

Expert Skills Program Learning Awareness Inventory

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This 16 question Learning Awareness Inventory, with five optional essay questions, was developed to reveal whether you have the right learning skills for achievement in medical school. In particular, it has relevance well beyond scores on examinations because it is equally applicable to learning that underlies clinical performance.

- Different educational environments have different conditions that require different types of learning.
- For example, premedical achievement requires significantly different thinking than for medical school. This is also true for other programs such as engineering and law.
- In addition, the medical school environment also requires that time be used differently. The use of time is linked to learning skill.

The Expert Skills Program (ESP) originated and evolved from the need to help numerous students acquire a new way of thinking. It now applies to all medical students, not just those who become at-risk.

- The ESP Learning Awareness Inventory has been developed to help illustrate to interested students how this new thinking affects them. A passing grade is 16 out of 16, i.e. ESP is a holistic concept and piecemeal knowledge of its components cannot lead to the development of expert thinking skills. Each question raises the awareness of essential ESP concepts.
- To help illustrate the principles, annotations to the answer choices will show you how the ESP teaches you to become a complete professional.
- The optional essay questions are also annotated to help teach the relevant principles.

Instructions: As with all exams you will take in your medical education, the instruction is to choose the most correct answer.

1. What observation most influenced the Growth Mindset?

- A. Students who understand how their brain learns have higher academic performance.
- B. Students who use retrieval practice have increased intelligence.
- C. Students must make the most of their intelligence through regular practice.
- D. Students who fear failure generally are motivated to work harder.

E. Students gradually increase their intelligence as they grow interested in learning.

2. Which one of the following best describes what happens during learning?

- A. The brain stores new facts for use later.
- B. The brain uses existing facts to create new facts.
- C. The brain physically grows as it creates new facts.
- D. The brain makes better use of existing synapses.
- E. The brain acts on experience to change itself.

3. Which area of the brain most closely corresponds in its function to the hard drive in a computer?

- A. The prefrontal cortex
- B. The limbic system
- C. The temporal cortex
- D. The motor cortex
- E. The sensory cortex

4. What is the key determinant for consolidation of synapses that are formed when studying practice questions?

- A. Retrieval practice
- B. Repetition
- C. Clarity of annotation comments
- D. Difficulty of question stem
- E. Emotional relationship

5. Which of the following best describes how the preference for introversion is used during group learning?

- A. Organized – Keeps group on task
- B. Passive – allows contribution from members who know the material
- C. Processing – allows deep thinking to process rationales and facts
- D. Harmonizing – reduces tension and prevents arguments
- E. Logical – certifies that discussion makes sense

6. Which of the following is least likely to be effective for constructing concept maps as part of self-directed learning?

- A. Outlining
- B. Paraphrasing
- C. Comparing

- D. Reciting
- E. Analytical reading

7. Which of the following is the most important contribution of concept mapping to learning?

- A. It avoids an obsession with details.
- B. It reveals relationships through interconnected patterns.
- C. It can be done on a computer.
- D. It can be done alone or in a group.
- E. It is more fun than other methods.

8. Which of the following is the best way to help a student who is not performing well on their exams in medical school?

- A. Recommend that they review practice questions on a daily basis.
- B. Get them to work with a tutor as soon as possible.
- C. Get them to describe how they can correct their learning weakness.
- D. Don't help them. Medical school is sink or swim and the weak students will just become weak doctors.
- E. Get them to set up regular visits with their professors to have their questions answered.

9. Which of the following sequences best ranks the importance of the Myers-Briggs preferences (S,N,T,F) as a successful learning style in medical school?(Key: **S**ensing, **iN**tuition, **T**hinking, **F**eeling)

- A. N>S>T>F
- B. S>N>T>F
- C. N=S=T=F
- D. N=S>T>F
- E. F>T>N>S

10. Bias in identification of one's MBTI type occurs most often due to:

- A. a desire to be different than you are
- B. changes in preferences over time
- C. substantial proficiency in an area of preference
- D. mental illness
- E. knowing type descriptions in advance

11. Which of the following is the most likely target for applying deliberate practice?

- A. an inborn talent
- B. a specific type of intelligence
- C. a weakness
- D. a newly acquired interest
- E. an area of expected success

12. Which of the following is most likely represented by the crosslinks in the ESP Step 1 Prep side-to-side concept map that is used to analyze practice questions? (See video 6 in the ESP video series [set hyperlink here, <https://youtu.be/jcfAtZhUP9w>]

- A. correlation between an answer choice and a trigger word in the stem
- B. a rationale for elimination of an answer choice
- C. identification of a correct answer
- D. identification of the most important finding
- E. the part of the question that should be memorized

13. According to brain research findings, which of the following is the most effective method for learning?

- A. retrieval practice
- B. reading for understanding
- C. reading for recognition
- D. reciting with or without flashcards
- E. concept mapping

14. Which of the following is the most important step in experiential learning?

- A. reflective observation
- B. concrete experience
- C. abstract conceptualization
- D. active testing
- E. Retrieval practice

15. Which of the following is the most effective way to schedule Step 1 study?

- A. Begin one month before the exam date
- B. Regular practice question review beginning in year 2
- C. Ongoing analysis of course relevant questions
- D. Register for a prep course to find out areas of weakness
- E. Register for a prep course that provides a proven schedule

16. Which of the following best describes the way that sensing types answer case-based exam questions?

- A. Seek the answer that matches notes or text
- B. Rule out answer choices that don't fit learned patterns
- C. Read answer choices first to improve reading of question stem.
- D. Read end of case first to improve reading of question.
- E. Cover up answer choices and determine answer then identify correct answer.

Short essay questions (optional):

Instructions: Although most of your exams in medical education will be multiple choice, you will also be asked during your clinical experiences to explain your answer. Short essay questions are good practice for this. You will get more out of this exercise if you try to give a good answer first before reading the annotations. Better is to discuss your answer with a classmate first then check the annotation and discuss further.

1. Do you feel that development of your learning skills is nearly complete? Explain.
2. If you were/are a sensing type, how would you explain the value of learning specific facts and details to an intuitive type?
3. Describe the biological event that corresponds to increasing intelligence.
4. Do you think that your learning style is the best way for you to learn? Why?
5. Explain how learning style correlates with specialty choice.