Test Taking Anti-Patterns

Even though students possess the necessary knowledge to tackle test problems, they often encounter difficulties stemming from certain anti-patterns (AP) that hinder their ability to find the correct answers. To successfully navigate these tests, students are expected to maintain focus, apply diligence, and effectively use all the available resources and tools. Below, we identify these test-taking anti-patterns and offer coaching strategies to help students overcome them in future tests:

* Referring to the text: Student fails to peruse all of the critical information provided above each passage, within the passage, as well as any author's notes mentioned at the end of the passage. Students need to carefully go back to the text and use the information presented in both the question and the text to find and check the correct answer. The answer is most likely explicitly stated in the text, albeit occasionally with different wording.
* Recommended Best Practice (RBP):

1) Advise the student to read all information presented both above and below the passage, as well as any other text features (image captions. Since critical information is usually limited to a few sentences, it will not consume much time during the test.

2) Have the student underline or highlight the important information in the text while explaining the question.

3) Advise the student to look for keywords from each question in the text and look for their answer where they're located.

4) Try to create a habit of checking the selected answer against the text and eliminating wrong answers as a way of sanity checking."

* Contextualizing (including extracting key information): Students may encounter difficulty summarizing passages or determining the significance of details, which can hinder their ability to answer questions correctly. It involves comprehending a passage or poems' significance and situating it within a context that reinforces the historical or original meaning. This AP is most likely found on questions about main idea, theme, or summary. The answer is most likely to be inferred, not directly summarized from the passage.

RBP: To coach on this,

1) Have the student annotate (i.e underline) what they believe is important information

2) Get them to describe and summarise each paragraph

3) Ensure that the student can comprehend the material by asking them to summarize, question, and comment on the messages conveyed.

If the student can correctly elaborate why their answer is wrong and the other is correct, they need to work on strategies such as annotation and note-taking. If they fail to explain why one answer is correct and the other is not, or their logic is faulty, it's a knowledge hole."

* Problem decomposition (APPD): Students cannot break down a complex problem into smaller parts that are more manageable and easier to understand.

RBP: Problem decomposition is a vital skill for tackling complex questions. We can loosely break it down into 3 components:

1) Isolating and identifying the relevant inputs (Students should annotate - underline - as part of APDE - Showing Working)   
- Can you list all the relevant pieces of information provided? Write them down.

2) Isolating and identifying the required output (Students should annotate - underline - as part of APDE - Showing Working)   
- Can you write down the required answer?

3) Identifying the steps required to convert inputs into the desired output

- Do you know all the steps required to get from the input to the answer?  
- Do you know the first step? Write it out. The next step? Write it out.

It may be that the student can stitch together all the component pieces and arrive at the solution. Or, the student might get blocked at a certain step due to lack of knowledge (which should result in a skill/resource recommendation).

\* This applies to many question types, but not all. For example, a question that asks: “Calculate the density of an object with a mass 143 grams and a volume of 44 cubic centimeters.” cannot be problem solved or deduced, the formula for calculating density must be pre-existing knowledge. But, if the learner gets this wrong, then they have recommended resources instead of AP coaching."

* Decontextualization (APDC): Student could not formulate a mathematical statement based on language inputs. Students may struggle to understand how sentences that involve quantities can be converted into equations that can then be used to solve the problem. Often solving the equation is trivial for them.

RBP: To coach on this,

1) Have the student annotate (i.e. underline) what they think is the relevant data

2) Get them to describe what they want to do with that data (and why) in terms of values and calculations on those values

3) They must be able to take information from English and convert it into an equation used to calculate a result

This applies to many question types, but not all. For example, a jet flew east at a constant velocity for 6 hours. In one-third of that time, it flew 3,600 kilometers. What was the jet's velocity? Students should be able to convert this input into a mathematical statement to calculate the velocity."

* Diligence (Rushing, Carelessness, no show of working) (APDE): This is a general class of AP, in which the student is not applying themselves sufficiently, or not focusing deeply enough. It includes:
* Rushing - does not spend enough time on the question
* Does not have intermediate working
* Incorrect calculation (esp. if it is trivial for them)
* Typos
* Carelessness
* Elimination of alternatives is one of the techniques on diligence (also a test-taking technique)

RBP: To coach on APDE, advise the student to:

1) Slow down, take your time (test isn't timed)

2) Double check your work (as you go)

3) takes notes - make annotations with care so that handwriting quality doesn't hinder checking your steps

4) Retrace steps and interim results, if the result is not correct

5) Perform a sanity check by eliminating answer options and making sure all questions have been answered

* Distractions (APDI): The performance of students is significantly affected by distractions during the test. They include:
* Noise
* Talking to others
* Electronic devices
* Low battery on their device

RBP: Recommend that the student work in a quiet environment that is free from distractions for the entire duration of their test. Instruct them to refrain from using their mobile phones or any other applications during the exam.

To concentrate on the test, it is crucial that they avoid conversing with others and prepare adequately in advance. Advise them to ensure that their devices are fully charged and that they have all of the necessary materials for the exam."