



## EFFECTIVE METHOD OF LEARNING ANATOMY

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### ABSTRACT

What is good teaching? Many teachers must have asked themselves this question. Administrators of medical institutes struggle with this question as they attempt to meet students' needs and create reward schemes for their teaching staff. What are the expectations of teaching? Should teaching meet the expectations of the students, the teachers, or the administrators? If effective teaching = good teaching, can it also be said that good teaching = effective teaching? Is bad teaching really

detrimental? After all, what does bad teaching do? It often drives learners to the library. The outcome: independent learners. Isn't this one of the outcomes of effective teaching? Students adopt usually three sensory learning styles, visual, auditory, tactile, and two social learning styles, individual and group, in relation to learning Anatomy.

- Visual Learners like to see words/pictures.
- Auditory Learners like to hear the spoken word through lectures, individual conferences and small group discussions.
- Tactile Learners like to touch and feel the dissected parts.
- Individual Learners like to work alone and prefer self- directed study, independent reading etc.
- Group Learners like group interaction. These findings reveal that students' preferred ways of learning, do not change regardless of content and teaching methods.

This implies that if teachers want to significantly enhance student achievements in class, they need to match their teaching styles to their students' learning styles (Felder & Henriques, 1995; Grasha, 1996). They have to embrace a multi-style teaching approach to connect to each student's learning style by planning auditory, tactile, visual as well as group and individual activities to reach all students.

This paper emphasises some ideas about learning and teaching and gives a common sense teaching philosophy gathered with experience over the years.

**KEYWORDS:** Teaching, Teacher, Administrator, Learners, Teaching Philosophy.

## **INTRODUCTION**

What is good teaching? Many teachers must have asked themselves this question. Administrators of medical institutes struggle with this question as they attempt to meet students' needs and create reward schemes for their teaching staff. But the answer is elusive, as it depends on who is asking the question:

the student, the teacher, or the administrator?

**The students' qualitative feedback over the last few years can be broadly categorised into**

### **Group A**

- Communicates clearly
- Explains difficult concepts well
- Is approachable
- Is knowledgeable
- Is willing to listen
- Prepares us for the examinations
- Helps us problem-solve
- Always there when we need him.

**But is this really what a teacher would like see in his feedback?**

### **Group B**

(Includes all the above and in addition)

- Interests me to read further
- Probes us
- Makes us think laterally
- Makes us to question concepts
- Willing to listen to another point of view
- Has a different approach to teaching.

It would seem that teachers in Group B are not only are good, but also effective teachers. However, can all administrators see the difference between Groups A and B?

If we simplify the equation such that effective teaching = good teaching, could we also say that good teaching = effective teaching?

Students seem to have a problem differentiating good teaching from effective teaching. Majority of students nominate teachers in Group A as good teachers, and only the discerning few would nominate Group B teachers. This is because teachers in Group A often are very good at mentoring students and meeting their emotional needs. And students have great difficulty differentiating a good mentor from an effective teacher. In fact, many see the mentor as their ally and the effective teacher as the aggressor.

### **We should consider another point**

Is bad teaching really detrimental? After all, what does bad teaching do? It often drives learners to the library. The outcome: independent learners.

Isn't this one of the outcomes of effective teaching?

### **According to Shuell (1986)**

If students are to learn desired outcomes in a reasonably effective manner, then the teacher's fundamental task is to get students to engage in learning activities that are likely to result in their achieving those outcomes; it is helpful to remember that what the student does is actually more important in determining what he has learnt than what the teacher does.

## **DISCUSSION**

### **So, what is Effective Teaching?**

1. Learning is more important than teaching. The effectiveness of teaching is measured by the effectiveness of learning, not by the specific teaching techniques or methods employed. There is no single best method of teaching. What works best for one teacher does not necessarily work well for another; good teachers typically employ a variety of methods, each tailored to particular learning objectives. Most "good teachers" share a general understanding about how learning occurs and direct their efforts accordingly.

2. Learning occurs by bridging the gap from the familiar (known) to the less familiar (unknown). The accumulation of knowledge occurs by incorporating the results of new experiences with those of the learners' past experiences. The most effective teachers are those

who are best able to help the learners bridge these gaps. Effective teachers are those who can explain the apparently complex (unfamiliar) terms, in terms that the learner can understand. Once the basic concepts are understood, the specific facts and differences between familiar and unfamiliar phenomena can be added to the equation.

