PERFORMANCE DEVELOPMENT

Recording and monitoring your personal development programme is essential in order to check progress and make adaptations to your programme correctly as you go along.

This can be done through:

- Keeping a **training diary** throughout your programme including how you felt the programme was progressing, where you adapted the programme and/or any problems you may have had. This should be completed following each training session.
- Re-testing performance by using the methods of gathering information from before e.g. repeating the Personal Reflection Sheet, General Observation Schedule and Focussed Observation Schedules both at the mid-way point and at the end of the training programme will help monitor performance development.

Why use a Training Diary?

A training diary is a very effective way of monitoring the plan because it allows the performer to consider aspects such as the time of day, how they were feeling before, during and after the session on a scale of 1-10. The performer can also refer back to the diary at a later date to compare or to make changes to the programme throughout the season.

Why re-test?

By repeating the same methods of gathering information you should be able to see improvement in your performance. For example, you may notice an improvement in your General Observation Schedule statistics or have improved all of the weak subroutines that you identified within your chosen stroke prior to practice. Tests will therefore need to be carried out under the same conditions.

Why else is monitoring important?

- To allow comparisons with previous information you have gathered
- To check what progress you have made
- To check if you have achieved your short and long term goals
- To assess whether your personal development programme is appropriate
- To assess whether you need to make changes/adaptations to your programme
- To identify any new strengths/weaknesses
- To motivate you to keep working or to work harder.



TRAINING DIARY

***DO NOT WRITE ON THIS SHEET**

MY TRAINING DIARY

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

EVALUATING PERFORMANCE DEVELOPMENT

When evaluating your personal development programme it is essential to identify your current level of performance and compare this against your initial performance. For example, you could repeat the General Observation Schedule of you performing against the same opponents. You could also complete the Emotions in Sport Questionnaire and compare your results to your initial attempt. Comparing these results will allow you to evaluate the effectiveness of your approaches by checking the progress you have made.

When comparing your results you need to be able to explain the effects your personal development programme has had on your weak stroke and on your overall performance. For example, you may have developed your forehand drive technique by improving weak subroutines within the preparation phase of the stroke. This may have improved the effectiveness of your forehand drive as well as all other strokes as your ready stance and timing has improved. Similarly, you need to be able to explain how improved emotional factors have had a positive effect on your overall performance.

Why Evaluating performance is useful?

- Using the same methods as before improves the reliability of results
- Allows you to see if also if performance has improved and also if the performance development programme has worked
- Re-testing using all methods is appropriate as the programme may have improved your technique but had no improvement on your effectiveness in the game
- If results are positive then this can improve motivation to develop performance even further.
- New strengths and weaknesses can be identified and future development needs can be agreed.
- The information from the evaluation process can also be used to plan a new training programme that will be specific to developing these future development needs.

My Future Development Needs

Following your process of monitoring and evaluating the success of your approaches to development, you may be able to identify next steps or future needs. By retesting and evaluating the process you have completed you will be able to identify any features within the factors that still require focus.

- You may decide to continue to work on the same factor
- Change to another factor or particular feature of that factor (See Section A)



UNIT AND COURSE ASSESSMENT HELP

Command Words

Throughout the Factors Impacting Performance Unit you will be asked to demonstrate your understanding of the course through responding to the following command words:

Analyse - This requires critical thinking by exploring various concepts related to the course. For example, you will be asked to analyse different methods of gathering information on different factors. To answer this you should provide the advantages and any disadvantages of these methods and draw conclusions based on your analysis.

Evaluate - This involves making informed judgements supported by findings from your own experience, personal feelings and any other types of evidence. For example, you will be asked to evaluate the effectiveness of your development plan. To answer this you will need to comment on the effectiveness of your programme by highlighting any positive or negative effects it has had on your performance.

Explain - This requires you to demonstrate your understanding through reasoning. For example, you will be asked to explain the relevance of using certain approaches to develop performance. This involves making clear the main points and reasons why selected approaches are chosen to develop performance (advantages of method).

Justify - This is similar to explain although more evidence may be required to support reasons. For example, you will be asked to justify why a particular factor requires development. You could justify this by referring to data you have collected on your performance.

These command words will also feature in the final course assessment as part of both the single performance and the question paper.

Single Performance

Here you are required to **explain** the relevance of two challenges you will face in the single performance and **explain** how you will prepare to meet these challenges. Following your performance you will be required to **analyse** the effectiveness of your preparation for the two challenges and **evaluate** your strengths and areas for development from your performance.

Question Paper

The question paper will have two sections. The first section will contain 3 questions which are worth a total of 24 marks. These questions will be similar to the types of questions you have answered in the FIP unit workbook. The second section will involve a scenario question worth 16 marks. You will need to apply your knowledge and understanding of the coursework across the Swimming, Basketball and Table Tennis to other sports and performance situations in order to access high end marks.