

CCEA GCSE Physical Education  
(Summer Series) 2015

# Chief Examiner's and Principal Moderator's Report

physical  
education



## Foreword

This booklet outlines the performance of candidates in all aspects of CCEA's General Certificate of Secondary Education (GCSE) in Physical Education for this series.

CCEA hopes that the Chief Examiner's and/or Principal Moderator's report(s) will be viewed as a helpful and constructive medium to further support teachers and the learning process.

This booklet forms part of the suite of support materials for the specification. Further materials are available from the specification's microsite on our website at [www.ccea.org.uk](http://www.ccea.org.uk).



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# GCSE PHYSICAL EDUCATION

## Chief Examiner's Report

### Component 1      Developing Knowledge, Understanding and Skills for Balanced, Healthy Lifestyles and Participation in Physical Activities

Nearly all of the candidates attempted all of the questions. It was clear that the candidates had sufficient time to complete the paper.

The range of questions in this year's paper allowed candidates to respond positively. At the same time the paper was effective in differentiating between the wide range of abilities of the candidates entered. In answering the questions, the candidates demonstrated their knowledge and understanding of the subject content. They also demonstrated their ability to apply their knowledge and their ability to interpret, analyse and evaluate information related to the subject content.

The level of language used in the examination paper was candidate friendly, appropriate and seemed to be clearly understood. Where there appeared to be any misinterpretation or misunderstanding of a question, it will be mentioned in the comments below.

Many candidates communicated their answers clearly and concisely with the appropriate use of technical terms but there were other candidates who struggled to put their answers into a meaningful written form. The quality of the candidates' handwriting was mostly good and easily read, however, some was very difficult to read. This concern should be highlighted to future candidates and addressed by those candidates who fall into this category.

From an overview of this year's responses, the points made below on specific questions may be of help in preparing future candidates for the written examination paper.

- Q1** Nearly all candidates identified leisure time activities that did not involve participating in sport or participating in physical activity.
- Q2 (a)& (b)** Most candidates were able to define adequately the term 'sports facility' and were able to explain how the existence and/or non existence of sports facilities can influence participation in a sport.
- Q3** The examples were usually well explained and demonstrated clearly a contrast in the physical fitness requirements for the sports or events chosen by the candidates.
- Q4** Nearly all candidates successfully completed the statement.
- Q5** Most answers were from those included in the mark scheme. Some candidates provided other acceptable answers, e.g. "a woman who is pregnant." Some candidates gave "diet" or "the food you eat" as answers. These answers did not receive credit as they are not factors that affect the daily energy needs of a person.
- Q6 (a)** Most answers were from those provided in the mark scheme. Some candidates may not have noted the opening statement as they gave, "it is addictive" as an effect of nicotine. This effect had already been mentioned in the opening statement.

- (b) (i) Mostly the candidates' explanations were sufficient to get the mark.
- (b) (ii) Mostly answered well. Some candidates simply wrote that, "the person had to work harder." This was not enough.
- Q7 (a)&(b) Sugar would have been the content, in both foods and drinks, that was most frequently identified by candidates. The explanations as to the effect of the sugar on a person's quality of sleep would have been similar for both foods and drinks. This was acceptable. Caffeine was also identified frequently as a content in drinks.
- Q8 The most common differences identified between the 1800s and today were to do with differences in the requirements at work and the differences in the modes of transport used. The best answers stated what was happening in the 1800s and compared this with what was happening today. These answers often had "whereas" or "compared with" included in the answers. Some candidates had difficulty in communicating clearly the differences.
- Q9 The best answers referred to both the older people and younger people in the explanations. Some candidates limited their answers by referring solely to one or the other, but not both.
- Q10 (a) Nearly all candidates were able to distinguish successfully between aerobic and anaerobic energy production.
- Q10 (b)&(c) Most candidates demonstrated sufficient understanding of muscular power and muscular endurance to gain up to two marks. Candidates who had a fuller understanding gained all four marks.
- Q11 (a) Most candidates had some idea of what fartlek training involved. What differentiated between them was the detail and understanding shown in their explanations.
- (b) The best answers explained what isometric training was and gave an example of it to demonstrate understanding. It was sufficient to explain correctly what isometric training was to get full marks. Some candidates' explanations were not accurate, however, an appropriate example given of an isometric exercise allowed them to get one mark.
- (c) Nearly all candidates were able to name two different training methods to develop flexibility.
- Q12 (a)&(b) Nearly all candidates knew when the principle of peaking was applied in a training programme. Most identified that there was less training in the peaking phase. Not so many qualified it by mentioning that in this phase of the training it would have been at a higher intensity. Again fewer candidates mentioned the 'tapering off' just before the competition in order to allow the muscles to fully recover and fuel stores to be full.
- Q13 The best answers provided three physical changes that take place in the heart and/or circulatory system as a result of regular and appropriate exercise with an explanation as to how each of the physical changes helped improve performance. For example, more blood capillaries develop in the muscles. This helps improve performance because the muscles get a greater supply of blood bringing oxygen and nutrients.
- Some candidates gave functional changes (e.g. cardiac output improves or the heart gets stronger) rather than physical changes. In this case candidates were not given credit for the physical change, but they received credit for an appropriate explanation as to how the functional change helped improve performance.

