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Introduction

This document has been prepared to support staff in preparing candidates for external assessment. There is an example of a candidate’s work, together with a Marking sheet which includes Examiner’s commentary and mark allocation.

It is important to ensure this information is used in conjunction with the Course Arrangements documents.
Reading the floor will define my teams' success. Important decisions are a regular occurrence; each individual has the potential to change the course of the game. Refining my decision making will not only improve my personnel performance, but also and more importantly, my teams' performance.

As there are numerous variables in basketball out with my control, it is imperative for future development that I make more effective comparisons to a skilled performance, crucially in the specific area of decision making.
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**Rationale**

My initial aim is to simply define a skilled performer and my personnel resume as a player.

Not only does the 'elitist' possess exceptional talents, tremendous skill, physical and mental fitness but perhaps most importantly something extra., that spark of genius which can change the course of the game, the ability to succeed when everything is against them, the capability to defy all odds. Although a team sport (5vs5), numerous 1vs1 situations occur. For me these are the foundations of the game, the success of your team depends on one factor: are you better than your opposite number? These situations occur regularly throughout the game: the technical battle between 3 point shooters, the physical contest between rebounders, the application of tactics to confuse opponents not to mention the personnel battle of wits, determination and skill between opposing point guards. Indisputably this is my greatest challenge within the game.

As a point guard, I have the power to change the course of the game. I should be able to execute a wide range of skills and options to deal with the immediate ‘floor problem’. At the level I play at, I believe I am competent in the physical and technical departments; (although my long range shooting is sometimes erratic) my tactical application however could be more consistent. I firmly believe this is affected by decision making which essentially is determined in my mental sharpness and ability to control my arousal.

Decision making is an extremely intangible area, and is open to perception due to various factors such as experience, anticipation reaction time, management of arousal, and numerous internal and external attention cues. Throughout the course of the game, my decisions influence and eventually decide the success of my team's offense. The decisions I make heavily depend on my confidence, the state of the game, my opponents, intrinsic and external pressures, and importantly in my team-mates ability to fulfil their duties. (I find this frustrating at times). For example, in each of the following scenarios, whilst carrying the ball into the oppositions half, I would most likely make a different decision when:

- vs. a weak opponent
- winning by a single point
- down by 10 points
- moving to assist team-mate

These decisions occur in the blink of an eye, and obviously when under a great deal of pressure.

Due to the nature of my study I shall primarily concentrate on my offensive role related responsibilities only; as I feel the scope would be too great otherwise. I represent my school team as a point guard and play in the divisional league; therefore I can offer a definite overview of my experiences. I believe offense is all about improvisation, in which the speed of decision making plays a huge part. I also believe that controlling emotions affects decision making. Our games are fast paced and played aggressively, in these situations I need to control my aggression and blot out external factors more. I also need to learn to control my frustration especially with my weaker team-mates and use encouragement rather than anger. I know I feel the game pressures as the weight of my team's success lies primarily on my shoulders; ultimately how many points I score, how many options I create and how many assists I make. For the majority of the time I feel I do this substantially, but I want to make better options to match ‘immediate floor problem' - I know I can do better.
**Project proposal: Nature and Demands**

Throughout this study, I want to improve my decision making ability and examine my limitations as a player. To do this my attention is focused in:

**Structures and Strategies Key Concepts 2 and 3**

- Identification of strengths and weaknesses.
- Problem solving and Decision making with emphasis on
  - the need to support team, for e.g. helping team-mates and denying opposition opportunities to the basket.
  - the importance during performance of continually - being perceptive - making good decisions under pressure

AND

**Skills and Techniques - Key Concept 1**

- Concepts of skills, technical and skill related, as appropriate to nature of activities, with emphasis on related key factors with emphasis on
  - how skills are performed, for example, through an information processing model.

Describing the fundamentals of basketball will put into context my appreciation of the essential characteristics required for a quality performance and offer status to my intent which is to improve as a point guard via improved decision making.

The nature of basketball is a challenging team sport. It is an intense directly competitive sport, with a wonderful mix of open and closed contexts and is a pursuit in which I relish participating. The game is played at an extremely high pace, with specific rules to govern fair play and game outcome. It provides tremendous one on one situations in which any weaknesses physical, skill-related or mental will definitely be exploited by your opponents. It is classed as a non combat sport which defies belief as players give little or no regard to their opposite number when challenging for the ball. The prime objective of the game is to score more baskets than your opponents.

According to the purists basketball is the most intense ball sport in history. An action packed fast flowing game which seldom provides the audience or player with a ‘dull’ moment as it ebbs and flows between offense and defense. The sport combines numerous technical, mental and physical skills, when performed by the elite it can only be described as an art. *When played the way it's supposed to be played, basketball happens in the air, flying, floating, elevated above the floor, levitating the way opposed peoples of this earth imagine themselves in their dreams*’ (John Edsar Widen)

Although the dimensions of a basketball court are relatively small in comparison with other ball sports (such as hockey and football) it still demands exceptionally high levels of all round fitness; it obliges phenomenal levels of physical, technical, mental and skill related fitness.

Technical demands include the selection and execution of passing, dribbling, shooting etc. The physical demands of cardio respiratory, muscular and speed endurance are required in abundance as the energy demands of fulfilling role related duties for the duration of the game; end to end court
coverage is draining.

The skill related demands of timing, reaction time agility and balance are needed to ensure effective execution of skills and to seize opportunities when they occur; making steals for example. Most importantly the mental fitness demands must be of a very high level to succeed in the competitive arena. Reading the ‘floor problem’ requires focus, split second decisions, patience etc.

The sight of an elite basketball player is extraordinary. Complicated skills are performed in a smooth and controlled manner; the ball and performer appear to be in perfect harmony. Maximum efficiency is created with apparently little effort and attention. Not only are these sights breathtaking but performed consistently and under persistent pressure. Sharp expresses the skilled performer as

'one who has learned techniques, but more than that, one who can use techniques by making sound judgments.'

Abemethy would support this view affirming that the elite player has

'a better knowledge of probabilities, sequences and patterns of play' (Abemethy)

Their decision making is appropriate to the games situation, accurate and made in a split second. The movements following their processing of information are unhurried and may seem 'lazy'. However they are greatly more effective than that of those around them, who are trying to do everything as quickly as possible, with little or no attention paid to the end result. This I feel is the difference between a recreational and elite player, and since I want to play university basketball when I leave school my aim is to become an elite player.

Over the years there have been two stereo-typical views of the point guard, 1) the point guard who shoots first, passes later; a perfect example is Jason Kidd of the New York Nets., 2) the playmaker who controls the tempo of the game, but still manages to score a reasonable number of points per game; Steve Nash of the Phoenix Suns for example.

