GCE Physical Education – Exemplar Materials

Unit 2: The Critical Sports Performer (6PE02)

Task 2.4 – Performance analysis (Dance)

Commentary

Mark band four (19-24):
"The student has produced a very good standard of analysis tasks which have enabled them to demonstrate a clear knowledge and understanding in their chosen performance role."

General comments
This is a detailed and well presented piece of work. The specification requirements have been covered and the candidate demonstrates a high level of knowledge and understanding of the many of areas covered.

The information and analysis is presented in a structured way and photographs have been used to illustrate a number of the points made. Additional use of diagrams or photographs / pictures would have allowed for a greater degree of analysis to be made.
There is evidence of some research and there is use of technical language throughout. Several sections lacked depth and these would have benefited from greater research.

2.4.1 – Technical analysis of four core skills

Four appropriate core skills have been identified. Photographs have been used to support the descriptions which cover technical information, physiological / mechanical detail, including the muscle group used and range of movement, tactical application and psychological preparation (although this is not required for this work).

There is a comparison of technique to the perfect model (to aid analysis) although use of annotated pictures would have added helpful detail to this element of the work. There is a brief explanation about the tactical use of the technique.

The explanations offered for the nature of muscle contractions lacks clarity and this detracts from the overall quality of the work. Some statements (such as aspects of the work offered for the tactical application) are repeated in each section and the candidate may have considered the way in which core skills being considered might be appropriately linked to other dance elements within a performance.

2.4.2 – Tactical analysis

The candidate considers a variety of suitable 'tactical dimensions' of dance and how they impact on performance. Key terms are explained and there is a helpful table offering the candidate's views of her own strengths and weaknesses of these tactical applications together with an 'interesting' category which adds additional context.

The analytical dimension of this work would have been enhanced with a short comparison to aspects of the work described, perhaps through analysis of short video clips of her own

choreography and that of professional dance, or by taking an aspect of her performance that she states needs work ("multiple level choreography") and explaining how this might be improved.

2.4.3 - Notational analysis

Three notations have been undertaken, including that of an 'elite' performer which provides a suitable opportunity for analysis. There is a summary of key points identifying what the candidate has learned about aspects of performance for each notation together with a brief conclusion.

Additionally the candidate has sought to add additional context by offering some data about key fitness tests which she argues complements the information gathered. There are some anomalies with this work. For example, the information about the vertical jump does not appear to have been related to 'reach' height; within the tests she refers to a test of 'standing on a bench' for thirty seconds and recording the number of times performers 'fall off'- more details of the test are required before it can be used for analytical purposes; furthermore, the candidate refers to the importance of speed for an effective pirouette and then refers to her time over 60 metres.

The candidate should also have provided more contextual details about the notational data gathered (when, where etc) and more information about the elite performer referred to (who, when, nature of performance for analysis etc) and concluded by outlining a plan of improvement on the basis of what she has learned from the process.

2.4.4 - Training analysis

This section covers a number of important aspects of the training including a helpful introduction and some analysis of the teaching styles of the candidate's two dance teachers. Other work includes consideration of the key parts of an effective warm up and energy systems. There is some comment about periodisation but the concept is not explained clearly and the ensuing content loses impact as a result.

Some information about training methods, fitness testing are confined to the appendix and more information about the actual content of training (resistance levels, heart rate / training zones, repetitions/ sets etc) would have added welcome depth here.

2.4.5 - Strengths and weaknesses

The candidate has provided a personal appraisal of strengths and weaknesses which is an important aspect of this section. The candidate rightly has made reference to physiological, technical, tactical and psychological aspects of performance as suggested in the Internal Assessment Guide. The candidate has also referred to other sections of the AoP work, which is good practice, including fitness tests and the work undertaken on choreography.

Peer and/or coach assessments to provide additional depth and detail would be considered relevant for a higher mark here and the candidate should link this work to the A2 Development Plan.

Task 2.4 — Performance Analysis	
Technical Analysis	**5 / 6**
Tactical Analysis	**4 / 6**
Notational Analysis	**3 / 6**
Training Analysis	**4 / 6**
Analysis of strengths and weaknesses	**4 / 6**
Total	**20 / 30**

Core Skills

Pirouette

Saute

Rande de Jambe

Grande Battement

Vanessa Walters **Year 13 JT**

Contents

Introduction

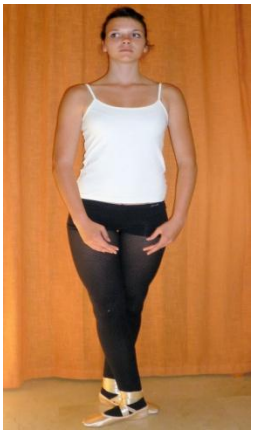
This document is intended to detail some of my core skills in dancing. These skills are;

1. Pirouette
2. Saute
3. Rande de Jambe
4. Grande Battement

For my four core skills listed above I will go through all the technical, physiological, mechanical, psychological and tactical activities which occur during these movements. For each movement I have illustrated these movements throughout the preparation, execution and recovery to show the difference of muscles used, mental state, and of course the importance of each movement.

At the end of each recovery of the movement I have also compared myself to a perfect model to show the work I still have to do. I have illustrated some of these with pictures to show the difference.

Pirouette



Preparation:

Technical Analysis: Start with your feet in 5th position. Keep both your legs extended and have your arms in bras bas. Then degage arms to first right foot in front, right arm opens to second. Line your eye sight to head height for spotting.

Flex into a deep plie staying with your weight spread evenly in the middle. Push heels into the floor to grasp ready to push up and turn. Keep your head high and eyesight set on spotting point.

Physiological Analysis:

- Balance – this is used to stay steady in place to keep the centre of gravity in place.
- Flexibility: you need to have flexibility in your ankles and hips to create a good turn out to improve execution of movements.

Mechanical Analysis : Eversion and plantar flexion of feet using gastrocnemius and soleus, supination of hands. Trapezius, quadriceps (rectus femoris, vastus intermedius, vastus medialis and vastus lateralis) , Rectus abdominis, external obliques, infraspinatus and gluteus maximus are all contracted. Hamstrings relaxed working in the antagonistic pair. Synovial hinge joint of the knee is extended whilst elbow joint has slight flexion to cause first arms. Saddle joint in thumb is used for hand position. Horizontal adduction in the arms using the pectoralis major and minor. Adduction of legs to meet in the centre. Cartilaginous joint of the vertebral column; essential for straight back and posture

Psychological Analysis: I have to mentally prepare myself to focus so that I will be able to execute the movement well. This also is to concentrate before the movement occurs and control anxiety so nerves don't get to you before you perform.

Tactical Analysis: Neuro-Muscular system is used for fast reactions and the speed of the moves. Muscular-Skeletal system is used for power, Balance and Flexibility to support the body. A Pirouette is normally performed at a heightened staged of a routine to add a feel of elegance and show off ability. Any movement will always have a preparation which will be performed before the execution and by this you mentally prepare yourself but also make sure you're in the right position so no harm is done. This is an isometric contraction as it does not move and is a help position.

Execution:

Technical Analysis: Releve to demi-pointe pulling your back leg to the front and taking your arms to first position. Whilst up you should be balanced on your straight supporting leg and now turning. Keep spotting to your chosen spot until your head cannot see it anymore and then whip head around to support the then spot again. Your shoulders should be down and your abdominals and gluteals should be held in tightly.

Stand upright with centre of mass being aligned over the centre of gravity. Don't move your legs out of position, they should both be turned out, also the head must turn faster than the body to prevent dizziness.

Physiological Analysis:

- Balance – this is used to stay steady in place to keep the centre of gravity in place.
- Flexibility: you need to have flexibility in your ankles and hips to create a good turn out to improve execution of movements.
- Speed: to whip yourself around and keep upright otherwise if you were too slow you would fall off of our foot.
- Coordination: you have to have coordination to manage to keep your body upright and use your arms to spin whilst whipping your head around to keep you from dizziness.

Mechanical Analysis: Relaxation of quadriceps, contraction and flexion of hamstrings (biceps femoris, semiteninosous, semimembronosous) working in antagonistic pairs. Rotational arm abduction at a slight angle using biceps femoris, deltoids and pectoralis major. Pronation on the left arm using pronator teres. Ball and socket joints at shoulder and hip rotate and abduct. Rectus abdominis contracted permanently to stay steady. Sternocleidomastoid on neck contracted as head whips round to keep focused on spotting point. Cartilaginous joint of the vertebral column is essential for a straight back and posture. It strengthens of the core muscles which improves core stability. The cartilage cushions spinal column whilst landing a jump.

Psychological Analysis: At this point I need to be focused completely on keeping balance on my foot and keeping my body pulled up so that I don't lose my centre of body. I have to focus on a certain point so that it gives me somewhere I can constantly look and helps me spot to decrease the chance of dizziness.

Tactical Analysis: Neuro-Muscular system is used for fast reactions and the speed of the moves. Muscular-Skeletal system is used for power, Balance and Flexibility to support the body. A Pirouette is normally performed at a heightened staged of a routine to add a feel of elegance and show off ability. The execution of the movement is when your power is at its highest. A pirouette is performed in all dance exams as it is seen as a vital part of dance. This is an isotonic movement as it is moving.

Recovery:

Technical Analysis: Once you have managed a turn or as many as you want, you should land elegantly with your feet once again in fifth. Arms should be in first still and then to finish it off take them out to second and then back to bras bas looking to quase gracefully with an elongated neck.

Physiological Analysis:

- Balance – this is used to stay steady in place to keep the centre of gravity in place.
- Flexibility: you need to have flexibility in your ankles and hips to create a good turn out to improve execution of movements.