Some candidates' explanations as to how physical changes helped improve performance were limited to, "the person can run faster or longer." This was considered not worthy of credit as an explanation.

A few candidates gave physical changes related to the respiratory system rather than the circulatory system.

- Q14** Generally well answered in at least one situation. Some candidates had difficulty in communicating clearly their explanations.
- Q15** In Part (a), nearly all candidates chose 'Food C' which was the correct answer. In Part (b), many chose 'Food B' because it had the highest percentage of carbohydrates. The answer was 'Food A' because it contained the highest amount of fats. With fat containing twice as much energy as carbohydrate or protein, 'Food A' contained the most energy or kilojoules/kilocalories. In Part (c), most candidates identified correctly another piece of information contained on the food label.
- Q16 (a)& (b)** Most candidates identified Fig. 1 as being an anaerobic performance and Fig. 2 as being an aerobic performance. Many candidates were also specific and accurate in interpreting Fig. 1 and Fig. 2. They identified the specific intensity and duration of each of the performances.

Some candidates were too general in interpreting the graphs, for example in Fig. 1, "the athlete worked at a very high intensity for a short period of time." Some candidates were not accurate enough in interpreting the graphs and gave the time of the performance in Fig. 1 as 35 seconds and/or the time of the performance in Fig. 2 as 45 minutes.

- Q17** This question required candidates to consider different pieces of information individually and to make links with other pieces of information given. This proved to be straightforward for some candidates who achieved full marks.

Some candidates did not link the different pieces of information given. For example, the link between the average heart rate for the work periods and it being a twenty-year-old male, or the link between the ratio for the duration of the work periods and the recommended recovery time between the work periods, or the link between the number of repetitions to be done with the number of sets to be done when there was to be a three minute rest between the sets.

The link most frequently understood by candidates was the link between the work time of 60 or 70 seconds and the recovery time of 60 seconds.

- Q18** Most candidates were able to achieve full marks for this question. A few candidates scored less than this because they placed a physical activity in a sports facility or their total number of minutes exceeded ninety minutes, so they lost one mark. A few candidates interpreted the table as a training programme and gave days of the week rather than times during the day for when the exercise was to be done.

Most candidates focused on types of aerobic exercise such as walking or cycling to work; some included muscular endurance exercises as well as the aerobic exercise. Surprisingly, there were not many candidates who considered washing the car; doing the gardening; vacuuming the house or the like, as means of exercising.

- Q19** Most candidates compared what happened in each of the areas listed in the first test (venue; weather; equipment used; set-up etc.) with what happened in each of the areas in the second test. In answering, the best candidates identified clearly the differences between the two tests and explained how the differences would make the comparison of the results unreliable or unfair. Reference was made to both tests.

Some candidates went through each of the areas for the first test and identified things that they thought were unacceptable e.g. no warm-up. They then did this for the second test. No comparison was made. In doing this they limited the marks they could achieve. However, if they compared what was done in each of the two tests against the actual protocol for the 20 Metre Shuttle Run (from their experience of doing it) they often made valid points as to the differences and why a comparison of the test results would have been unreliable.