I believe that I am neither of the two stereo-typical players, more a combination. I always look for a weakness in my opponents defense, which I am either able to penetrate personally or indirectly with a pass. Obviously it is my responsibility to work hard in all areas of the court, this requires the previously mentioned qualities and to be of a superior standard that that of my opponents.

I feel that my decision making is not at its highest level. Sometimes

- I take on the drive when passing is the best option
- I take the 'easy' option e.g. a simple pass when ‘fake and go’ might have been better
- Shooting out with my zone instead of driving into basket

I know if I were to improve my decisions making I would be a much more valuable player to my team. I feel the responsibility of this as the point guard has to be an extension of the coach: he sees the floor and understands the total picture more than position players. To quantify this I need to set achievement targets; these will be judged against the success indicators of improved

- Tactical moves to increase options to basket for
  - Self
  - Teanmates
- Assist plays for team-mates; taking cogniscance of their strengths and weaknesses
- Dictating tempo of play.
- Scoring greater number of points more consistently

Due to the nature of decision making, no matter what I choose to do, the outcome will be scrutinised by some and praised by others. Before undertaking this study I knew that it would be a difficult task to substantiate; basically because it is such a subjective and intangible area. For example, every decision I make mitigates to a number of options, I may choose to execute a drive and shot, while others may simply hand the ball off to a team-mate.

**Who is Right Who is Wrong?**

Trying to make sense of this question is pretty much impossible as the ‘outcome’ (basket scored? Or pass failing to reach target?) has not been stated. Nevertheless I relish the challenge and will attempt to prove that it is possible to make better decisions and so provide me with the ‘edge’ over my opponents.

To summarise, I know to methodically plan my training, select the most relevant methods of practice, whilst continually applying the principles of effective practice and training - to ensure improved performances. This systematic approach will feature throughout as I endeavour to become a more effective and elite power forward.
Research

To improve as a point guard I put a great deal of effort into my research. Due to the wide range of
texts available on basketball specifically decision making, it was impossible for me to assimilate all
the information available. Therefore I had to extract the most essential points from an array of
theorists, whose work I have already used in previous sections to illuminate specific points.

I believe it is imperative that I re-emphasize the nature of decision making - how open to perception it
actually is. Decisions seen in the eyes of some may seem spectacular, while to others a disaster. It is
simply up to what the individual perceives as a successful decision.

The major task facing me was "how would I validate and gather relevant data to prove / disprove my
proposition"? The first and most obvious was to look at my game performance. I used several match
analysis (see appendix 1a , b & c) schematic diagrams to increase reliability issues, although these
appear complex the notional style facilitated ease of use. To eliminate human error , I also videoed
my performance. This was the most reliable tool of all as the 'camera never lies'. I used two, one
panning on the game and a second camera on me only as a kind of single cam effect. These tools
provided me with quantifiable and diagnostic feed back. I feel however the most powerful tool was
my 'personnel reflection in post match discussions with my coach and team-mates. This gave me
constructive criticism which I took on board .

With no standardized tests or comparative norms to utilise I had to construct a series of conditioned
tests to identify my strengths and weaknesses. I used the result s of these to help me select the most
appropriate training methods and also to aid future references when evaluating the success of my
programme . The test protocols were designed with an emphasis on decision making; (improved
reaction time, anticipation); there were 5 tests in all. (See appendix 2) These tests gave me quantifiable
data and I used these test again at the end to compare any improvements; in this respect I had ensured
validity of future findings.

Gathering data I felt was not enough. To get the best out of my training I researched more on related
works to improve my understanding; I wanted to have a greater appreciation of how decisions were
made. According to Knapp, decision making is an extremely complex skill, affected by many factors.
‘The skill of decision making is affected by the amount of information, which in turn depends on what
the individual perceives. At any one time, there are a large number of stimuli present both inside and
outside the body’ .

I read up on how information was processed and found much research on this topic, for example,
information processing can be regarded as a production line, in which there is 3 stages; an input, an
action and an end product (see appendix 3 a). More scientifically according to Welford’s processing
model 'the sense organs receive stimuli from outside, this is known as perception and lodged in the
short term memory, internal feedback translates perception to action namely choice of response,
decision making'.

He goes on to explain that the whole process involves applying a host of cognitive and perceptual skills
before a player can carry out the necessary motor skills with any degree of proficiency. Unlike any
other 'production line' however, in the game of basketball these processes occur in fractions of a second.
My ability to improve my decision making will require me to more fully investigate the
interdependence of the cognitive, perceptual and motor skills involved. I found that the processing of
information, (decision making) is affected by the experience of an athlete, anticipation levels, reaction
time and management of arousal. I decided to examine each of these topics in turn.
I definitely believe experience plays a huge part in decision making. I notice the difference between myself and other players less experienced than me. It is said that the less experienced athletes fixate long on more obvious aspects of environmental information, irrespective of the circumstances (Williams and David). As an experienced athlete and in many situations, I try to always select the best option available. Experience will allow the athlete to ‘pre cue’ in other words they know what to expect. For example, when driving to basket I know to expect strong challenges and be closed down on route. My previous learned experiences enable me to cope with this in a variety of ways. These learned experiences are a result of hours of specific related practice relevant to my stage of learning. As a proficient performer, my practices reflected pressure and game-related drills, to enhance technical qualities of dribbling, shooting, etc. I used individual repetitive practices—these refined my technique.

Further research indicated that anticipation is closely linked to experience. I try to channel my focus ensuring my anticipation and reaction time is heightened, allowing me to pre cue appropriately and produce the correct ‘end product’. I watch and admire the NBA players; I can only hope to get more consistent in my decision making ability by playing more and practicing harder. Each new ‘floor problem’ will present me with new challenges, each new challenge can be grasped with new and a variety of different options. As I become even more experienced, I will learn to recognise situations earlier, assimilate cues, block out unwanted distractions and apply greater variety and creativity in my play. This inspired me to look further into theoretical work on reaction time and anticipation. Hick’s Law was the most obvious starting point (whose work revealed that reaction time was dependent upon the time between the onset of a signal to respond (stimulus) and the initiation of that response or action).

I also learned to appreciate how the interrelationship of reaction time and anticipation influenced decision making by studying Wrisberg whereby Spatial and Temporal anticipation is the capacity of a person to predict what and when an event will happen in a performance situation. Furthermore, reaction time indicates the speed and effectiveness of decision making. By studying the works of several psychologists such as Loehr, Schmidt, Dick, and Bull, all theorists illuminated their findings in different but also in common ways. All agreed emphatically that management of arousal could have a positive or negative affect on performance outcome. I have experienced this first hand, over confident I can become too relaxed and make unforced errors, too anxious I make hurried and often select the wrong option. Another personal example is in my commitment to ‘win at all costs’ this can sometimes take control of me, causing frustration with ‘lazy’ teammates. The inverted U-principle describes the relatively stable relationship that exists between arousal and performance: specifically as individual’s arousal levels increases. The person’s performance increases, but only to a point. If the individual’s arousal continues to increase performance begins to decrease (Schmidt) (appendix 3 b). To manage this different methods have been suggested such relaxation, breathing techniques, self-talk and imagery. I found some of these methods hard to take seriously and relied most heavily on the use of imagery.