Mechanical Analysis: Elevate the patella. Move through the synovial ball and socket joint. Dorsiflexion at the ankle. Keep shoulders down using the lower trapezius and your pectorals, this goes through the synovial ball and socket shoulder joint. Biceps contracted to keep the arm upright and stable. Slight flexion at the hinge joint at elbow and knees. Quadriceps concentric contract as I start extending my legs again to come up into preparation position. Rectus abdominis and obliques are contracted and pulled up to keep centre balance and sternocleidomastoid is contracted to keep the elegant neck line stable. Pivot joint at neck is stable.

Psychological Analysis: for this my mind can relax as it is at the end of the movement and I do not have to focus as much. I should still keep still to finish the movement with elegance but I do not have to spot anymore. This is using the attribution theory as I would attribute the success of the movement.

Tactical Analysis: Neuro-Muscular system is used for fast reactions and the speed of the moves. Muscular-Skeletal system is used for power, Balance and Flexibility to support the body. The recovery is after every movement and it is to make sure you don't just bounce and finish a movement. It adds safety and elegance. After a movement you normally still move your head to finish the movement. Knees have to be slightly bent to absorb the force of the land.

Comparison to Perfect Model: As you can see on the picture underneath, my flexibility in the hips is a disadvantage compared to a perfect model as I cannot get as good a turn out as expected however it shows that my balance is spot on and my muscle contractions are as good as the perfect models as I have enough strength in my legs. Compared to the perfect model I find it hard to spot and not get dizzy, this decreases my chance of doing many pirouettes and also it reduces my smooth finish which a perfect model has. My main weakness of flexibility could be improved my stretching daily and being more focused whilst executing the movement would help keep centered to keep going.

Sautes

Preparation:

Technical Analysis: Start with feet in 5th position with arms in bras bas then Bend both knees to deep plie pushing both heels into the ground to get the friction between the feet and floor for the elevation. Keep the centre of gravity balanced in the middle and take arms to second. Turn quase to the corner.

Physiological Analysis:

- Balance – this is used to stay steady in place to keep the centre of gravity in place.
- Flexibility: you need to have flexibility in your ankles and hips to create a good turn out to improve execution of movements.

Mechanical Analysis: Eversion of arms. Feet extrended, eversion and Dorsiflexion. Tuck in abdominals for core body strength using obliques and rectus abdominis. Trapezius, quadriceps, abdominals and gluteus maximus are all contracted. Horizontal abduction with the arms using deltoid and trapezius as I stand in bras bas but as I move for preparation of movement there is Internal Rotation and Abduction of the arm this goes through the synovial hinge joint of the elbow. Pronation on the left arm using pronator teres. Contraction of quadriceps, flexion on hamstrings working in antagonistic pairs. Cartilaginous joint of the vertebral column is essential for straight back and posture.

Psychological Analysis: I have to focus my muscles to be able to jump into the air. Once again it helps if I spot onto a certain area in the room. I have to centre my body and make sure I'm upright to get the lift and elevation I need. I prevent anxiety as I think positively and motivate myself to succeed.

Tactical Analysis: Neuro-Muscular system is used for fast reactions and the speed of the moves. Muscular-Skeletal system is used for power, Balance and Flexibility to support the body. The preparation is important for this movement as it decides whether you gain enough momentum to jump high enough to make this look well performed. This is a full sauté routine. This is an isometric movement as it is still.

Execution:

Technical Analysis: Push off the floor pushing feet to 4th keeping centre of gravity. Take opposite arm to leg in from out to second. Land in 4th plie sinking feet into the floor. Push off the floor again taking your feet to 2nd and taking your arms to second as well. Land in second plie. Push off of the floor taking your feet back to 4th but derriere (behind) taking the opposite arm to second. Make this on quase. Then land in 4th plie. Repeat the whole thing starting derriere keeping centre of mass.

Physiological Analysis:

- Balance – this is used to stay steady in place to keep the centre of gravity.
- Flexibility: you need to have flexibility in your ankles and hips to create a good turn out to improve execution of movements.
- Muscular Endurance: this is needed to keep your muscles going over and over again for the several jumps
- Power: this is needed to get the speed and strength to elevate up high for the sauté.

Mechanical Analysis: Abdominals and trapezius for core stability are contracted. Gluteous maximus contracted to stabalise the thighs. Gastrocnemius and soleus contracts to point toes causing plantar flexion. Quadriceps contract as legs are extended synovial ball and socket joint allows full range of movement for complete extension. Abduction of the legs when taken to 2nd position. Hamstrings contract whilst quadriceps relax. Eversion at the ankle. Biceps Brachii, brachialis and brachoradialis, deltoids and pectoralis major contract whilst triceps relax. Sternocleidomastoid is contracted to fixate the neck to give an elegant line this is moved with the pivot joint at the atlas and axis. Cartilaginous joint of the vertebral column keeps body stable and attaches to stabilizers at the trunk, this help with core stability and supports the spine whilst jumping.

Psychological Analysis: For this I have to be self motivated and focused on the height of the movement. I have to be motivated to keep going because as this exercise can last and tires the movement I am not allowed to decrease the intensity of the movement. I need to focus on my extrinsic motivation to the task being done.

Tactical Analysis: Neuro-Muscular system is used for fast reactions and the speed of the moves. Muscular-Skeletal system is used for power, Balance and Flexibility to support the body. This movement is often executed to heighten a routine. It is also always performed in exam routines as it shows your elevation and how well you control your body. This is isotonic movement as it is moving and not still.

Recovery:

Technical Analysis: Land elegantly in 5th position after all of it taking your arms through ports des bras, take your head to slight diagonal whilst elongating the neck.

Physiological Analysis:

- Balance – this is used to stay steady in place to keep the centre of gravity.
- Flexibility: you need to have flexibility in your ankles and hips to create a good turn out to improve execution of movements.
- Muscular Strength: this is needed to keep the arm muscled contracted in that same position for a longer period of time.

Mechanical Analysis: Eversion at the ankle. Quadriceps (rectus femoris, vastus intermedius and vastus medialis) contact and extend. Biceps contract at arm to keep it upright synovial ball and socket joint allow abduction of arm, and external rotation and the elbow hinge joint allows slight flexion of arm. This allows full range of movement in the transverse plane. The saddle joint at the thumb always is bent slightly inwards for curvature of hands whilst dancing. Atlas and axis rotate at pivot joint in neck. Cartilaginous joint of the vertebral column helps posture. Strengthens core muscles which improve core stability.

Psychological Analysis: in the recovery my mind can relax unless there is another movement afterwards because in dancing you always have to think forward so you don't miss any moves. In a normal recovery the mind can relax and just think of finishing elegantly.

Tactical Analysis: Neuro-Muscular system is used for fast reactions and the speed of the moves. Muscular-Skeletal system is used for power, Balance and Flexibility to support the body. The recovery shows that the movement is finished, this is normally pursued by an elegant head tilt and standing still.

Comparison to Perfect Model: For this movement compared to the perfect model illustrated in the pictures below, once again my flexibility in the plies is lacking. I do however have the appropriate elevation and turn out whilst jumping. In some areas my arms should be help higher and my body should be kept more upright to keep the centre of mass. I tend to favor one side of my body more than the other which in turn makes me land earlier on one side than the other which causes unbalance.

Vanes JT

Ronde des Jambe

Preparation:

Technical Analysis: Prepare with Ports des bras taking arm out to second and back. Standing upright with straight legs in 5th position.

Physiological Analysis:

- Balance – this is used to stay steady in place to keep the centre of gravity.
- Flexibility: you need to have flexibility in your ankles and hips to create a good turn out to improve execution of movements.
- Muscular Strength: the arm muscles have to be strong to keep the arm muscles up in a constant position.

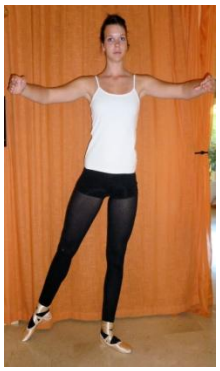
Mechanical Analysis: Eversion of feet and pronation of hands usuing pronator teres. Dorsiflexion caused by tibialis anterior at shin bone. Trapezius, quadriceps, abdominals and gluteus maximus are all contracted. Horizontal abduction with the arms using deltoid and trapezius. Synovial hinge joint of the knee is extended whilst elbow joint has slight flexion to cause first arms. Saddle joint in thumb is used for hand position. Horizontal adduction in the arms using the pectoralis major and minor. Adduction of legs to meet in the centre. Cartilaginous joint of the vertebral column is essential for straight back and posture

Psychological Analysis: Once again I have to focus on the movements about to come. For rande des jambe there are more than one movement so I have to focus on all the different muscle contractions such as bending and stretching the leg. This is to self motivate myself to improve confidence and rid anxiety to create perfect execution.

Tactical Analysis: Neuro-Muscular system is used for fast reactions and the speed of the moves. Muscular-Skeletal system is used for power, Balance and Flexibility to support the body. The preparation takes places before the initial movement of the rande des jambe. It is to manage to control the centre of mass which helps you with your balance to be able to execute the movement with precision.

Execution:

Technical Analysis: Demi-plie flexing both legs evenly, take the chosen leg out infront of you extending it whilst still having the supporting leg flexed. Extend the supporting leg taking the pointed, extended foot to second. Keeping whole body up straight with abdominals contracted and arm abducted to second. Take the leg round in a oval motion, taking it derriere, through 1st, devant and back to second. Keep both legs extended at all times and body upright with head held high.



Physiological Analysis:

- Balance – this is used to stay steady in place to keep the centre of gravity.
- Flexibility: you need to have flexibility in your ankles and hips to create a good turn out to improve execution of movements.
- Muscular Strength: the arm muscles have to be strong to keep the arm muscles up in a constant position.
- Power: I need to do strong movement quickly to power would be needed.
- Coordination: I need to be able to move the legs and arms at the same time whilst moving the head to certain positions.