- Q20 (a)** Many candidates provided a list of the exercises that they would have included in the circuit rather than explaining the range of exercises that should be included in the circuit. These candidates were given credit if the list was sufficient to cover the major areas of the body and the appropriate components of physical fitness.
- (b)** Many candidates listed the order of the exercises that they would have included in the circuit rather than explaining the order in which the exercises should have been performed. These candidates were given credit if the order was sufficient to demonstrate the principle of rotation.
- (c)** Candidates who provided lists in Parts (a) and (b) tended to consider the circuit from the perspective of a person doing the circuit rather than the person organising it, therefore, the most common answer was along the lines of: ‘the person may not be able to do a set number of repetitions, however, with a time in seconds they would be able to work at their own level and do what they could’. Candidates who had explained Parts (a) and (b) were more aware about organising a circuit and would have also included as an answer that having a time in seconds for each exercise allowed all participants to change stations at the same time and therefore there would be no congestion at the stations.
- (d)** Answers from those candidates who considered the question from the perspective of doing a circuit rather than organising it often explained the reason for having a recovery time between exercises, e.g. “to allow the muscles to rest” rather than explain the principle underlying their choice of a recovery time between the exercises. Candidates who considered organising the circuit, often explained the general principle underlying the choice of recovery time between exercises and/or gave a specific ratio for the relationship between the work time and the recovery time, e.g. 1:1. The best answers included both.
- (e)** Most candidates were able to identify one or two of the variables. A few candidates gave, “change the number of sets” as an answer. This was not worthy of credit as the number of sets was fixed at three.
- Q21** The full range of marks was used. Most candidates were able to score some marks. Weaker candidates usually put forward benefits, some of which were valid, but they did not clarify or explain sufficiently why the exercises using ‘fixed weight machines’ were of benefit to those who had not done weight training before. The top candidates identified valid benefits and explained clearly why exercises using ‘fixed weight machines’ were safer, better or easier than exercises using ‘free weights.’
- Q22 (a)** This question differentiated between all candidates but in particular the top candidates. Not many candidates managed to enter RMs that were all within the acceptable range for improving muscular strength, decreased over the phases of the training programme and that had repetitions for each of the RMs given which were appropriate for them.

Many candidates entered weights in kilogrammes rather than RMs or entered percentages of 1RMs or entered RMs that were outside the acceptable range for improving muscular strength or quite often the RMs entered increased over the phases of the training programme rather than decrease. For some candidates, the numbers of repetitions were not appropriate, even if the RMs were suitable.

- (b) Generally, if candidates were successful in answering Part (a) then they were able to explain their choice of RMs in Part (b). Some candidates who had scored zero in Part (a) by entering percentages of 1RMs or weights in kilogrammes were able to gain marks in this section as they were able to explain successfully the principle for developing muscular strength using the percentages of 1RMs or the weights in kilogrammes.
- (c) If candidates were successful in Part (a) then they were usually able to explain in Part (c) their choices for the number of repetitions for each of the different RMs over the phases of the training programme. Again, candidates who had scored zero in Part (a) by entering percentages of 1RMs or weights in kilogrammes were able to gain marks in this section if they explained that the number of repetitions would be within the range of 12–6 and over the phases of the training programme the number of repetitions would decrease as the weights got heavier.

## Principal Moderator's Report

During the Summer 2015 moderation period, a team of 31 Moderators conducted assessments of 1792 candidates across 87 centres. In a majority of centres there was evidence of sound understanding, interpretation and application of the specification. It is worth noting that teachers who had attended the Agreement Trials commented on how much more confident they felt in delivering Component 2 particularly for next year's examination series. (Important notes from Agreement Trials will be repeated in the Component 2 and Component 3(b) section of this report).

### Preparation at Centres

All centres were given an opportunity to clarify the administrative and practical requirements for moderation with their assigned moderator by phone and through the introduction of the 'Pre-Moderation Check List'. This check list proved very helpful for teachers and moderators in ensuring that all administrative requirements were available and an efficient schedule of assessments was in place for the day of moderation.

Detailed instructions to guide teachers through the moderation process can be found in the publication 'Instructions to Teachers' which is available online from [www.ccea.org.uk/physical\\_education](http://www.ccea.org.uk/physical_education). The following documentation is required to ensure the visiting moderation can be completed:

- Candidate Record Sheets Component 2 (two copies signed by teacher and candidate);
- Candidate Record Sheets Component 3a & 3b (two copies signed by teacher and candidate);
- OMR/TAC1 (Mark Sheet);
- TAC2 (Internal Standardisation Form);
- Copies of Non Centre Controlled Activity form as previously submitted to CCEA;
- A4 page for each of the 3 components listed in rank order; and
- Component 2 samples as requested by CCEA.