Finding out about the different types of anxiety namely, cognitive and somatic helped me to pinpoint which type affected me most. Cognitive anxiety, according to Neidfer, leads to changes in behaviour via negative thoughts, where as somatic anxiety leads to changes in my physiological reactions of uncontrolled breathing patterns for example. Of the two types described by Neidfer, I occasionally relate to somatic anxiety; pursuing the methods to control this such as visualisation suggested by Bull, Dick and Loehr will serve to improve my overall performance. Coupled to this was in my ability to learn how to use attention cues and consider the positive ones and block out distractions that would upset the final outcome such as noise from the crowd or verbal response from my opponent designed to put me off my game.

I used these sources to inform my thinking and designed a tailor made training programme; the design of which was a conditioned approach and included game like, problem solving and pressure drills. I felt that this was the most relevant approach to improve decision making. Decision making by its very
nature demanded to be reinforced in pressure and open contexts; I could also have secondary training benefits of improving my physical fitness, skill fitness and importantly my mental fitness at the same time.

I trained for 12 weeks, every second day, setting personnel goals throughout the course. (appendix 4)

*Crystallize your goals. Make a plan for achieving them and set yourself a deadline. Then, with supreme confidence, determination and disregard for obstacles and other people's criticisms carry out your plan.* (Paul Meyer)

I also put extra hours in doing some fartlek training and swimming this gave me 'the edge' over my team mates - who are definitely as talented as me, however do not train as much as I do. I stayed focused and committed throughout the training. Setting myself a number of short and long term goals, these were designed to motivate me, as I would always have an objective to work towards,

*'Your future is determined for more by what you do that what you are genetically (your talents).'* (James E. Loehr)

As I felt improvement I knew to apply the principles of training and progressed by increasing the number of game like drills, playing more 2 vs 1 mini games and decreasing the amount of time I spent on simple problem solving drills. As I trained using these preferred drills I worked on my mental toughness.

*Toughness is the ability to consistently perform toward the upper range of your talent and skill, regardless of the competitive circumstances.* (James E. Loehr)

Before each session I took a few minutes for visualization practice - Loehr's research definitely made a positive impression, as this visualization helped me control anxiety and aided my selective attention.

The most challenging part of my research was to evaluative improvements in my decision making, and link theoretical work into practical contexts. On the completion of training I used the same tests and protocols to make comparative and final judgments on improved performance in the key area of decision making (see appendix 4). Had my hard work paid off?

Let's find out - - - !
**Interpretation and Discussion**

Through a critical review of my initial match analysis sheets and video replay there were strong indications that I accomplished a high percentage of the basic skills e.g. dribbling, passing and steals, (appendix 1a, b & c). However too many of my 'hand offs' were to marked players, although I supported these players, it simply wasn't good enough. As a point guard's responsibility is to ignite the offence, it is basically impossible to penetrate the opponents defence if the player with the ball is being strongly marked; I had to find the player in space more often.

Video evidence highlighted that in tight situations and in crucial sections of the game I won a high percentage of court battles. For the majority of the games I was holding the ball up in order to create options for team-mates - however this was not always the case. I drove to the basket when possible, benefiting my interpretation of the best solution to the 'floor problem'. Although I was trying to involve my team-mates as much as I could my frustrations became evident on tape due to the lack of 'off the ball' movement. I infer that I had read the right scenario but the key player's failure to 'link' to this caused the breakdown in offence. The video offered concrete evidence as the camera 'never lies'. It allowed me to continually analyse all aspects of my game in great depth. The use of the 'freeze frame' technology allowed me to scrutinize specific technical characteristics of my game. Although the video was basically error free, there was a single limiting factor, on occasion the camera focused solely on me, rather than panning out over the whole court. This provided difficulties in the evaluation aspect of the topic as I was unable to see all the options available to me. Therefore I relied on the supporting use of MAS, personal resume and game stats.

I felt however my personnel pride and management enabled me to develop my weaknesses and improve as a player throughout my training programme. The programme was tailor made to specifically address decision making and all the component features such as anticipation, reaction time and selective attention. Essentially I made sure I was constantly put under pressure to respond to multi game stimuli (ball, players, space etc) whilst selecting the best option to meet immediate demands. This was hard work and I greatly relied on internal feedback.

As a result, I felt greater improvement in my ability to select, apply and adapt techniques to improve the options available to me. Post match statistics verify this (see Appendix 5a, b & c). On reflection I feel this was a direct result of the nature of my training. In particular, training drills such as the 1 vs 2, - in which I had to select the precise moment to drive to the basket, which was being covered by 2 defenders, this vastly improved my decision making when it came to penetrating the key. The 2vs2 situation also enabled me to improve the timing of my passes, as my pass would determine what opportunity my team mate would have to secure the basket. These drills were game like in context and prepared me for the ever need to respond and adapt to the ‘floor problem’. During these drills I was becoming ‘more experienced’ my earlier research had clearly highlighted the link between better decision making and experience. I certainly found this to be the case as I was now much more aware of the need to hold the ball up to create options for myself and team-mate; better use of reverse and cross dribbling made this possible.

Some of my drills were ‘controlled’ such as the goalkeeping and bobble ball drills, these were designed to improve my reaction time, spatial awareness and anticipation (see appendix 2 & 4). The controlled environment served best my ability to develop ‘probabilities sequencing’ i.e. ‘know what was going to happen before it did’. This sharpened my reflexes, my ability to assimilate important stimuli and so improved the consistency in the options I selected. Mentally, I was rehearsing the speed at which I would move; I was on my toes ready to move and anticipate the throw, my centre of gravity was adjusted earlier enabling split timing. I felt my peripheral vision was improving thus improving my ability to taken in more ‘cues’.
Meanwhile other drills were more unpredictable, such as the rebound drill, which not only improved my decision making ability in a offensive sense, for example, following in after a shot missed but through sheer repetition of the drill I improved the explosive power in my legs. Being more spatially and temporally aware I felt my creative skills improved, as did my ability to control the tempo of attacking moves either that I initiated for my self or started such as a fast break for my team. Allowing me more time on the ball - which gave me that extra second to decide what I was doing. However this extra second on the ball did not give my opponents the opportunity to steal the ball as they were already 3 seconds behind my chain of thought!

Throughout the training I knew that it was important to consider principles of training therefore I decided to increase the complexity of some of the drills, for example, use 4 balls in the goalkeeping drill. This ensured I was continually pushing my boundaries I had to be faster in my cognitive and motor skills. The random nature of the feeds meant that I was more alert, similarly when I had to pass back to a specific player; who was first stationary then moving, aided my ability to speed up my decision making.