Mechanical Analysis: Contracting the quadriceps and relaxing the hamstrings you push out front foot whilst you relax quidriceps and contract hamstring on the other leg whilst flexing. Plantar flexion to point the foot using the gastrocnemius and soleus. Straighten using the quadriceps and rotate leg out to second at the synovial ball and socket joint at hip. Keep abdominals and gluteus maximus contracted with an elongated neck. From derriere flex foot taking it through 1st using tibalis anterior then extend using gastrosncmius and soleus. Cartilaginous joint of the vertebral column is essential for straight back and posture.

Psychological Analysis: For the execution of the rande des jambe I have to keep focusing on my muscle contraction and turn out as I take the leg round especially when I take the leg from the side towards the back as there is a twist in the hip. I have to also think about what the arms are doing whilst I take the leg around. I always need to remember to keep my shoulder down as well. I aim to gain the highest evaluation apprehension from others as I aim to succeed.

Tactical Analysis: Neuro-Muscular system is used for fast reactions and the speed of the moves. Muscular-Skeletal system is used for power, Balance and Flexibility to support the body. The rande des jambe is more often used in slow routines as it contains a lot of feeling and does not have any elevation. It is mostly based on how you point your feet and the turn out, also your hand movements make a lot of difference.

Recovery:

Technical Analysis: Finish by taking the leg from second, derriere and close taking arms to bras bas. Repeat on derriere taking arms back to 2nd position. Close back to 5th devant (to the front) and take arm to bras bas. Elegant head tilt whilst elongating the neck and standing still.

Physiological Analysis:

- Balance – this is used to stay steady in place to keep the centre of gravity.
- Flexibility: you need to have flexibility in your ankles and hips to create a good turn out to improve execution of movements.
- Coordination: I need to be able to move the legs and arms at the same time whilst moving the head to certain positions.

Mechanical Analysis: Take leg round using quadriceps through the ball and socket motion. Finish flexing feet through dorsiflexion using the tibialis anterior. Elongate neck rotating through axis and atlas. Contract quadriceps once standing as leg is extended. Triceps contract and biceps relax as arm is extended. Arms adduct. Rectus Abdominis, obliques and gluteus maximus are contracted to keep the body steady and stable. Horizontal adduction in the arms using the pectoralis major and minor. Adduction of legs to meet in the centre. Cartilaginous joint of the vertebral column is essential for straight back and posture and core stability. This cushions the vertebrae so that impact cannot affect it.

Psychological Analysis: for this my mind can relax again unless there is another movement which comes afterwards. I am able to focus but I have to keep an open mind. Attribution theory is used to evaluate my success and focus on my next aims.

Tactical Analysis: Neuro-Muscular system is used for fast reactions and the speed of the moves. Muscular-Skeletal system is used for power, Balance and Flexibility to support the body. The recovery shows that the movement is finished, this is normally pursued by an elegant head tilt and standing still. Isometric contractions as they are still and held.

Comparison to Perfect Model: For this movement I am not too different compared to my perfect model. My turn out once again is not as good as the one of my teacher and she manages to execute this movement with more easy whereas for me it is more difficult and does not look as fluid. This can be improved by more practice and ballistic exercises. My coordination is good as I manage to move my arms, legs and had at the same time. I also manage like my perfect model to show elegance and precision in this movement but I still have to improve my muscular strength to whip my leg round.

Grande Battement

Preparation:

Technical Analysis: Prepare foot in 5th position. Arms ports des bras to second taking them to out and back. Both your legs extended and have your arms in bras bas. Then degage arms to first right foot in front, right arm opens to second. Head should be looking slightly to the side.

Physiological Analysis:

- Balance – this is used to stay steady in place to keep the centre of gravity.
- Flexibility: you need to have flexibility in your ankles and hips to create a good turn out to improve execution of movements.

Mechanical Analysis: Eversion and plantar flexion of feet using gastrocnemius and soleus, supination of hands. Trapezius, quadriceps (rectus femoris, vastus intermedius, vastus medialis and vastus lateralis) , Rectus abdominis, external obliques, infrspinatus and gluteus maximus are all contracted. Hamstrings relaxed working in the antagonistic pair. Synovial hinge joint of the knee is extended whilst elbow joint has slight flexion to cause first arms. Horizontal adduction in the arms using the pectoralis major and minor. Adduction of legs to meet in the centre. Cartilaginous joint of the vertebral column is essential for straight back and posture.

Psychological Analysis: I have to mentally prepare myself to focus so that I will be able to execute the movement well. I have to think about the leg movement that come next and what muscles I should use, how I have to keep my head held, my body upright and where my arms will go. Focus and self motivation to succeed in the execution of the movement.

Tactical Analysis: Neuro-Muscular system is used for fast reactions and the speed of the moves. Muscular-Skeletal system is used for power, Balance and Flexibility to support the body. The preparation of the grande battement is important because you have to be prepared to swing your legs and have to make sure that your body is aligned properly so no harm is done. There is isometric movement occurring as the preparation is stable. This is a isotonic contraction as it is moving whilst the muscles are working.

Execution:

Technical Analysis: Take front leg in a controlled kicking motion up in devant in front of you. Should be around 90 degree angle. Take arm out to 2nd position. Turn head to slightly angle keeping body and legs extended and balance. Taking arms right arm to 5th. Take the leg out to second up to at least 45 degrees taking your head to the front and arm to second. Keeping the legs and body over the centre of gravity contracting in the stomach. Close derriere. Take leg up derriere up to 90 degrees taking arm to second arabesque with a light tilt forward looking quase. Keep body held in and legs straight.

Physiological Analysis:

- Balance – this is used to stay steady in place to keep the centre of gravity.
- Flexibility: you need to have flexibility in your ankles and hips to create a good turn out to improve execution of movements.
- Power: you need power for this to swing your leg up controlled in a fast action.
- Coordination: you need coordination because you have to move your arms legs and head at the same time.
- Muscular endurance: this is needed as you are using the same muscle groups over and over again.
- Reaction Time: you need to be able to respond quickly when you hear a beat to swing your leg up.

Mechanical Analysis: Contract quadriceps whilst taking leg up with hip flexors, illiopsoas whilst hamstring relax as leg is extended. Gastrocnemius and soleus point foot. Plantar flexion point toes whilst the standing foot is still dorsiflexing.Biceps contract with abduction of arm and internal rotation to hold arm up and take it inwards. Axis rotates to diagonal at pivot joint. Keep abdominals and obliques contracted. Pronation of arms using pronator teres. Lift leg using illiopsoas. Both arms triceps contract and biceps relax. Gluteals fixate the trunk so that your legs are stable. Cartilaginous joint of the vertebral column is essential for straight back and posture, this also improve core stability. Cushioning of vertebrae so that impact does not injure body.

Psychological Analysis: For this you need to be very focused as need to be able to control your leg movements as it is easy to just swing your legs but you need to be able to control how high and the turn out and how fast to get the beat right. You also need to focus on using your head in the right movements and changing your arms from when you take your leg back or forward, your arms change too from 2nd to 3rd. I need to focus on the measure of success I am willing to achieve.

Tactical Analysis: Neuro-Muscular system is used for fast reactions and the speed of the moves. Muscular-Skeletal system is used for power, Balance and Flexibility to support the body. The grande battement is very important because although you normally just use the grande battement alone in a warm up it is also vital for many other movement like grande jette (split jump) or anything which need a high fast kicking movement. It is always used in exam routines and in normal routines it is used to add height into a dance and show control for the dancer.

Recovery:

Technical Analysis: Repeat starting from derriere then close devant, ports des bras closing arms back to bras bas looking to the corner gracefully with elongated neck.

Physiological Analysis:

- Balance – this is used to stay steady in place to keep the centre of gravity.
- Flexibility: you need to have flexibility in your ankles and hips to create a good turn out to improve execution of movements.

Mechanical Analysis: Contract quadriceps once finished as legs are extended which relaxes hamstrings. Using Triceps adduct the arms back to bras bas, Biceps Relax. Atlas and Axis rotates to turn head to diagonal at pivot joint using sternocleidomastoid muscles at the neck. Abdominals and obliques and gluteals are still contracted to keep a stable upright position. Slight supination at the arms to turn palms of the hand upwards. Feet are everted and usuing tibialis anterior for dorsiflexion they are flat on the ground. Latissimus dorsi and trapezius keep the shoulder down to have an elegant look. Cartilaginous joint of the vertebral column is essential for straight back and posture.

Psychological Analysis: Now I can relax again and although I have to look elegant unless there is another movement to follow I can now relax my mind and just stand with grace. However I always have to think about my turn out and standing up tall, not slouching. This used the attribution theory as I evaluate my success which may lead to me setting goals of improvement for the next time and it could build my self confidence. Motivation to improve from this performance.

Tactical Analysis: Neuro-Muscular system is used for fast reactions and the speed of the moves. Muscular-Skeletal system is used for power, Balance and Flexibility to support the body. The recovery is after every movement and it is to make sure you don't just bounce and finish a movement. It adds safety and elegance. After a movement you normally still move your head to finish the movement. For this it shows control as well that you can swing your leg up but finish it will ease as well without moving your torso. This is a isometric movement as it is held still.

Comparison to Perfect Model: For this I once again am lacking the flexibility as shown by my perfect model and I also do not have such a good turnout especially when in 2nd position. I do however manage to control my legs very well by the power I have in my legs and I can end the movement with grace and precision. My flexibility can be improved my stretching on a daily basis and this would also help with my turnout. I also need to work on keeping my hips still and not to swing them, this can be improved by working my gluteus maximus and internal obliques more to tighten my trunk.