Moderators arrange with the teacher to observe at least two practical activities to be seen from Component 3(b). The choice of activities to be observed will normally be common to the majority of candidates. A range of candidates is also observed in Component 3(a).

Centres should note that a full day is required to complete the moderation and that inaccuracies in paperwork are likely to prolong this process.

### Post Moderation

All teachers should be fully conversant with the CCEA requirements for the activities their candidates select. They must visit the CCEA GCSE PE microsite [www.ccea.org.uk/physical\\_education](http://www.ccea.org.uk/physical_education) to familiarise themselves and their candidates with the specification and all associated support material.

Despite reminders at Agreement Trials and in the specification the following changes have been overlooked by a minority of centres. Inaccurate interpretation of the specification can greatly disadvantage the candidate so teachers are asked to note:

- candidates must choose activities from at least two of the categories listed in the specification;
- **at least two** of the activities must be centre controlled and carried out under the direct supervision of the teacher;
- candidates may choose to be a Performer and a Leader/Official in the same sport; and
- Component 3(a) requires the analysis of a skill, not the coaching of it. Appropriate technical language is expected from candidates accessing the higher mark bands. (Refer to the sample video of Component 3(a) on the physical education microsite);
- Component 2 requires teachers to complete the Candidate Record Sheet and to also add thorough annotation within the text of the work.

## Component 2      Developing and Maintaining a Balanced Healthy Lifestyle

Most centres presented very detailed evidence in written booklet format to support the marks awarded in Component 2 with some candidates demonstrating highly competent and consistent learning when applying the process to lead a balanced healthy lifestyle. The quality of evidence has improved year on year, however, teachers appeared to instruct candidates to avoid the oral or DVD format with almost all candidates opting to write their submissions for Component 2. Teachers have expressed concern over the perceived substantial workload required in this component by teachers and pupils alike and feel it is disproportionate to the marks awarded. This concern was addressed in the Agreement Trials this year. It was apparent at moderation that some teachers were already implementing the advice given while others plan to put the suggestions in place next year because their students had already completed the project early in the year. The guidance offered at Agreement Trials is outlined below.

Do's	Dont's
Carry out a detailed lifestyle audit at the start of this component to produce a lifestyle profile that includes: <b>detailed</b> information on all the exercise, training or physical activity they undertake on a regular basis, both inside and outside of school.	
Provide results from appropriate tests to gauge their level of aerobic fitness and muscular fitness, and their degree of flexibility.	Do not include diagrams or write up the protocol of tests.
Include personal information relating to their nutritional intake; (Detailed information is not required but applied knowledge is.).	Do not copy and paste impersonal information about nutrition from websites. Do not create tables of food intake.
Include personal information relating to their rest and sleep pattern; (Detailed information is not required but applied knowledge is.)	Do not copy and paste impersonal information about rest and sleep from websites. Do not create tables of sleep patterns.
Include personal information relating to their work, including study commitments and part-time work AS APPROPRIATE.	Do not copy and paste impersonal statements about work and leisure from websites. Do not create tables of work/leisure patterns.
Include information relating to their work, including study commitments and part-time work as appropriate.	
Identify other relevant factors impacting their personal lifestyle profile, for example peer pressure, culture and the media.	
Form an action plan that covers a <b>period of 8 weeks</b> , focuses on developing and maintaining a balanced, healthy lifestyle. <b>(Remember detailed information of the physical activity aspect of their lifestyle as evidenced by the teacher.)</b>	Candidates should set targets in relation to improving their diet and sleep patterns but are not required to produce weekly tables dedicated to monitoring each of these. A summary overview statement at the end of each week is sufficient. E.g. This week I have managed to meet my target of only one fizzy drink per week. I did not meet my target of being asleep each evening by 11pm due to....