I incorporated more 3v2 half court games to enable me to get more responsibility on the ball, I was forcing myself to link better with team mates not lose control and be more patient with their attempts to link attacking moves. My scanning ability had improved and I could read better 'off the ball' moves by my team mates; also my opponents who were sagging off ready to steal.

I was also committed to playing in weekly league matches; again an opportunity to become more experienced. I felt my - hard work was beginning to pay off. My match statistics were continually improving (appendix 5 a, b &c), which gave me an added impetus in training. I had learned to use more 'fake and go' moves to confuse my opposite number. I felt more relaxed and had more time on the ball; I had a better understanding of 'selective attention' and felt that I ignored the 'wide up' comments made by my opponent who was deliberately trying to force me to make errors. I felt that my ability to scan was developing as a result. My dribbling and handling skills became more refined and allowed me to be more creative and respond to the surround stimuli of team mates, opposition and ball -resulting in the end product of a 'better decision'.

Throughout the training I relied heavily on theory work as a stimulus - in relation to response timing, controlling emotion and spatial anticipation. On completion of my training I used the same tests and protocols in order to make informed and well judged comparisons. (Appendix 6)

I have to be honest and highlight the problems with validating re-test results. External factors cannot be totally controlled and will obviously affect results. Things such as opponents, game pressures, fitness and mental state are not constant throughout each match. I also remind the reader that my results reflect my decision making in my offensive duties only because the scope would have been to great for me otherwise; this would have turned this study into the size of a small novel. As well as reference to my post training and game statistics I add personal opinion and infer the progress I have felt and believe to have developed. I feel great progress in relation to my technical ability -improved hand offs, assists, steals and created opportunities. As a result of improved anticipation and selective attention I definitely feel I have greater empathy with team mates hand signals, observance of their body language and in my ability to communicate my intent of where I want to initiate play; now dictating earlier to others the direction the offence is going. I also handle my aggression much better and channel this more positively for the benefits of others.

Review of videoed games would affirm these improvements. Other impressions I have made from watching match performances are that I assist players more often and use screens to greater advantage. I always had good peripheral vision but feel my ability to process information quicker enables me to take in even more information I am shooting a greater percentage of shots both on my strong and weak side. I have enjoyed my games more and do not feel so pressured; I think this is due to the mental
training I used before taking court. During training and after matches my coach and team-mates offered advice I feel much more responsive to their comments and feel I am a better team player as a result.

I take this opportunity to remind the reader again of the challenge I faced proving any development in my decision making. As I said it is such an intangible area based on subjective opinion – mine and the observance of others. Although the opinions of others are important, they do not know how I felt, the options that were available to me, the decisions I made based on several internal/external factors at any given time within the game. What I have learned throughout this process is the need to be self critical. What I do know is what I felt and feel. Self reflection and critical observance qualify the improved sense of control that I now feel. I am more measured before I go on court which means I fully concentrate on what I am doing and attempting to do. I have gained more experience and certainly have tried to put into practice my insight knowledge about selective attention, spatial and temporal anticipation to greater effect.

I am confident that the conditioned approach to my training definitely improved me as a player. As such I want to leave you with a strong impression that my improvements are based on fact and not on supposition even although I rely heavily on my personnel reflection. I feel I have substantiated that my quality of decision making is consistent, I process information quicker and have wider array of options for me; these which were previously unavailable.

I feel as a point guard I perform 'in the zone' more frequently, giving me an edge over my competitors. I feel I am focused on the immediate floor problem much more have become much more of a leader and an intimidating player as a result.
Application to Personal Development

At this stage it is imperative that I remind the reader of my research focus which was to locate my study in the specific perspective areas of Structures and Strategies and Skills and Techniques. I feel I have rigidly examined related concepts and key features to support my proposition. Furthermore, in my previous section I have already offered a strong impression about the success of my training and performance development, the remainder of this section therefore will highlight how I used and applied these works to influence my thinking, appreciation and understanding of improved and skilled performance.

Up until the planning process of my project I had no concrete awareness of the theory related to decision making. I have only touched the surface of this topic but nevertheless feel this has advantaged me as an athlete and I can more accurately appraise the nature of processing information in a skilled performance. Inspired by various authors (refer to bibliography) selected works on:

- Decision making, information processing
- Management of Arousal
- Selective Attention
- Effects of motivation feedback.

I have learned that many of these topics are complex and multi functional. I have tried to bring the main aspects together to make sense of them and have throughout my project relied upon them to influence and change my thinking. I have also taken on board new information which has broadened my understanding and feel this had made me a more reflective thinker.

In adopting an information processing approach to analysing how a performer uses present information from cues and signals from the environment with previously learned experiences to make some form of response (decision making), I have realised that the process takes a long time to develop and question can it ever be perfected? Yet I am constantly reminded about the adage ‘practice makes perfect’. I certainly feel I have got quicker in this process and have learned to select quicker the correct technique or movement pattern in response to solving the immediate ‘floor problem’ Due to the ‘open’ nature of basketball, situations are constantly changing which obliges the need to adapt to meet demands.
This diagram from the work of Beashel and Taylor depicts perfectly how this process works;

This had an impact on how I approached my training. I had to ensure the specificity was correct and for this reason used a conditioning approach. The inclusion of problem solving, pressure drills certainly focussed my mind and capacity to scan and take in more information. Also by applying research work about managing emotions I used mental rehearsal and breathing techniques to greater effect. A great example of this was when in the ‘closed’ situation of a ‘free throw’ I rehearsed in my mind the flight path I wished the ball to travel in. I felt more relaxed and again blocked all external distractions; such as crowd noise, which had previously upset me.

Influenced by the works of several authors such; Schmidt, Wisberg, Davis, Auty, Kimmet, Dick, and Roscoe all of whom emphasised the characteristics of skilled decision making reflects the experience of the athlete. Good athletes display the ability to ‘scan’ this is a sub conscious process and reliant on assimilating important cues and ignoring insignificant ones. I certainly felt that in my pressure drills, my scanning and subsequent selection processes were developing.

Earlier research indicated that there is no substitute for experience, this I suggest affirms the adage ‘practice does make perfect’. Certainly I felt more heightened in my awareness to respond to stimuli, for example, during training and games, when
selecting which of my team-mates cutting into the key was in the best position to receive the ball I can anticipate more quickly where to put the pass and indeed executed it automatically with real conscious thought to type i.e. bounce pass or chest pass. I also learned from Wrisberg that ball players need to react to more than one stimuli and that a delay in this processing can upset the organising process and so delay action. In open drill practice I determinedly focused on my ability to move after responding to an initial stimulus. For example, once I had passed to my team mate I would move to get the hand off, assist or screen, or once I had taken my shot I followed in quicker to rebound (I could sense when I had missed). By reinforcing this in my game I was adding ‘learned experiences’ and increasing my ability select and adapt my performance to meet the demands of the situation.