Tactical Analysis

Vanessa Walters **Year 12 JT**

Contents

Introduction

The tactical analysis will be related to choreography. I will underline the factors that reference, as well as my experience, state are required in order to make great choreography and what it needs to be effective for the audience. In each of these sections I will then describe some elements of my own choreography. I will finally analyze my choreography based on these elements using the De Bono "PMI" (Plus, Minus, Interesting), method. The elements I will be examining are **Timing, Spacing/Formations, Energy/Music, Setting on Stage, Expression/Mood, Colour**, and **Movement**.

What is Choreography?

Choreography is the execution of several movements which combines to a routine, bringing to the audience the elements previously described, (Timing, Spacing/Formations, Energy/Music, Setting on Stage, Expression/Mood, Colour, and Movement). It should reflect personal expression to music. It is used to express feelings and emotions through gestures mixed with the harmony. It is not just made of random movements; (even in so called "free dance"), they have to be thought through and planned, especially when dancing with other people, otherwise discord or chaos can result, with a bad audience perception.

My Choreography

I have been attending formal dancing schools since age 4. During the last 3 years this has included learning elements and general study of choreography. At my dancing school we are often challenged to make up parts of choreography to test our skills (based on our **Core Skills** such as **Pirouette**, **Saute, Rande des Jambe** and **Grande Battement**), in combining a movement to the theme of a song. As part of my training I also must learn skills based on the elements previously described, which we as a group are then challenged to apply in classes, both for ourselves individually, and also the entire group, involving both chorus and lead dancing roles. I am encouraged by my teacher to seek different dancing techniques and choreography techniques, other than those formally taught and to bring these into class or performance practice. To this end, I often make use of reference sources such as TomJohnDance or ChoreographyToGo from the internet.

Great Choreography

Timing

Once of the most important aspects of a choreography is timing. If the timing in a dance is off it loses the whole "feel" of the dance. This is why we often listen to the piece of music many times before dancing at all, to get the feel of the beats and rhythm. There has to be a good sense of timing in dance, related to the beats, otherwise it would become purely random movement to some music.

The timing and music set the underlying atmosphere of the whole choreography. A good choreography will have a variation of timings in it; there will contrast between fast and slow, for effect, etc.

In my group we often use the same movement at different times or slightly lower or higher movements to give it a higher range of effect such as **Cannon** (repetition of the same movement either some people after each other or one person doing it twice or more times), **Unison** (all movements are happening simultaneously) or **Counterpointe** (different tempos of movement happening at the same time of two or more dancers). This is used in every choreography I have studied to add the effect that is needed for the piece.

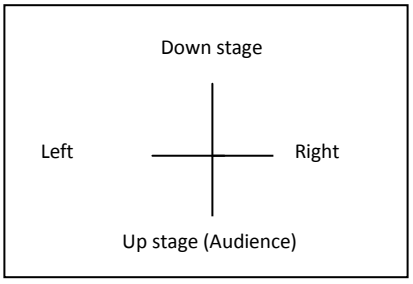
There should also be accents which emphasize one specific beat. The biggest aspect of timing for choreography is the synchronization. Synchronization is the coordination of the group dancing together and moving as one. In choreography the dancers should be in time with each other and without even a second delay.

In my group as we practice a piece, we are often asked to count the steps out loud in their beats such as 1,2,3,4,5,6,7,8,1,2,4,5,6,7,8 so that we do not get confused what to do at which beat and are all kept in time.

Spacing/Formation

The spacing is important, as it is the area/space a dancer is moving in. It is their territory and they know exactly where in that area they are allowed to move, at what time. If the dancer doesn't know their spacing, they can end up colliding with each other which can lead to confusion for many dancers if they are not where they're supposed to be.

Space has **levels**; **low floor moves**, **medium standing moves** and **high leaping** and **lifting moves**. It can move **upstage, downstage, centre, left and right** and you can move around this area in a **straight, curved or diagonal** line so this is very important too. The spaces should be varied; some people low some high then others moving diagonal some from front to back, back to front. There should also be movements used like **symmetry** (when two people mirror each other) and **opposition** (two people standing opposite each other) to make it effective.



Energy/Music

The energy put into the dance by the dancers enhances the quality of the movement. It adds the 'Final Touch' to dancing. If there are weak lifeless dancers in a dance it is not very effective and the feel of the choreographed piece does not come across as well as when you have someone putting in all their energy. Ideally the audience should be able to feel the power, enthusiasm for the dance and energy of their movements by just looking at them. This is the effect that good choreography strives for.

The music is the most important part of dancing because the music sets all the moods and outlines the styles of dancing. It gives the mood and motivation to the choreographer to create moves. Without the music a choreographed piece is extremely difficult, (although it can still be done, by using the base rhythms of performers feet stamping, or claps, for example, as in the stage show "Stomp").

Setting on Stage

For good choreography you need to know where you are performing to get a feel how much space you have. You can't teach choreography in a huge dance studio and then expect it to be performed in a really small one, without further practice.

At my dance school we create the choreographed dances so they can be modified to whatever size is required by expanding the personal dancer's space as required. You should still be able to move up stage and down stage and start from one corner to another without a change of stage size then being a difficulty.

Expression/Mood

The facial expressions on a dancer set the whole mood of the choreography. It shows if it is supposed to be a happy or sad dance, if you're supposed to be in suspense or know what's coming. The expressions keep the audience intrigued. Choreography doesn't have to be really complicated as long as there are expressions to make up for the feet. The audience in most cases doesn't look at the feet but at the faces.

I have always been taught to smile when I'm on stage to lighten up the dance and 'pull in' the audience. The audience is entertained by the expression because when they watch a dance they want to see the feel of the dance as though it is real life.

Colour

Choreographies need a lot of color to make them unique and to emphasize or contrast certain aspects of what the dance is about. It is what gives it a sense of attraction to the audience. I always choose to wear something bright when I am dancing and have a free choice of outfits unless it is a dramatic dance then the colours, black, white and red are most appropriate to set the theme.

Levels

A choreographer has to think about the different levels of the dancers in the group, they have to make sure that everyone in the group is able to participate to their full potential and are no less capable than others. There shouldn't be an unrealistic limit in a choreography, dancers should not be stretched over their natural ability. However, each dance should be a personal challenge to give a dance an exciting aim to work towards.

Movement

The relationship between the movement and music is essential. Individual skills should be molded together to form a sequence of movements; portraying emotions, mood and pattern. A good choreography is 'a work of art' in movement.

Analysis of my Choreography

De Bono PMI Worksheet

Area Subject	Plus	Minus	Interesting
Timing	Understand the concept and relates to music	Difficulty in splitting into multiple streams	Need to practice multiple level choreography
Spacing/Formations	Understand the concept and execution	None currently	Significant experience gained in different venues
Energy/Music	Understand and executes well	Core strengths require further effort	Multiple music types executed
Setting on Stage	Understand the concept and execution	Difficulty in splitting into multiple streams	Need to practice multiple level choreography
Expression/Mood	Understand and executes well	None currently	Classic ballet to Jazz executed
Colour	Understand and executes well	None currently	Classic ballet to Jazz executed
Levels/Movement	Understand the concept and execution	Difficulty in splitting into multiple streams	Need to practice multiple level choreography

Summary of Analysis

I have choreographed my own dances which I found very challenging as the total choreography needs many aspects which I have yet to learn or perfect. I prefer currently to concentrate on choreography for a group or for just one individual, rather than choreography for a group AND lead dancer, as I find it easier to adjust music beats and rhythm to one person or one group movement. This seems to suggest that although my timing, sets and movements is good for groups, adjusting timing and splitting musical beats and rhythms to two streams, (one for the lead, one for the chorus dancing at the same time), is something I must practice more and concentrate upon in the future.

Notations

Notations of dance skills:

Contents:

Introduction:

For my notations I have chosen three notations. One of these notations is based solely on one of my dancing skills based on one of my weaknesses. The other two are based on a series of skills, one of the notations on my class mates and their performance and the other notation on just my performance. In the end I am going to compare myself to the rest of my class and also then compare myself to a perfect model to see the difference. I am going to introduce some of my core skills and also outline the tests that I have performed to see my strengths and weaknesses. My notations will contain qualitative and quantitative information.

Notation No. 1

Aim: I analysed the degree of balance I achieve whilst doing a pirouette. I have decided to measure my balance due to the fact that this is one of my weaknesses. I am going to repeat this three times, each time I am going to vary my place where to spot. On the first try I am going to look slightly to the side of me, on the second try I am going to look to the diagonal and on the third try I am going to look straight ahead. Then I am going to measure how this affected my balance.

To perform a good pirouette several components of fitness are needed:

- Balance: you need to be able to stay up on your foot and keep the centre of gravity so that you can carry on turning during a pirouette. This is one of my weaknesses shown on my tests as standing on a bench for 30 seconds I fell off 5 times.
- Speed: you need to be able to spin around fast to keep going for more than one pirouette. Speed is one of my strengths shown on my 60m sprint = 10,3 seconds
- Coordination: you need coordination as you need to use your legs to spring but also your arms and head to whip yourself round. Coordination is one of my strengths and I can multitask.
- Flexibility: you need to be able to obtain a good turn out so that the body is more aligned and flows better with the movement

Overall I should be able to perform this notation at a high level. In my core skills I also analysed the pirouette which shows that I need more flexibility but I am able to perform it with precision. A pirouette needs elegance and power to whip round which are qualities which I obtain.

I have used an objective method of measuring this. I have done this by sticking a cross with tape on the floor to mark my starting point, before preparing for the movement. I then measured how far I went off balance whilst executing the move. I then marked where I finished the movement and measure the distance from where I started using measuring tape.