Overall Do Include	Do Not
<ul style="list-style-type: none"> <li>• An analysis of their lifestyle profile;</li> <li>• A BRIEF outline of the strengths in their current lifestyle and a commitment for this good practice to continue;</li> <li>• A BRIEF outline of any issues or areas for improvement identified in their lifestyle profile;</li> <li>• A specific objective, or objectives, for a set period of time (students must state the time-scale for their action plan, which must cover a period of 8 weeks);</li> <li>• An explanation of the actions they propose to undertake to achieve their objective(s) based on the opportunities and pathways available to them.</li> </ul>	<p>Do not copy and paste chunks of information from websites – keep your story original! Use SMART targets and apply the FITT principle and overload but it is not necessary to write a description of what these are – the marks are awarded for their application!</p>
<ul style="list-style-type: none"> <li>• An outline of their intended outcomes, or the targets they set;</li> <li>• An outline of the resources and support they will need;</li> <li>• Information on how they will monitor the action plan; and</li> <li>• Information on how frequently they will monitor the action plan;</li> <li>• Implement the action plan for the period of time selected;</li> <li>• Monitor and evaluate the effectiveness of the implementation of their action plan;</li> <li>• Monitor (using appropriate tests as required) and evaluate the effectiveness of their action plan at regular intervals.</li> </ul>	<p>Photographic evidence is not a requirement – where it is used it must have relevance.</p> <p>Do not include work that is not referenced – it is the teacher’s role to identify plagiarism!</p> <p>Do not include evidence that the teacher would have difficulty validating.</p>

In making their assessment the teacher must use the assessment criteria as outlined in the specification e.g. a high achieving candidate must meet the following criteria.

The candidate consistently shows highly competent learning when applying the process to lead a balanced, healthy lifestyle.

The candidate demonstrates a highly competent ability to:

- audit and to critically analyse their own lifestyle;
- explain observed evidence of strengths and areas for improvement and to identify the priority areas for action; and
- use appropriate principles and methods to set up safe, effective, short-term action plans to develop and maintain a balanced, healthy lifestyle;
- the candidate can consistently work with others to successfully carry out the action plans, to monitor and review the effectiveness of the action plans and to make changes when necessary.

The evidence shows clearly and consistently that the candidate has a balanced, healthy lifestyle.

## Component 3 Individual Performance in Physical Activities

### (a) Analysing, evaluating, planning, implementing and monitoring actions to improve skilled performance in selected physical activities

The majority of centres had prepared their candidates well for this component. The challenge remains for some centres to get the balance right between who is to perform the skill, the complexity of the skill to be performed and the appropriateness of the drills for the level the performer is at. In some cases candidates were using pupils that were too capable and so making spotting and fixing of errors almost impossible. Best practice is a basic skill demonstrated to a complete beginner or an advanced skill demonstrated to a fairly experienced improver.

### (b) Improving the quality, efficiency and effectiveness of individual performances in physical activities

This component is delivered confidently in the majority of centres. Some centres choose common activities for a whole teaching group while others allowed individual candidates to make their own choices. Both methods are acceptable provided the activities are chosen from at least two categories.

- Adjustments to the assessment of fitness outlined at Agreement Trials in 2013 have been met with enthusiasm and there is now a greater uptake of this practical activity which is so important in Physical Education. However a minority of centres continue to misinterpret this practical activity and should note the overview below; candidate's fitness is assessed in three areas specific to their chosen sport.
- Teachers must use tests outlined in the teacher's guidelines/support materials.
- Candidates are not required to provide a log of progress.
- At moderation the candidate is expected to perform within the range of marks they have been awarded.

Team games continue to feature highly at moderation. Candidates must always be observed in the full game situation. It is important that a second member of staff is available to referee/umpire games allowing the moderating teacher to focus on observation. It is also helpful, prior to the full game, to observe candidates in appropriate drills that demonstrate the skills of the sport.

Centres are to be commended for supplying video evidence of candidates who participate in non-centre activities. Many centres have used sports governing bodies to deliver activities such as Orienteering and Volleyball. It is important to note that, while these activities have proved very successful, it is important that the class teacher must oversee the assessment of the candidate in conjunction with the qualified coach.

It is important for teachers assessing Component 3(b) to note that candidates' standard of performance is not the only element assessed. Candidates must also demonstrate strategic and tactical play, an appropriate range of skills, appropriate levels of fitness, knowledge of rules and conventions and suitable attitudes and behaviours associated with fair play and success.

Teachers are reminded that candidates in this component may also be assessed as leader/official. This option is not popular at present and yet it must surely give opportunity for the weaker performer to study an activity from a different perspective.

## Contact details

The following information provides contact details for key staff members:

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