Sport and Exercise Science



Practical Assessment Task (PAT) Grade 12 – 2025

Instructions to candidates

The purpose of this task is for you to apply the knowledge and skills you have learnt to a practical situation. This PAT assesses Topic 1 in the IEB Subject Assessment Guidelines.

THE AIM OF THE PAT: You are required to investigate the impact of eye training exercises and drills on the performance of athletes.

Familiarise yourself with all the PAT documents (Instructions, Framework, and Rubric) before you begin the task.

OVERVIEW OF THE TASK

To complete the PAT, you must select **FOUR athletes** who can access and follow a programme devised by you. The selected athletes:

- Do not need to participate in the same sport.
- Do not have to be the same age or gender.
- Your athletes must follow the eye training programme provided for a minimum of three weeks.

The following must be included in your PAT:

- Plan of action
- Phases 1–4
- Conclusion

Plan of Action

Draw up a personal plan of action that outlines the process you intend to follow for the PAT:

- What will be done?
- Where, when, and by whom will each step occur (include dates and timeframes)?
- How will each activity be carried out?

The action plan should be a summary of the steps the learner intends to follow.

- Methodology must be provided for ALL steps of the PAT.
- Dates, estimated time frames, and personal agendas must be included.

This is a working document; it is not cast in stone. It will show that your process is feasible and that you are organised.

PHASE 1 ATHLETE SELECTION AND INITIAL ANALYSIS

1.1 Design a Questionnaire

Design a questionnaire that you can use to survey a sample of athletes. You will use the data that you collect in the survey to choose the four athletes who will ultimately be participating in the PAT. (A suggestion is to conduct a survey of 8 to 10 athletes so that you have a better idea of who the ideal candidates might be.)

The questionnaire will need to at least provide the following information:

- Personal details such as:
 - Athlete's name; age; gender
- Sporting information:
 - Sport the athlete participates in
 - Level of performance of the athlete, i.e. beginner, intermediate or elite
 - Does the athlete play in a 1st team or a 5th team?
 - Are they a purely social participant?
 - What other activities do they participate in?
 - Amount of time spent training?
 - Regularity of competition/participation?
- Vision-related information:
 - Whether they wear glasses or contact lenses?
 - Reason for wearing glasses or contact lenses, i.e. Near-sighted or far-sighted
 - Do they wear the glasses/contact lenses all the time?
 - Do they struggle with vision when playing sport? E.g. mishitting the ball
 - Do they suffer from headaches or tired eyes?
- Include any other pertinent questions of your choice.

Formulate the questions and format the questionnaire in a way that ensures you get the information you need. The questionnaire format should ensure clarity and relevance.

1.2 Conduct Surveys

Carry out the survey on 8–10 athletes. Select four athletes for your programme based on their responses. Justify your selection by considering the following:

- Variety in sport, age, or gender.
- Potential visual or coordination issues that could benefit from eye training.

1.3 Parent/Guardian Consent

For athletes under 18, obtain written permission from their parents or guardians.

1.4 Analyse Data

Analyse and interpret the data gathered from the questionnaires on the four selected athletes and identify any possible issues that could be negatively impacting their performance. You may interview the four selected athletes to get additional useful information.

General Administration for Phase 1

The completed questionnaires and any interviews, if conducted, for the four selected athletes must accompany your analysis.

The completed questionnaires from any unselected sample athletes must be included in the **Appendix** of the task.

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PHASE 2 Baseline Testing and Programme Design

2.1 Conduct Baseline Tests

Conduct a baseline test with each athlete and record the results.

The baseline testing **must** include the following, which must be sourced:

- Eye Dominance Test
- Visual acuity test using Snellen Eye Chart (literate or illiterate)
- Plate Tapping test
- Wall Toss test
- Soda Pop test
- Foot Tapping Speed Test (for those needing foot-eye coordination)

You may include other tests. (Explain why you selected the extra tests.)

Provide photographic evidence that testing was conducted.

2.2 **Design an Eye Training Programme**

Design/Source an eye training programme carefully tailored to each athlete's specific needs based on the analysis of their baseline test results. Submit each programme.

The programme must be explained to each athlete and adhered to for a minimum of 3 weeks.

(Guidelines to assist in setting your training programme)

- Use the baseline test results to pinpoint improvement areas (e.g. visual acuity, hand-eye coordination or reaction time).
- Identify sport-specific visual demands, such as tracking fast-moving objects for a cricket batter or improving peripheral awareness for a basketball player.
- Include a variety of drills and exercises that target key visual skills.
- Structure of the Programme including frequency, duration, progression and/or adaptations.
- Provide written and visual explanations for each exercise (e.g., diagrams, videos).
- Include step-by-step instructions that are easy to follow.
- Specify equipment required, such as balls, cones, or smartphone apps.
- Outline how athletes should self-monitor and document their adherence and progress (e.g. via the provided diary).
- Encourage athletes to report any challenges or successes during training sessions.

Signed Declaration

Before starting the programme, ensure that:

- Each athlete receives an explanation of the programme, its objectives, and the expected commitment.
- Athletes sign a declaration confirming they understand the instructions and agree to adhere to the prescribed training regimen.

This detailed and personalised approach ensures that the programme is effective, goal-oriented, and feasible for each athlete. Let me know if you'd like specific example drills or additional elements included!

2.3 Athlete Diary

Design a diary template for athletes to use. The diary format must be able to include the following information about the athlete:

- That records their daily adherence to the prescribed programme.
- It should also record all additional training other than that prescribed, e.g. 2-hour rugby or basketball practice.
- The diary should also include responses as to how the athlete feels after doing the exercises in the provided training programme.
- You must design the format of this diary to ensure that you get the information you need.

PHASE 3 POST-TESTING AND ATHLETE FEEDBACK

3.1 Post-Test

After the 3-week training period is over, a post-test must be conducted on all four athletes by repeating the same tests done in Phase 2:

- Eye dominance test
- Visual acuity test using Snellen Eye Chart (literate or illiterate)
- Plate tapping test
- Wall toss test
- Soda pop test
- Foot-tapping speed test (for those needing foot-eye coordination)

Ensure that you follow a testing protocol of objectivity and reliability.

Provide photographic evidence that testing was conducted.

3.2 Analyse data

Compare and analyse the results of the baseline test and the post-test.

3.3 **Second questionnaire**

Design a second questionnaire that allows the athletes to reflect on the feasibility of the prescribed programme, their perceptions of its impact on them, and their performance.

You may interview the four selected athletes to get additional useful information.

PHASE 4 ANALYSIS, EVALUATION, AND REPORTING

Analyse and evaluate all the information you have collected.

- Discuss whether the eye training was effective or not.
- Discuss whether or not the training impacted them or not, and what impact it had on their performance.
- Identify any adjustments you would make to the programme and why.
- Provide further recommendations that you would make to improve performance.

CONCLUSION

Write a concise conclusion to the task that provides a link between the initial information gathered and the final outcome. The conclusion must relate directly to the topic.

It must include a reflection on the process you followed: strengths should be identified, limitations acknowledged, and recommendations made for improvement.

SUBMISSION OF THE PAT

- Your task must be submitted online.
- It must include the completed prescribed IEB Cover Sheet.
- The content must be organised in the correct order, according to the sections in this
 document.
- The content must comply with the following criteria:
 - All components in the framework must be included.
 - The task must be typed.
 - Font type Arial.
 - Font size 12.
 - Headings font size 14.
 - The text must be edited for spelling and grammar.
 - All photographic evidence labelled.
 - There must be a Reference List written in a recognised format, preferably the Harvard system.