		My Pirouette!		
	Number 1	**Number 2**	**Number 3**	**Average**
Measurements	5cm	7cm	2cm	5cm

I then compared this with my perfect models movement on her pirouettes to see how much she would move. This would then illustrate the difference between balance and where is best to spot when you are doing a pirouette.

	Perfect Model Pirouette!			
	Number 1	**Number 2**	**Number 3**	**Average**
Measurements	2cm	3cm	1cm	2cm

Conclusion: This has shown me that looking straight in front of me I have a better chance to achieve a better degree of balance. The more I look to the side the more I get put off my centre of balance and have to move from my starting point. In comparison to my perfect model my balance is a lot worse as you should barely move if you have your centre of mass whilst doing a pirouette.

Notation No. 2

Aim: I have analysed the different skills of a whole group whilst performing in a routine. I have looked at the most important aspects which are needed to become a professional dancer. This also includes some components of fitness with are essential for dancing.

I have used an objective method by using my eyes to judge their dance movements but then I did quantitative measurements to show the results of the components of fitness. However, I did ask a fellow student to have a look at the same routine to see if she agreed with my judgments. I rated them on a scale from 0-5 judging their precision and accuracy of their movement. I looked for Timing with the music, synchronization, extension of the feet, arm position, hand shape, shoulder line, head positioning and elevation.

Grades 0-5					
0	1	2	3	4	5
Grass root level	Very low ability	Low ability	Good ability	Excellent ability	Elite

Dance Movement - Rating 0-5

Pupils	Synchronization	Feet Extension	Arm Position	Hand shape	Shoulder line	Head Position	Elevation
Nicolle	4	5	3	3	5	4.5	5
Charlie- Anne	4	3	4	2	2	3	4
Denise	5	2	4	3	3	4	3
Taylor Anne	2	4	3	3	4	1	0
Daisy	1	2	3	3	5	4	4
Christina	5	4	5	5	5	5	5
Sam	3	2	4	2	5	5	5

Then I analysed their most important components of fitness which are needed in dancing and again rated them between 0-5.

Fitness Components - Rating 0-5

Pupils	Balance	Power	Coordination	Muscular Endurance	Flexibility
Nicolle	4	5	4	5	5
Charlie Anne	4	5	3	3	4
Denise	2	3	4	4	2
Taylor Anne	2	3	1	2	3
Daisy	3	3	3	3	4
Christina	4	4	5	3	4
Sam	4	5	3	5	5

I also did some fitness tests to show my marks which helped me to illustrate my grades.

Fitness Tests

Pupils	Balance - standing on bench 1 min on one leg	Power- sergeant jump	Muscular Endurance - doing a high intensity dance routine using the same muscle	Flexibility - sit and reach
Nicolle	fell off 2*	1,80m	no stops	25+
Charlie Anne	fell off 2*	1,78m	2 stops	19+
Denise	fell off 7*	1,45m	1 stop	9+
Taylor Anne	fell off 6*	1,51m	3 stops	14+
Daisy	fell off 4*	1,43m	2 stops	18+
Christina	fell off 2*	1,66m	2 stops	19+
Sam	fell off 2*	1,84m	no stops	23+

I then compared these results with a perfect model to see how different the results are.

Dance Movement - Rating 0-5

Pupils	Synchronization	Feet Extension	Arm Position	Hand shape	Shoulder line	Head Position	Elevation
Perfect Model	5	5	5	5	5	5	5

Fitness Components - Rating 0-5

Pupils	Balance	Power	Coordination	Muscular Endurance	Flexibility
Perfect Model	5	5	5	5	5

Fitness Tests

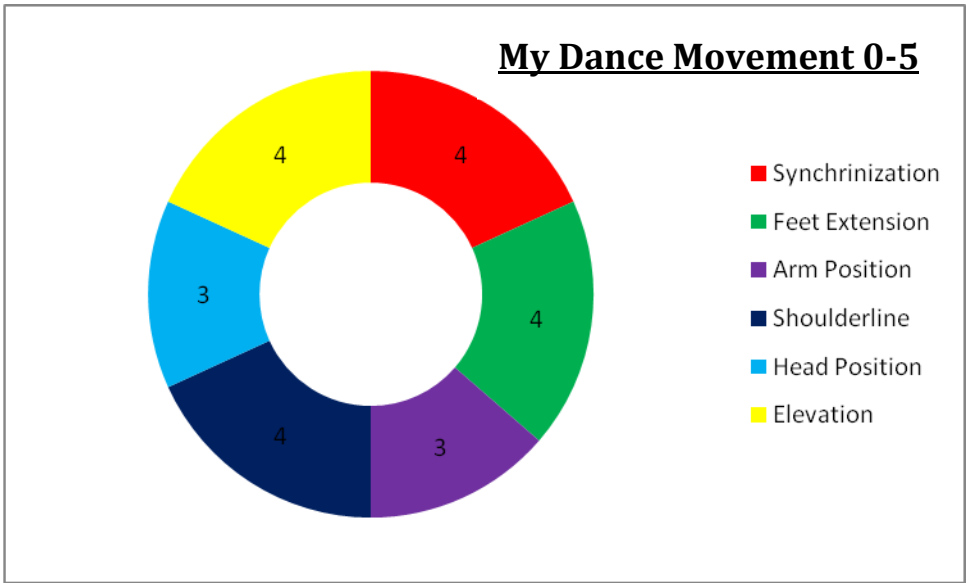
Pupils	Balance - standing on bench 1 min on one leg	Power- sergeant jump	Muscular Endurance - doing a high intensity dance routine using the same muscle	Flexibility - sit and reach
Perfect Model	fell off 0*	1,78m	no stops	20+

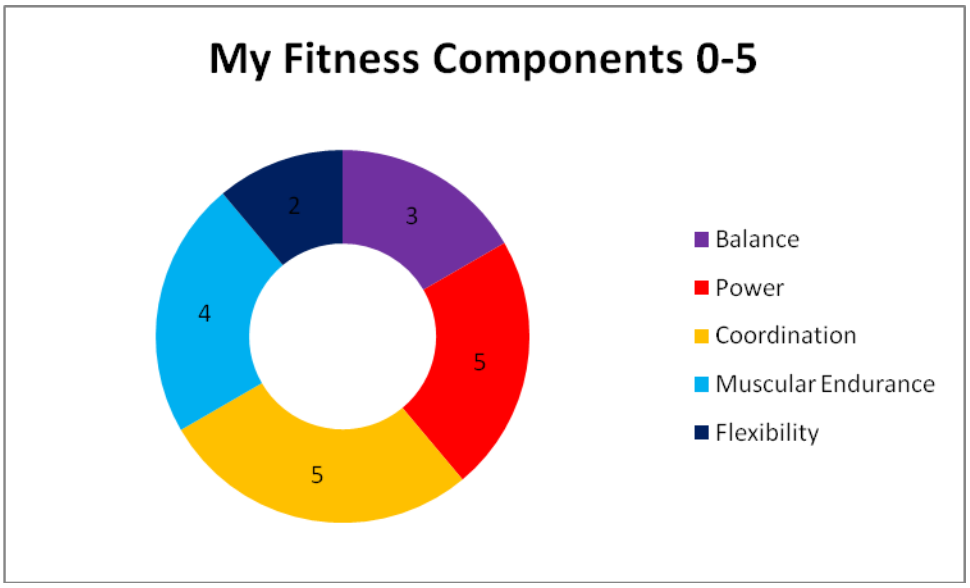
Conclusion: This has shown that there are some students at a very high standard dancing in my group even to the point where they are better at some things than my perfect model. It also shows that almost every dancer has a fault somewhere or other but this is made up for something else whereas a professional does not have any flaws and gets the highest marks possible. These were quite accurate results as they were not just judged by my eyes. This shows that 90% of the people aren't very good at holding their shoulder and headlines properly whereas they are good in moving with others or extending the feet.

Notation No. 3

Aim: I have analysed myself doing the exact same exercises as my group.

I used an objective method as I had filmed myself first and then looked at the film to grade myself, I also got one of my fellow students to assist me with this. I rated myself on the scale from 0 to 5 on how well I execute the performance. I looked at my Timing with the music, synchronization, extension of the feet, arm position, head position, shoulder line, head positioning and elevation. Then same as for my group I rated my components of fitness judging by some of my tests. These I then once again compared to the perfect model and liked to my core skills.





Fitness Tests

Pupils	Balance - standing on bench 1 min on one leg	Power- sergeant jump	Muscular Endurance - doing a high intensity dance routine using the same muscle	Flexibility - sit and reach
Me	fell off 2*	1,77m	1 stop	13+

Conclusion: This shows that I am quite good at holding my lines upright and executing routines in time with others and to the music. My arms are quite weak and my main weakness is my balance and flexibility shown in my test. Compared to an elite performer I am still very weak as I can't move as stable and quick or elegantly as an elite performer could. On the other hand I do have a very close test in muscular endurance and power whilst jumping. Compared to others in my class it shows that I am not the strongest dancer but it do have the skills to perform at a high standard. My execution of these movements are also shown on my core skills such as on my pirouettes and grande battement as you can see my lines are of a good standard whereas my flexibility and balance isn't as good. On my rande des jambe executed in my core skills you can see that I am leaning more to one side than the other showing my balance is off.

Training Analysis

Vanessa Walters

Year 12 JT

Contents

Introduction

The training analysis is based on my training diary. I will take all of my strengths and weaknesses into account to show how the training affects my level of performance. In dancing skill acquisition and perfection of technique form a greater part of the classes although stretching as a method of training (in addition to the warm-up) and strength and body conditioning are also essential to condition the specific dance related components of fitness. I will also analyze my dancing schools different teaching techniques using the De Bono "PMI" (Plus, Minus, Interesting), method, as well as performing a basic Strengths and Weaknesses analysis on myself.