Every time I step on court now, I believe I am becoming more experienced. Having studied Schmidts’ work on temporal and spatial anticipation has made me more tuned in to game problems. I am more aware of picking up subtle differences in body positioning of my opponents; this gives me an edge of the type of move I need to initiate in order to give me more time and option when on the ball.

I found the work on spatial anticipation fascinating and that it was dependent on my ability to judge what was going to happen before it did. I knew from the way I would mark my opponent that I would force an opportunity to steal the ball, sagging off him allowed him ‘false security’ and enabled me to steal the pass that was directed towards him. Whilst I appreciate that temporal anticipation is useful (the ability to anticipate what is going to happen but does not know when) I now appreciate to have both spatial and temporal anticipation is much more effective to me as a point guard. I can now use anticipation to my own advantage and apply the principles to disadvantage my opponent. My improved understanding of spatial and temporal anticipation means I deal with a second response even before I have responded to the first one; this now features as a strength in my performance. Seeing is believing!- putting into practice what I have learned and seeing improved results has helped me make more sense of theory and I can debate more critically with opinion.

A by product of this studied area of work is improved deception play, by including strategies of

- Delaying movements as long as possible
- Disguising relevant cues
- Emphasing non relevant cues
- Presenting false information

this produces uncertainty for my opponents and in pressure situations I definitely have the edge over them.

I am more educated about the potential of the three A’s of information processing – Alertness, Attention and Arousal. I feel it is the last of these –Arousal; has made me a better point guard.

I understand the effects of over and under arousal. Prior to my research I had no idea that this can be traced to personality traits and motivation. My motivation could sometimes be too high. I now use my motivation to benefit others rather than be
aggressive in my attitude and put them off I am more patient and sympathetic to
recognising their weaknesses.

As I studied many of these concepts I had picked up important information in the role
of feedback to accentuate change in my earlier behaviour.- I have learned to view this
as ‘response produced information’ as a result I now more consistently correct and
detect errors in my own performance and in that of others. In summary my research
has allowed me to effectively diagnose, design and assess and has made my learning
more relevant.
Evaluation

Admittedly before embarking on the course, whether it is due to naivety or the ease of which I found the higher course—I had no idea of the mammoth task facing me. The amount of research work was something I had not prepared for. However I have enjoyed it, even though it has been hard work both theoretically and practically, I have found it extremely rewarding.

The task of investigating such a complex issue such as decision making remained quite a challenge throughout. A fascinating area, I feel I have learned a lot about many related issues that are interlinked including, experience, anticipation, reaction time and attention selection. To be perfectly honest I suffered a lack of motivation mid way through my research work and wished I had selected an easier proposition to focus on; basically because I found it so hard to grapple with. I realised at this stage when you debate on an area so subjective there seems to be no right or wrong answer.

When I actually took time to look at model performers I realised that even with ‘experience’ and playing at the top level in their field these players also made mistakes. The question I would pose is the same one I have attempted to prove which is

“is it possible to ever improve this quality,”?

Without facts and valid proof many would agree this could be left open to interpretation but when interviewed these players would give a reflective opinion of their intent.

I quickly realised that there was no valid scientific way of proving/disproving my theory. There were no standardised tests to evaluate initial levels of decision making therefore to collate data presented me with frustration; I felt I adequately overcame this by the notional design of my data sheets. Opinion featured highly throughout this process; both from self and others. I enjoyed the discussions with fellow players and coaches who on review of video evidence could not agree about errors made being put down to poor decision making, lack of skill, fitness or indeed experience. As stated earlier decisions can be praised by some and criticised by others. The truth of the matter I think is that there is no definitive answer, and that many factors on the day, hour or minute of action can be so changeable. There are too many variables that can influence performance, for example, weather, mood, stage of competition or injury all to some degree may affect outcome. Therefore I am firmly of the belief that internal critical evaluation does become a powerful tool for evaluating cause and reason when reflecting upon how effective my decision making and processing of information had become.

I definitely agree with many of the theorists whose work I have studied that undoubtedly any player will improve with experience; as each time a performance is complete a learned cycle of new experiences is also complete. From this process we either change old habits or apply new or better learned skills to improve performance. I definitely feel I have benefitted from learning different ways to improve learning and in the process have learned much about the type of performer I am. I have realised that at times my naturally aggressive and competitive nature had been detrimental to my decision making abilities. I also had to accept that on many occasions I was affecting my team-mates confidence by my over arousal and determination to win this caused them to make mistakes. The study of different personality traits is an area I would like to study in the future.

I feel I have improved my ability to be more thoughtful and focussed when on court. I feel my opponents do not enjoy the prospect of facing me in competitive situations, whether it is training or in a game.
I feel these improvements have further fuelled my desire to win and become a more elite performer. I have grown to respect the views of others, if I disagree with them or not. I take in all the information before passing judgment and vitally I know that no matter what the odds are, they can be defied.

In the future I hope to play university basketball if selected and considered experienced and good enough to do so. I would want to continue developing as a performer so would use the skills learned from this process to look at other areas of my game requiring development. As stated earlier the area of personality traits interests me and I would be keen to examine how influential these can be to skill learning and development.

This course has undoubtedly prepared me wonderfully for University, the knowledge I have gained will be put to great use throughout the forthcoming years.

To conclude I feel I have offered a good attempt at proving my original proposition which was:

Reading the floor will define my teams' success. Important decisions are a regular occurrence; each individual has the potential to change the course of the game. Refining my decision making will not only improve my personnel performance, but also and more importantly, my teams performance.
APPENDIX 1a Match Analysis sheet notional form

V Grange

Record criteria

Data to be completed once I cross halfway line. Refer to MAS 3 for resume.

Circles to be filled out in tally marks—with 1 to denote successful

x to denote / unsuccessful
APPENDIX 1a Match Analysis sheet notional form v Lourdes

Personal reflection-diagnostic feedback from coach

Analysis indicates a strong performance of my technical abilities. I felt I performed my role effectively and where possible dictated play according to our preferred strategy. My dribbling was for the most excellent and very positive. My distribution was good and I managed to get many passes to marked players. My coach indicated I agreed that hand offs and assists to team mates required improvement. I could also think about my shooting consistency. Faults registered in the area of poor support play after I had made initial decisions. Match performances revealed good play but questioned my ability to remain effective in attack play I took on too much and definitely put my team mates off due to me not handling my emotions.
APPENDIX 1b Match Analysis sheet notional form v Holyrood

Record criteria

Data to be completed once I cross half way line. Refer to MAS 3 for resume.