My Training

I have been studying dance since the age of four. However, I have only been with this dance school for the past 8 years. I go training 3 times a week studying different types of dance such as ballet, jazz and hip hop. My training varies depending on what we are learning and which teacher we have on that day. Normally we split our sessions throughout the days as we still do basic dance movement, if we have examinations we normally have one day to practice exam work and we also have several shows throughout the year so we learn new dances. My training is always well structured and organized. We always start with a warm up and then normally do some basic ballet exercises. After this we then go on to either, show, exam or more practices. At the end of every training session we also do a cool down to prevent delayed onset muscle soreness (DOMS). My training sessions are strict and to the point which is illustrated within my strengths and weaknesses section, as we tend to have some classes which train specific aspects such as our components of fitness (mentioned in appendix) using different methods of training (mentioned in appendix). however these do not always occur in class, as circuit training and CV training is very hard to do in a dance studio.

Teaching Styles

I have two teachers at my dance school who both have very different teaching methods but are both very good. One is the lady who owns the dance studio who has been teaching me since I was 10 but who now is unable to teach us everything anymore due to her age and because of the long working hours and physical demands. She is a very strict and disciplined teacher. She teaches all the main dancing and has a very good and traditional teaching method. She knows all the techniques and how the moves should be performed. Therefore she has a more reserved leadership technique as she expects us to learn from her words instead of showing us.

The other teacher who teaches me more frequently now teaches in a less strict and more explanatory manner. I prefer this method of leadership as its more open, it helps me understand when she talks more and explains why a move must be performed in a certain way, rather than just telling what to do. She teaches how to control the moves and how to make them look like a professional performer, which she previously was.

Teaching Style PMI Analysis

Comparison of two different Teching methods in my Dance Classes, Utilising the PMI "De Bono" method						
	Teacher 1			Teacher 2		
	PLUS	MINUS	INTERESTING	PLUS	MINUS	INTERESTING
FITT (Frequency, Intensity, Time, Type)	Basics covered in means of formal routines	Due to her health and age, students are not stressed and demos are not given	Traditional Training is similar to this	Basics and advanced techniques are used as these were standard methods in the techers training	None	Modern dance and sport training teaches these techniques now and they are being taught to students by younger teachers
Specificity	Individuals are taught according to the roles chosen by the teacher	These roles may not be what the individual really wants	There may be changing of roles, requiring re-training later	Individuals are taught according to the roles the have AGREED with the teacher	Small amount of additional time needed to negotiate before trainng regime starts	This is NOT the way dancing is taught or occurs in adult "Real World". Troupe leaders dictate, or there is competition for roles.
Progressive Overload	Constantly new techniques being addeded, then practised regularly	None	Traditional and classic method	Constantly new techniques being addeded, then practised regularly	None	Traditional and classic method
Individual needs	Individuals are taught according to their roles and perceived ability	These roles may not be what the individual really wants	Traditonal and Real World method	Individuals are taught according to the roles the have AGREED with the teacher	None	Democratic and good training method
Moderation	Pushed to limits as judged by teacher, but not to injury.	Experience based. Less experienced teachers MAY cause the student injury	Traditonal and Real World method.	Pushed to limits as stated by student. Sometimes stretched beyond that.	Experience based. Less experienced teachers may allow a student to slacken/become lazy.	Democratic and good training method, but not applicable to real world

Teaching Style PMI Analysis Summary

Both styles are very effective in teaching us both the fundamentals of and advanced dancing. Both to one extent or another follow the fundamental sports teaching principles. One is more democratic and allows far more input from the student, and uses somewhat newer methods,

the other is far more strict and traditional based, with much more being "dictated" to the student, however, this method of practice, trying out for roles and performing in dance troupes, is much more "Real World" if dancing is chosen as a career.

Weekly Schedule & Time Planning

We plan out weeks at a time to decide what we will be training as we all have different personal goals and strengths and weaknesses. We use periodisation for this because this allows us to divide the training into sections to focus on specific objectives depending on the needs of the pupils. We normally split the sections on what we would work on into 3 or 4 weeks depending on how many people needed work on that skill.

On a weekly basis we worked on specific skills such as improving flexibility for a few weeks, then we worked on turnouts or carriage of arms, legs and head. Normally when there was a new pupil in the class we would start with strength training for a few weeks and then go on to endurance and speed to the basics were there, then we would move on to areas such as balance and flexibility which improve upon movements and cause them to be executed with ease. All our sessions however are evenly balanced spreading out our time for barre work, choreography, exam work and physical fitness. (see Appendix)

14 weeks Macrocycle

Mesocycle 1				Mesocycle 2			Mesocycle 3			Mesocycle 4			
Microcycle 1	Microcycle 2	Microcycle 3	Microcycle 4	Microcycle 5	Microcycle 6	Microcycle 7	Microcycle 8	Microcycle 9	Microcycle 10	Microcycle 11	Microcycle 12	Microcycle 13	Microcycle 14

Some factors which may affect my training are that throughout this programme I will have some holidays and throughout this time I do not have dancing lessons. After these holidays my standards would be lower and I would have to start again with reversibility.

Structure

My training sessions for dancing are not always well structured but we always aim them at our principals of training (see Appendix) so that it could meet all of our specific needs throughout the weeks of training. We used specificity to see whether the training was appropriate for our goals.

We used progressive overload to gradually increase intensity so that we can improve our performance.

We used Moderation to balance our work and rest time so that we would not injure ourselves. The principle of training we used most was FITT; frequency, intensity, time, type; this was to see how many times per week we should train, how many hours, how hard and what training we should be doing.

Warm- Up

The Warm- up is a vital part of dancing. The warm-up is what keeps a performer from getting injured or straining themselves. It increases the blood flow around your body which in turn increases the oxygen that is spread to the working muscles which gets them warm. It allows more movement at the joints. The warm-up is what gets a dancer mentally and physically ready to dance without any risks to the person.

This if the Warm-up which we perform in class:

1. **Gross Motor**- This raises the heart rate and get the blood pumping around the body letting the oxygen spread to the working muscles. I usually ***jog*** 6 laps around my dance studio to get my blood flowing.
2. **Mobility**- This is where you increase the movement at a joint by rotating muscles. E.g. moving arm in circular windmill motion, looking left and right with the head. This increases the ***Range of Movement (ROM)*** at a joint which is useful for dancing as I need to have the highest ROM possible. This is important for specific movements at the joints e.g. cartilaginous joints will be opened.
3. **Stretch**- this is to prevent injury and also increase the ROM. You go through all of your muscles one by one and do a different stretch for each of them. There are many different ways of stretching. The most commonly used stretches in dancing are the ***static stretch*** which is a held stretch and the ***ballistic stretch*** which should only be performed when the muscles are warm as it is a moving and ***bouncing stretch*** which ensures that when I do swings and active movements in a routine I will be warm. E.g. taking heel high stretches quadriceps and taking arm up and sideward stretches which stretch the latissimus dorsi. **Sport specific** – these are stretches especially for your specific sport. For dancing we would be doing ***ballistic moving stretches*** such as leg kicks and also ***dynamic stretches*** which move around. This would also include bits of routines to increase the movement/body intensity to our working levels. These are also ***neuromuscular movement sequences***. E.g. I would perform some plies, plyometric sautés and pirouettes which I will be using more during my dance session.

Cool Down

This is one of the most important parts of training. After a hard day of work the muscles have a lot of lactic acid built up and are contracted, the cool down allows the acid to slowly break up again and lets the muscles relax. The lactic acid is the main cause of cramps and stiffness which

a Cool Down helps prevent. I normally do the whole stretch sequence again and finish it with a nice slow jog around the studio. This is the transition stage from the working heart rate to the resting heart rate. The Cool Down also speeds up recovery which will, with time, help me recover faster so I can perform at a higher rate again shortly after. Performing a cool down also prevents delayed onset muscle soreness, (DOMS) especially after working hard.

Safety

Although dancing is quite a safe sport it also consists of some safety regulations which should be followed. A dancer should always warm up before starting to dance as this could cause severe injuries such as sprains, strains and stress fractures such as a bad back or even pressure on the heart if ignored. A dancer should also always wear the proper clothing and shoes, as a dance floor can be quite slippery and the shoes are made with special soles and even ankle reinforcement to prevent injuries. This is why one of the rules in my dance class is that we are not allowed to dance without the correct equipment. The ballet shoes should also always have ribbons on the ankle to support them. There are no fluids or food permitted in the dance studio apart from water otherwise the floor could stick and obstruct a dancer. In a dance studio there should also not be things lying around near the dance floor, otherwise people could trip and fall. We are not allowed to wear jewellery as it could get caught on other dancers and someone could get severely hurt.

Energy Systems

Dancing is a sport which combines all three systems together:

The ATP-PC system: is used right at the beginning of most fast movements. It is used in the first 8-10 seconds and is part or the alactic system. This is needed when you first start a high intensity routine it's for strong, powerful movement. This creates the onset muscle contractions.

The Aerobic system: This system starts after 3 minutes of exercise. This is used when you are working for a longer period of time and have to take the intensity level of exercise down. This is why I have been doing some endurance training so that I can work longer at a higher intensity without getting tired. The aerobic system uses oxygen when the energy is released. This is used when there are short movements which need the oxygen.

The Anaerobic system: This system is the most important in dancing because you need to move and react quickly and that is what this system is specifically for. It works between 10 seconds to 90 seconds. This system does not use oxygen due to the quickness of action. The anaerobic system is very frequently used whilst performing on stage due to the mass of energy that has to be exerted for briefer periods of time in a routine on stage which may itself go on for a long period of time. This burst of energy in turn releases lactic acid in the joints.

Strengths & Weaknesses

Basic Strengths & Weaknesses Comparison		
	Strength	Weakness
Warm Up	I can perform all warm up exercises in the group and additional ones I know from other sports without problems	None
Health Releated Components	Generally this is very good due to my long term dancing, as well as the number of other regular sports I do weekly. My strength, endurance, cardiovascular health and body composition and all fine.	My Flexibility needs improvement. I still cannot do the splits. This is important in dancing because most movements at my level need very high kicks and split jumps.
Skill Related Components	Generally this is very good due to my long term dancing, and other regular sports I do weekly. My co-ordination, agility, balance and reaction times are all fine.	Power of movements needs improving, as I can use my muscles and have strength but I cannot do many explosive movements in a fast action. Speed generally must be improved to allow faster cross-overs of feet for example. My phycological confidence could be improved.
Cool Down	I can perform all cool down routines in the group and additional ones I know from other sports without problems	None
Safety	Always checks all aspects of safety and will not perform if there is any questionable issues without addresing them	None
Energy System	ATP-PC, Anaerobic and Aerobic systems are quite well tuned and in good shape, due to the numerous sports I am active in as well as my dancing.	All systems can always be somewhat improved and as i get older, more time will be needed to keep my current levels

Future Improvement

I still have a lot of things that I have to improve such as:

Power of movements, I can use my muscles and have strength but I cannot do many explosive movements in a fast action. For this I will be doing some plyometrics training as this is explosive and powerful movements.

Speed needs improvement as it is lacking in movements such as changing feet elegantly. I am going to do some sprint training for this and also some jumping whilst changing feet in the air.

Flexibility has improved, but I do still have to work on it as I still cannot fully do the splits. This is important in dancing because most movements at my level need very high kicks and split jumps.

FITT will be practiced a lot in the coming period, in order to balance out the different aspects of my dancing timetable.

Psychological side of my performance needs to be worked upon to improve my confidence, - which is vital in dancing.

Conclusion

Even some of the highest standard people have room for improvement in technique or method or strive to improve upon their physical fitness. I recognize that I still have room to improve especially in my power, speed and flexibility if I wish to become a first class and lead dancer. I have started a programme of improvements in order to reach this goal and am aided both by my teachers at school and at my dance school.

Appendix:

Components of Fitness

Health-related Components

The health related fitness points below contains the key factors needed to be a dancer. Some of these are factors which we are born with and cannot be learned. As a dancer you need:

- ***Cardiovascular Fitness**- this is what carries the oxygen through the blood to the muscles. This is needed for everything as it speeds up the movements that will be needed from dancing especially for repetitions in routines.*
- ***Muscular Strength**- is the maximum force that can be exerted by the muscles. This is needed for dancing for the power of jumps or kicks. I have been doing some plyometrics exercises such as 'spring jumps' to improve this. It also build my core stability which is a vital part of dancing as it is needed for every movement to stabalise so that it can be executed properly.*
- ***Muscular Endurance**- It is being able to use the same muscles over a long period of time whilst performing different movements. This is very important for dancing as it is needed through every dance. The muscular endurance is what makes a dancer able to carry on whilst dancing a very long dance without failing to exert the maximum force that is needed. I have a quite high muscular endurance which is good when I have to perform long performances. I tested this by doing as many sit ups as I could in a minute = 63.*
- ***Flexibility**- this is the range of movement available at a joint. Flexibility is very important with dancing as it allows you to move freely and execute all the movements with ease. I am not very good with my flexibility. I have been doing some 'sit and reach' stretches to improve this as my current range is not adequate for the level I am at. I achieved a score of 21+.*
- ***Body Composition**- this is the percentage of fat, muscle and bone that make up your body. This is pretty much perfect for me as I am an ectomorph which is needed for dancing.*

Skill-related Components

The skill-related fitness also has mostly key factors of dancing. These are factors which can in general be taught by others and learned.

- ***Co-ordination****- this is the ability to move two or more body parts at the same time. This is very important because whilst performing a movement and moving your legs you also have to move your arms to make a greater effect.*
- ***Balance****- the ability to retain the centre of gravity of your body either in a fixed position (static) or moving (dynamic). This is one of the most important factors in dancing as it is needed in every movement involving lifting your legs off of the ground. I find balancing to be quite a challenge but once I have the right position it is easy to stay there. I have tested this by standing on a thin bench with one leg whilst closing my eyes and have managed to stay on for a minute but with difficulty.*
- ***Agility-*** *The ability to change position quickly and controlled. This is very important in dancing as you have you to move from one side to the other in a controlled manner. I tested this with the Illinois agility test which showed it was quite good. 16,15 seconds.*
- ***Reaction time****- This is the time taken from presentation of stimulus to the onset subsequent action. This is needed in the cases of pirouettes where you have to whip yourself around in a fast movement. I tested this by sprinting 10 m to see how fast I react and it shows it takes me a while to react. 10m= 2,5 seconds*
- ***Speed-*** *the time taken to move from one place to another. This can be important if you are doing a fast dance or if you have to travel a far distance in a short period of time. To test this I did a 60m sprint = 10,3 seconds.*
- ***Power****- this is the combination of strength and speed. It is the ability to exert a vast motion in one single fats movement. Power is needed for jumps and leaps. I tested my power I did two tests, the standing long jump= 1,77m and throwing medicine ball= 5,50m this showed a high power.*

Methods of Training

The methods of training are used to improve any weaknesses that a person has or to keep the level you are at. Some are naturally good at what they do but the majority of people have to train to overcome their faults. I have been doing quite a few methods of training to improve myself and overcome my faults in dancing.

- **Circuit Training**- this is set out in different activities going round in a circle. Each station is targeted at a different muscle group. I used this to strengthen my muscles and make them move faster such as in grande battements I would be able to whip my leg up higher or in jumps id be able to jump higher as I have more strength in my legs. I would have small amounts of reps with about 3 sets so that I could build pure strength. My recovery however would be 30 seconds between stations and 3 minutes between sets to gain full recovery.
- **Power Training**- This is the ability to convert strength into speed. It helps control the muscles to exert a greater force. This would help me with my elevation and power to lift off the floor.
- **Core Stability**- this is made up of exercises to strengthen the torso, spine, pelvis area. I have used this a lot to help me with my balance and stability for dancing. I am going to do 20 seconds work and rest for 30 seconds, then repeat this 6 times.
- **SAQ** (Speed, Agility, Quickness) - this is very explosive training in very short bursts. This training really uses the muscles and build but more muscle fibers, this is good for dancing as it helps with speed and then being able to switch the positions quickly although there is a lot of muscle to carry around.
- **Flexibility-** this is the ability to increase the ROM available at a joint. For this I did some specific stretches in the areas where I needed most work on. I stretched my inner thighs twice a day stretching them forwards and sideward, I also stretched my back every morning and evening to improve my back end which adds elegance.

Principles of Training

The principles of training are the rules that are applied to the methods of training. They are what happens with training programs or what could be the outcome. For dancing there are a few principles which are important.

- **FITT**(Frequency, Intensity, Time, Type)- this describes how often you train, how hard you train, how long the training has taken and what type of training it is. This is needed for dancing because dancing needs a lot of training and this helps keep track of it all.
- **Specificity**- this is the choosing of a specific method of training. It is normally specifically what the person is looking for to improve in a specific area or sub area of their sport. I

do this because I need to be specific what training I need for which activities and improvements.

- **Progressive Overload**- is the need to push the training limits to adapt the body to higher standards. This is how you go further and get better. When I stretch myself to become more flexible I do this to push myself.
- **Individual needs**- This is specific to a person. It is what they need and want.
- **Moderation**- this is having a balanced amount of training. This is important for dancing as you shouldn't hurt yourself or over train yourself especially just before a performance.

Strengths and Weaknesses

Vanessa Walters **Year 12 JT**

Strengths & Weaknesses: For my strengths and weaknesses we're going to be looking at my dancing. I have been studying since I was age 4, primarily three types of dancing, ballet, jazz and tap. In the last 5 years in addition I have taken up hip hop/funky. In all of these styles I am at different skill levels. My most advanced dancing style is ballet at skill level of advanced 1, but my favoured style is jazz where I have only a skill level of pre-elementary currently. In tap I have skill level of pre-elementary. In hip hop/funky I currently have no formal rating. I illustrate my strength and weaknesses sorted out in physiological, technical, mechanical, psychological and behavioural strengths and weaknesses.

Physiological:

Strengths:

- Muscular Strength: my muscular strength is quite good but it still has to be improved. This allows me to control my movements easily and keep my legs lifted for longer. This is a benefit for dancing as you need to have muscular strength in your legs to improve the ability of holding yourself, lifting your legs and add the effect you need.
  To test this I performed the sergeant jump test: 2,60m

- Muscular Endurance: my muscular endurance is quite good as I am used to using the same muscular groups over and over again from my dancing. This enables me to perform leg exercises well and to perform repetitive practices over several hours as shown in my core skills grande battement. This is good for long performances so that you keep going at a high level.

To test this I did count of sit ups in 1 minute: 63 sit ups in 1 minute.

- Coordination: my coordination is also one of my strengths as I am able to move two or more body parts at the same time. This is a benefit in dancing as I am able to move my arms and legs at the same time whilst still keeping my head in a nice line. This is illustrated in my core skills shown by the grande battement as you can see my arms and legs in different positions.

- Agility: my agility is strong as I can change position quickly whilst I dance. This is a benefit whilst dancing as there may be parts in a dance when I have to suddenly change direction to cause effect in the dance.

To test this I did the Illinois Agility test: 16, 15 seconds

- Speed: For dancing speed is quite important if you are doing a quick routine to hit all the right beats. My speed is quite good as I have always enjoyed sprinting. This is shown by my core skill of the pirouette as I execute is correctly and speed is needed to whip the head around and stay upright.