Circles to be filled out in tally marks – with 1 to denote successful

x to denote / unsuccessful
Appendix 2  Pre - Post Training Tests

Test one - Ball Watching —
This test involves me standing between 2 measured cones. In One minute 2 feeders pass the ball between these 2 areas randomly. Feeds are varied in height, angle and direction. I record the number of ‘missed balls'. This improves my anticipation and processing of information.

Test two - Reaction ball —
This test involves me moving to pick up the ball before it bounces a 2nd time. I record the number of ‘missed' balls in a minute x 3. The shape of the ball causes erratic direction of rebound –therefore making scenarios very unpredictable my speed of reaction time is tested.

Test three - Switch Play —
This test requires me to respond to a verbal command to receive a pass from the half way line. I then drive to the basket called 1,2 or 3. Basket (2) demands a 3 vs 1 zone defender x 3, whereas baskets 1 and 3 involve a fake/cut to the basket via a man marking situation. Calls are always random.

Test Four - Turnovers —
This test involves me turning over randomly placed cones. Cones are colored Red Blue Green Yellow. On command I can only up turn color called. (20) as quickly as possible in a minute x3.

Test five - Pass and Go - In this test I receive a ball with my back to the basket. When I pivot round I can only pass to the player with a specific color of bib on. These are called out by my coach in random order. I record any inaccurate passes.
APPENDIX 3a

Information processing model.

Input → Stimulus Identification *(Perception)*

Response Selection *(Decision Making)*

Response Programming *(Action)* → OUTCOME

APPENDIX 3b

Inverted U principle

![Inverted U principle graph]

Performance

Excellent
Average
Poor

AROUSAL LEVEL

Low  Moderate  High
APPENDIX 4a
Return Match Analysis sheets v GRANGE

APPENDIX 4b
Return Match Analysis sheets v HOLYROOD
APPENDIX 4c

Return Match Analysis sheets v LOURDES

Final Report

Again I feel results indicate good role related performance with consistent application of my technical duties. Physical & mental fitness areas do not feature here, but I infer from personal reflection I have improved in my slamming ability and have contributed more fully to my team’s offence.
Personal reflection-diagnostic feedback from coach after training

Analysis still indicates a strong performance of my technical abilities with improved shooting, and distribution play. I feel my dribbling whilst remained positive throughout has speeded up when playing on both strong and weak sides. I look, anticipate and find more space for myself and team mates. The data does not and cannot feature improvements from personal reflection where I know I have performed my role even more effectively and now dictate play according to our game pressures. My coach agrees with me and has set me even higher targets to reach. My ability to remain effective in attack play has definitely benefited my team mates I am more patient and offer encouragement and support play much more consistently.

External factors of which I have no control over may have been contributing factor in authenticating my success rate is the effectiveness of opponents, standard play and temperament of own team etc, however I infer personal improvement and feel more in control, creative and positive in my ability to make effective decisions as a result of my research work.
## Appendix 5  
### Training Programme

<table>
<thead>
<tr>
<th>WEEKS</th>
<th>1-3</th>
<th>4-6</th>
<th>7-9</th>
<th>10-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ball Watching</td>
<td>X 3</td>
<td>X 3</td>
<td>X 3</td>
<td>missed</td>
</tr>
<tr>
<td>Reaction Ball</td>
<td>X 3</td>
<td>X 3</td>
<td>Missed out</td>
<td>Replaced with more 1v1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Missed out</td>
</tr>
<tr>
<td>Switch Play</td>
<td>X 3</td>
<td>X 3</td>
<td>X 5</td>
<td>Basket Missed</td>
</tr>
<tr>
<td>Turnovers</td>
<td>X 3</td>
<td>X 3</td>
<td>Missed out</td>
<td>Replaced with more 1v1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Replaced with 3v2</td>
</tr>
<tr>
<td>Pass&amp;GO</td>
<td>X 3</td>
<td>X 3</td>
<td>X 5</td>
<td>X6</td>
</tr>
</tbody>
</table>

### Individual Training Programme to augment above

Running x twice a week using fartlek training

Swimming once a week

All of the above is adapted every week in order to overload my body by considering and

applying principles of training.
Appendix 6

Final Test in comparison to initial testing

**Initial Test**

<table>
<thead>
<tr>
<th>Test</th>
<th>Result one</th>
<th>Result two</th>
<th>Result three</th>
<th>Result four</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ball Watching</td>
<td>8 missed</td>
<td>7 missed</td>
<td>7 missed</td>
<td>9 missed</td>
</tr>
<tr>
<td>Reaction Ball</td>
<td>12 missed</td>
<td>10 missed</td>
<td>7 missed</td>
<td>8 missed</td>
</tr>
<tr>
<td>Switch Play</td>
<td>Basket scored</td>
<td>Basket Missed</td>
<td>Basket Missed</td>
<td>Basket Missed</td>
</tr>
<tr>
<td>Turnovers</td>
<td>35</td>
<td>37</td>
<td>34</td>
<td>30</td>
</tr>
<tr>
<td>Pass&amp;GO</td>
<td>Inaccurate</td>
<td>Accurate</td>
<td>Accurate</td>
<td>Inaccurate</td>
</tr>
</tbody>
</table>

**Final Test**

<table>
<thead>
<tr>
<th>Test</th>
<th>Result one</th>
<th>Result two</th>
<th>Result three</th>
<th>Result four</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ball Watching</td>
<td>1 missed</td>
<td>1 missed</td>
<td>2 missed</td>
<td>3 missed</td>
</tr>
<tr>
<td>Reaction Ball</td>
<td>1 missed</td>
<td>2 missed</td>
<td>1 missed</td>
<td>2 missed</td>
</tr>
<tr>
<td>Switch Play</td>
<td>Basket scored</td>
<td>Basket Scored</td>
<td>Basket Scored</td>
<td>Basket Scored</td>
</tr>
<tr>
<td>Turnovers</td>
<td>45</td>
<td>47</td>
<td>48</td>
<td>50</td>
</tr>
<tr>
<td>Pass&amp;GO</td>
<td>Accurate</td>
<td>Accurate</td>
<td>Accurate</td>
<td>Accurate</td>
</tr>
</tbody>
</table>

Personal reflection: Given the specific test protocol and my development focus I am pleased to observe that my retest results substantiate improvement. Quantitatively raw data indicates greater consistency with improved abilities in my timing anticipation and reaction time. The design of the game like drills i.e. open contexts enabled me to develop cognitive, perceptual and motor skills. In these tests I have proved this and know from internal feedback how more confident I am when on court.
**Bibliography**

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James Knight

James R. Morrow Jr.

Alien W. Jackson

James G. Dish Dale P

Mood

National Coaching Foundation

Richard A. Schmidt

Craig A. Wrisberg

Heather Crouch

Mike Hughes Ian

Franks

Ken Green Ken

Hardmen

Davis Kimmit Auty

David Halberstam

Gerhard Bauer

Kevin Western, Nesta

Wiggins Graham

Thompson,

Sue Hartigan

Stephen J. Bull John G.