To test this I did a 60m sprint test: 30m = 5 seconds

Weaknesses:

- Cardiovascular fitness: My cardiovascular fitness is not very good as I am not used to running long distance. I intend to improve this throughout my training programme as it will help me to build up stamina to work longer as without this I will not be able to work at the same intensity continuously. It will allow my body to be more resistant to lactic acid for longer and therefore can work for a longer period of time. I am able to perform all dances and routines up to my levels completely and without problems but afterwards I am always out of breath and need a break.

To test this I performed the cooper test (12 minutes): 2.1 km

- Flexibility: my flexibility is not one of my strengths compared to an elite performer. This declines the height of my legs and the ability to hold my leg up in the air. This is illustrated by both my core skills as compared to my perfect model I am very inflexible and in my notations I am rated a 2 out of 5 for flexibility. I have started improving this weakness by stretching at least once a day but mostly twice a day so I can reach the appropriate elasticity needed.

To show this I did the sit and reach test: +12cm whereas an elite performer reaches +25cm

- Reaction Time: my reaction time is one of my weaknesses as I do not react as fast as I should. It is not so important to have a good reaction time in dancing as nothing should be unexpected, if you know the timing in dancing you should be able to make the right moves in time.

To test this I did a sprint start to show how fast I react: 10m = 2,5 seconds

- Balance: Balance is one of my weaknesses as I find it hard to find the centre of my body. This is however not my worst weakness as every dancer shoulder have a slight sense of balance. This is a disadvantage because in dancing you always need to be held upright and hold the centre of gravity so that a movement can be executed stably. On my notations it is illustrated that my balance is not good as I am rated a 3 out of 5.

To test this I stood on a bench for 30 seconds and noted how many times I fell off: Total Falls = 5

- Power: Power is not one of my major disadvantages, although I am fast and not weak I find it hard to put these together especially as I still need to improve my strength. My power of my lower body is higher than the power of my upper body. I tested my power in leaps and elevations with the sergeant jump and this proved to be quite good but whilst performing I lack power. This level is adequate for my dancing levels, but not outstanding, as with elevation comes speed.

To test this I did two different tests. The first was for my legs which was the standing long jump and the second was to test my arm strength by throwing a 3kg medicine ball. Standing long jump: 1,77m, Medicine ball: 5,50m

Technical:

Strengths:

- I hold my stage directions for the dance and keep my positions in a dance routine well, making the choreography track well, and keep pre-rehearsed routines with the other dancers clear and as practised.
- My presentation and posture is good and my body follows all the correct lines while dancing. And my elevation is at a high standard as I have good leg muscles and can lift off the floor well. This is illustrated in my notations as well as I am rated a 4 out of 5.
- My extension of my feet, legs and arms are good as I manage to keep them in a stable straight position. This is good as it helps control movements in dancing and allow you to hold your posture.
- I manage to create aesthetic smooth movements which flow in routines. This shows off control and ease of movements. When performing in an examination or a show this is very good as it may show the audience the feeling of the piece and also helps draw in the audience. It tells a story and shows passion towards dancing.

Dance Movement - Rating 0-5

Pupils	Synchronization	Feet Extension	Arm Position	Hand shape	Shoulder line	Head Position	Elevation
Me	4	4	3	4	4	3	4

Weaknesses:

- I have a problem with my turnout and my feet are not always pointed, which then compromises my balance. For this I have been doing some stretch exercises to improve my flexibility which will improve my turnout. This is illustrated in all my core skills compared to my perfect model.
- I am not equally strong on my left and right side. Whilst performing leg lifts such as the grande battement performed in my core skills, it is shown that I prefer my left side to my right as I bend slightly to my preferred side.
- My neck line is not always good which is necessary to make a movement look elegant and this also helps spotting when performing movements such as the pirouette. A stable head helps you whip round and know where you will be moving next.

Technical Movements 0-5

	Pirouette	Grande Battement	Rande des Jambe	Saute	Plie	Arabesque	Jette
	3	2	4	4	2	4	4
Components Needed	Balance, Flexibility, Headline, Arm position, Turnout	Leg control, Balance, Arm position, Turnout, Flexibility, Power	Turnout, Leg control, Alignment of neck and Head, good core	leg extension, feet turned out, carriage of arm, balance, muscular endurance, elevation	Turnout, Balance, arm extension, head alignment, muscular strength	Arm carriage, posture, turnout	elevation, posture, turnout, leg/feet extension, arm position, muscular endurance
Strengths							
Weaknesses							

Mechanical:

Strengths:

- My body composition allows me to move easily in dancing and it makes me look more elegant as I am an ectomorph. This is also shown by my core skills as I am a similar body composition as my perfect model.

Weakness:

- I have a problem since infancy with my kneecap dislocating on occasion when twists are performed during strenuous muscle usage. However for this problem I have received a series of exercises to perform to aid in strengthening my knee cap and to help prevent it from dislocating. These are now performed on a regular basis. The problem with my kneecap also cause issues with stability as it causes me mentally to be more cautious and I tend to stick to my comfort zone. The muscles which I train most are the quads especially the vastus medialis and intermedius as it strengthends around the tendons which are weak. Whilst going up on pointe shoes I tend to not have confidence as I get nervous about falling off and my knee dislocating.

Psychological:

Strengths:

- My concentration when we have a show or exam is good and I quickly learn new steps or routines. We have to do mental rehearsals before shows and I find this reasonably easy to do. In dancing examinations my concentration is very good because I have to remember all the exercises of the syllabus and I can do that quite easily as well as learning new dance sequences and routines.
- Psychologically I am able to control my anxiety to some extent when performing before an audience or performing examinations, enabling me to perform the routines well and adequately.

Weaknesses:

- I find my mental discipline and endurance fails before my physical endurance.
- I become distracted easily in class especially if other people are having difficulties. I interact a lot with the other pupils and find the social aspects to be as important as the performance at times. This causes me to not always perform at my highest standard.
- I lack full confidence of myself and struggle if people comment on my dancing I find it hard to focus. This causes me to fail when I miss a step because if someone comments on it I get nervous and lose focus.
- If I make a mistake I get very nervous and my concentration decreases which often allows me to make more mistakes.

Behavioural:

Strengths:

- I am punctual and very motivated because I love the sport and being motivated helps me perform my best. Being punctual enables me to do pre-class warm-ups and stretches to increasing and maintains my flexibility and also reduces the risk of getting injured.

Weaknesses:

- I don't always wear the correct clothing for dance, which is very important because the teacher needs to be able to see the alignment of the dancer's body in order to see if they are doing the moves correctly. To improve this however I bought a special dance bag which i always put my dance equipment in straight away so I do not forget anything.

- On the odd occasion when I misstep especially in live stage performances, I have a tendency to smile widely, thus showing everyone I have made a mistake, even if I correct from the mistake quickly

Tactical:

Strengths:

- One of my tactical strengths is that I can feel the music well which adds feeling to the stage and pulls in the audience.
- I am able to use the heightened stages of a routine to add a feel of elegance and to show off ability throughout a routine this is possible by emphasizing a beat by using bigger movements.
- I hold my stage directions for the dance and keep my positions in a dance routine well, making the choreography track well, and keep pre-rehearsed routines with the other dancers clear and as practised.
- I have good timing which is very helpful for dancing because the timing and music set the underlying atmosphere of the whole choreography
- I am good at setting the wanted mood for the stage because every routine and music sets a different atmosphere and you have to be able to control your facial expressions and make all the movements big to highlight the atmosphere you're in. I am good at this because I am able to feel the music and show this in my facial expression.

Weaknesses:

- Dance needs good kinaesthetic awareness, advanced 'feeling'. This is an ability which allows you to picture the position of your body and of other people to picture the next moves and where they should travel. This is not one of my strengths as I struggle to create performances with a large group of people doing different steps.
- My spacing is a weakness as I find it hard to see the middle line and tend to be a little out of place when I can't see the other performers. Also this is a disadvantage as it doesn't allow me to see and create different levels e.g. floor moves, high leaping, moving upstage, downstage etc.
- I find it hard to find the right piece of music for a certain choreography as this is essential because Individual skills should be moulded together to form a sequence of movements. I am not very good at this as I do not have the feel for styles of music matched with movements.

Improvements for Higher Level:

To be able to become a elite high standard performer I will have to improve quite a few things but most of all the ability to choreograph different levels and standards and mix movements up with the music. I have to learn how to use the stage directions properly so that I can choreograph high standard pieces and not stick with basic dancing. Physiologically I have to improve my flexibility and balance to be able to elongate all my movements and make them bigger than they are, also I have to be able to stay still in my centre without wobbling which my balance would improve. I also need to improve my cardiovascular fitness as I would have to be able to perform and structure long performances and stamina is vital. I have to learn to cover up when I miss step as I show when I have gone wrong, with this I will also have to gain more confidence as elite dancer or teachers have to 'shine' and show that they know and love what they do. My behaviour is pretty much correct as I always think positive and do not tend to give up.

Tests:

Tests for Strength

	Try No. 1	Try No. 2	Try No. 3
Sergeant Jump	2,58	2,60	2,62
Standing Long Jump	1,77m	1,76m	1,79m
	In 1 Minute		
Sit Ups	63		
Press Up	15		
Plank	Did not manage to hold for 30 secs		

Tests for Speed - Friday 8th October

	Try No. 1	Try No. 2
10 m Sprint	2,5 seconds	2,3seconds
30 Sprint	5 seconds	4.9 seconds
100 m Sprint	15,3 seconds	16,1 seconds

Test for Cadiovascular Endurance - Sunday 10th October

Cooper Test (12min)	2,1	
Loop (3.3 km)	23 mins	

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