Albinson Christopher J.

Shambrook

James E. Loehr
**ADVANCED HIGHER PHYSICAL EDUCATION: Project Report Marking Sheet**

<table>
<thead>
<tr>
<th>Comment on Rationale and Project Proposal:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The candidate presents a clear and well structured rationale and project proposal that takes significant account of the nature and demands of personal and activity specific issues. There is detailed explanation about current level of performance with sound knowledge exhibited about how the identified weakness will be developed.</td>
</tr>
<tr>
<td>The proposition is well stated with the performance focus located in perspective areas with relevant KC’s and KF’s clearly identified.</td>
</tr>
<tr>
<td>Marks awarded: 12 / 12 marks awarded</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comment on Research:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The candidate uses a wide range of relevant literature and resources to research selected concepts. The knowledge acquired is relevant and mostly detailed to support enquiry. In particular, the use of secondary sources is valid and well detailed. The inclusion of more primary sources, greater attention to selected training methods and mental fitness issues would have been beneficial.</td>
</tr>
<tr>
<td>Marks awarded: 14 / 17 marks awarded</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comment on Interpretation and Discussion:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The candidate exhibits comprehensive understanding of broad and specific issues arising from research through presenting and interpreting information accurately, with detailed discussion. Interpretations about improved performance are often offered from personal reflection with a good attempt to substantiate claims for improved performance from collated data. Although some discussion is narrative, the candidate consistently applies acquired knowledge to support debate; greater quality and depth of discussion in relation to training effectiveness would have been useful. A real strength of this work is the consistent attempt to appraise findings to the selected perspective areas and KC and KF’s.</td>
</tr>
<tr>
<td>Marks awarded: 15 / 17 marks awarded</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comment on Application to Performance:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The candidate consistently demonstrates how knowledge acquired was applied to personal development plans to optimise performance. Some repetition is evident and lacks full detail in relation to training considerations, in particular, to the mental fitness development of performance.</td>
</tr>
<tr>
<td>Marks awarded: 10 / 12 marks awarded</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comment on Evaluation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The candidate demonstrates an ability to critically evaluate work with claims for improved performance development justified. Recommendations for the future management of personal performance are not fully developed.</td>
</tr>
<tr>
<td>Marks awarded: 9 / 12 marks awarded</td>
</tr>
</tbody>
</table>

**TOTAL = 60 / 70**

| Assessor ____________________________ Date ____________ |
ADVANCED HIGHER PHYSICAL EDUCATION

Managing the Project Report

This overview is intended to help staff with their understanding of the ‘new sections’ of the Project Report.

The previous Course assessment required candidates to present their work in the form of a Dissertation. Often candidates failed to grasp the rigours of the study demands for this level of presentation and as a result, the structure of the work presented was poorly adhered to; with many failing to follow a recognised format. Rationale and performance development focus was rarely located in related Key Concepts and Key Features. Research often lacked the quality and depth to ensure meaningful debate. Consequently, interpretations, discussion and evaluations were shallow, narrative and repetitive; and lacked comparative and critical analysis.

For a more detailed overview, colleagues should refer to the Principal Assessor’s report, which highlights particular areas of strengths and weaknesses.

The new format is designed to enable candidates to work systematically and work more critically in their approach. It is imperative that the knowledge gained by studying the Units for internal assessment is integrated into their final project work. This investigatory work provides the candidate with the platform upon which they can fully develop their project.

A full appreciation of the structure, process and independent research requirements will enable them to produce sound pieces of work.

The purpose of a report can be to:
◆ inform
◆ predict
◆ persuade

Reports should be easily read and absorbed. They should give readers a clear idea of intent, findings, conclusions and recommendations before they start to consider the detailed argument.

How do candidates access marks?

In short — asking the question, finding the answer, reporting the answer.

1. substantiate performance issues
2. use research enabling contextual analysis
3. relate cause and effect; problem solve
4. test solutions with resultant critical analysis consistent with the evidence
5. evaluate the process, objectives and offer future recommendations
KEY AREAS

1 Defining the Performance issue – formulating the Rationale and Project Proposal

This involves considering the specific objectives:
♦ A convincing rationale must be evident; stating exactly what performance area will be addressed
♦ The construction of the argument must be located within relevant Key Concepts and Key Features
♦ The limits of the study are justified
♦ The context is made clear with relevant issues related to Nature and Demands, both activity specific and relevant to the performer.

The competency required here = **logical thinking**

12 marks available here

2 Planning strategy for research issues; primary and secondary sources

This involves considering:
♦ The most valid and relevant types of data gathering
♦ Consolidating reliability issues
♦ An extensive literature/resource search and detailed selection (refer to use of annotated bibliography)
♦ Applying research information to support enquiry.

The competency required here = **analytical and critical thinking**

17 marks available here

3 Interpreting and discussing; substantiating the process

This involves the use of:
♦ Interpretations that offer qualitative/quantitative/diagnostic/reflective/detailed comparative analysis and inference linked to data presented (often cited in appendices but these must be used to support points raised)
♦ A discursive rather than a narrative approach which includes full detail about training and its effectiveness, personal needs/performance goal achievement
♦ Primary, secondary sources and appendices used directly to support debate and appraised critically.

The competency required here = **analytical and critical thinking**

17 marks available here
4 Applying research knowledge to training and performance development; synthesising research information

This involves using all information gathered from research:
- To inform change/modify thinking
- To exemplify how performance has been affected
- To highlight ‘new learned’ knowledge and its relevance justified
- To assimilate/synthesize sources used to support argument

The competency required here = analytical and critical thinking

12 marks available here

5 Evaluation of the objectives, the process, and highlighting future recommendations

This involves considering:
- Repeating some of the previous statements — in summary format
- Substantiating the process and affirming or refuting hypothesis
- Critically reviewing the present, highlighting what has emerged and concluding via future recommendations

The competency required here = critical thinking

12 marks available here

What makes a good report?

A good report will have the following characteristics:

Quality of argument
- The management of the performance focus will reveal a grasp of the underlying principles, issues and concepts as well as some superficial ideas
- It will show how ideas and theories relate to own experiences
- It will show an ability to analyse the subject objectively from different and relevant perspectives
- It will have a clear and central thread to reasoning, maintaining the line of argument
- It will use a wide range of evidence to justify the line of argument
- It will inform how thinking and performance have been developed
- It will show good use of description, explanation and evaluation throughout.

Finally, the report should be presented in the correct format, with attention paid to wordage, detail, referencing of data and bibliography.

A question to you as a reader — Has the candidate offered a convincing argument in the Project Report and conveyed satisfactory understanding, knowledge and practice?
ADVANCED HIGHER PHYSICAL EDUCATION

General advice — Head of Department Perspective

1  Negotiating and managing the Course
2  Tutoring candidates in preparation for Unit and Course assessment
3  Teacher/lecturer role as facilitator/manager
4  Supporting candidate self study
INTRODUCTION

Whilst the logistics of the implementation process remain the responsibility of the centre, the advice offered is intended to aid the process by providing possible solutions for staff in the implementation of the Advanced Higher Physical Education Course.

1 Negotiating and managing the Course

There are obvious difficulties in obtaining a suitable timetable slot when competing for candidates. However, with a good department record of candidate accredited SQA results, the continuity of Advanced Higher study is an obvious development for broadening the Post 16 curricular provision. This may relate to your whole school development initiatives. The key to success is the early recruitment of candidates: think about the current cohort, identify the capable and potential candidates at this stage.

A suggested strategy

A strategic approach to negotiating the introduction of the Advanced Higher Course is to provide the SMT (in the year prior to implementation) with a detailed framework identifying difficult issues and offering some flexible alternatives. Importantly, this provides a perspective about how all the upper school candidates’ requirements would be met.

Identifiable features such as:

a) Candidate uptake
b) Timetabling/staffing implications
c) Parental perception/support
d) Certificate currency

a) Candidate uptake

Often the candidate uptake is quite small therefore teaching and learning considerations can be complex.

Considerations must also be made in respect of:

♦ the learning and teaching of Core, Higher and Intermediate level classes
♦ staff expertise, facilities and resources

b) Timetabling/staffing implications

It is important to negotiate with SMT and subject staff how the Courses will be adequately delivered.

It is desirable to have more than one member of staff timetabled to facilitate delivery of theoretical content. This may also serve as a staff development opportunity with CPR targets being satisfied.
There are various options available:

(i) to teach Advanced Higher group on their own (*all Course elements*)

(ii) integrate Advanced Higher — particularly important in the delivery of practical performance (*separating them for some theoretical aspects of coursework, via tutorials for example*)

(iii) integrate Higher and Intermediate 2 candidates (*differentiating theoretical aspects of coursework*)

One of the most advantageous ways is to integrate candidates for practical performance. This provides challenging contexts, motivation and sound assessment environments for all candidates. Consideration of the diversity of the other Course elements must be carefully planned to take account of the different individual learning styles. Accordingly, candidates are afforded adequate time to reinforce and synthesize the various learning aspects of the appropriate demand level.

For example, use of:

- various teaching methodologies
- differentiated class assignments, homework and support materials
- group and individual tutorials
- practical and theoretical workshops
- achievement related assessment

Considerations must also be made in respect of:

- staff expertise
- candidate’s performance development area
- available resources; the Annotated bibliography AH, published for LTS is useful for this purpose (*also negotiate with your centre librarian to purchase reference books*).

c) Parental perception/support

Dealing with parental enquiries are usually in connection with ‘certification currency’, reassuring them of the benefits of accruing University points to advance further education and career prospects ensures their support and cooperation. It is important to forge the triangle support between teacher/lecturer, candidate and parent as it is an integral part of the process.

d) Certificate currency

Although this seems to change on an annual basis, many Universities will accept Advanced Higher Physical Education as part of candidate point age for entrance/conditional placement. This may depend on the faculty applied for; therefore it is advisable to check.
2 Tutoring candidates in preparation for Unit and Course assessment

It is helpful to issue candidates with a Course handbook, which includes a copy of the Arrangements documents for Perspectives on Performance Development, Analysis and Development of Performance and Performance Units, as well as details about the Project Report. This encourages ownership and helps to clarify Course expectations and assessment requirements.

Candidates should be encouraged at a very early stage to select their preferred analysis area, identify the Key concepts and select the most relevant Key features to be addressed in developing their performance. They should be aware of specific performance targets and offer some reflection about how best to proceed with the development of their proposition. This provides an initial assessment of the candidates’ thinking and understanding.

In recognition of the candidates’ selected perspectives and project report focus, it is advisable to prepare a personal reading list. This should be negotiated with candidates as part of their planning and research; remind them of the need to add to this. This will help them to develop a more detailed appreciation about several key issues and enable them to offer critical debate by exemplifying theory and authenticate their research to practical experience.

To enable candidates to acquire knowledge, an idea is to set specific tasks related to the prescribed reading, for example give a talk on the prescribed reading or a synopsis of the main findings.

3 Teacher/lecturer role as facilitator/manager

Although there is a need for strong interaction between teacher/lecturer and candidate at this level of study, candidates should be working more independently. Tutorials help, as this involves the teacher/lecturer and candidate working together to improve learning and encourages the candidate to work proactively and not merely as passive recipients. Candidates should be supported to test solutions and develop a more sophisticated approach to research and developing their debate.

Teachers/lecturers therefore require to explicitly make a pedagogical shift from ‘content based approach’ to ‘thinking skills approach’.

Candidates require to demonstrate:

♦ a developed sense of purpose
♦ commitment to working independently
♦ logical, analytical and critical thinking skills

When preparing candidates to develop their Project Report, it is imperative to integrate knowledge gained through studying the Perspectives on Performance Development and Analysis and Development of Performance Units, this enables them to corroborate their rationale.
The Project Report requires the candidate to:

♦ substantiate performance issues
♦ use research enabling contextual analysis
♦ relate cause and effect/problem solve
♦ test solutions with resultant critical analysis consistent with the evidence
♦ evaluate the process, objectives and offer future recommendations

4 Supporting candidate self study

To enable candidates to acquire the essential skills required, self study needs to be presented as an attractive prospect, therefore a flexible approach should promote self belief, personal challenge and achievement to ensure they become better ‘skilled learners’. It is important to remember that whilst candidates will attempt to work independently, they will still need a structured approach to managing their work and meeting deadlines; a timetable will enable them to complete Course assessments.

What has worked well?

Various presentation devices to promote learning such as:

♦ class/individual group interviews
♦ candidate PowerPoint, video and oral presentations
♦ candidate book reviews *(oral and use of Dictaphone)*
♦ posting assignment tasks *(written and practical)* on notice boards
♦ issuing assignments on disc format or via the intranet
♦ engaging Advanced Higher candidates in the learning of their peers, for example teaching a Standard Grade group a specific aspect of performance or delivering a theoretical presentation to an Intermediate 1 or 2 group, enables candidates to select, apply and adapt appropriate teaching methods to deliver their ‘prepared lesson’. This allows them to draw on their own experiences by expressing their depth of knowledge, perception and evaluation. This approach can nurture motivation and develop the candidates’ self-evaluation, a vital tool in promoting confidence and promoting life long learning skills.

In summary, the learning and teaching of this Course can be complex; however by careful management, it is extremely rewarding.