3. The most important single element in determining how effectively learners learn is the teacher. This is not because the teacher is necessarily the most comprehensive source of the facts but, rather, because a good teacher serves as a living conduit for the information. A living teacher is more “user-friendly” and more “interactive” than any non-human teaching resource. The success of the teacher is his or her ability to capture and maintain the interest of the learner, to motivate the student to learn, and to package the information in its most understandable form. Every teacher is a learner, and every learner is a teacher. The primary distinction between the teacher and the learner is that the teacher is the one who typically has the most experience in a given area and is usually getting paid to be there.

4. The only thing more contagious than enthusiasm is apathy. Effective teachers are hopelessly infected with a contagious enthusiasm for their subject. They are convinced that their subject matter is important and can effectively communicate the relevance of that knowledge to all susceptible learners who come in contact with them. In effect, they serve as biological vectors to infect all but the most immune students with an enthusiasm for obtaining that knowledge. If you’re not excited about your subject, you shouldn’t be trying to teach it.

5. Teachers shouldn’t confuse love of the subject with an over-inflated self-image about how much they know about it. The most effective teachers are those who take their subject, but not themselves, too seriously. No teacher will ever have the answers to all the questions students will ask, so they shouldn’t be afraid to just say “I don’t know.” They should try to help the students find the answer, but never “fake it” and give them an answer as fact when, in reality, it is just a guess. These wrong answers will inevitably catch up, and students will quickly lose confidence in the teacher as a resource.

6. The more actively students get involved with the learning process, the better. An active experience is much better than a passive one; that is, doing is much better than watching, watching is better than listening, and so on. Trying to learn anatomy out of a textbook or solely from digital images, videotapes, and so on is worthless. No one can really learn much anatomy by just listening to someone else talk about it, even if they show a lot of slides or use

computer images. That is why Dissection hall and Histology laboratory experiences are far better than just sitting in a lecture room listening to somebody else talk about it. Small group interactions, are much more effective because the learners are much more involved in the learning process.

7. Ninety percent of what students learn in a given course is directly related to how they are tested. Students learn pretty much what is expected from them to know. If teachers concentrate on specific details and reward pure fact-recall, that's exactly what the students will learn. If teachers can be more creative in their questioning, so as to evaluate their ability to apply or integrate the knowledge, then they will soon become more concerned with developing these higher cognitive skills. In every discipline, certain facts and concepts are much more important than others. One of the primary strengths of a good and more experienced teacher is their ability to appreciate and point out these differences to the student. Good teachers emphasize these more important points, and their examinations accurately reflect differences in relative importance. Again, this is where the teacher is a living conduit for the information as he can emphasize certain points.

8. One of the biggest "de-motivations" for students is being surprised in an examination. Some of them have worked very hard to prepare for the exam, and if it is not a fairly accurate reflection, in terms of depth, difficulty, and scope, of the subject matter covered, they will realize that they cannot trust their teachers. An examination should be a learning experience in addition to just being a test. Students should be encouraged to ask questions about why certain responses did not receive full or partial credit. Sometimes students learn more from their wrong answers than from their correct responses, assuming, of course, that they understand why their answer was not acceptable.

9. Teachers can tell more about how much students are learning by the questions they ask, than by the answers they give. If most of their questions are of the type "Do you think this item will be on the examination?" or "Do we really need to know this or that for next week's test?" then you can rest assured that these students are experiencing "tunnel vision." The only light they see at the end of the tunnel is passing through their teacher's course. If teachers really want to motivate students to learn and to be more inquisitive about the subject, they should be getting questions like these: "How does item A relate to item B?" "Why does this muscle have this particular action?" "What action would be affected if this bone is fractured?"

10. Good teachers emphasize the applied aspects of the subject matter. Much of the information provided by the teacher should be related to the application of the knowledge to real-life situations. Inclusion of such information is not only appropriate but critical to acceptable comprehension and full appreciation of the subject by the students.

11. Forgetting is part of learning. Based on the premise that there is a finite amount of memory storage space in the human brain, a learner must be able to forget some things in order to make room for learning new and more important (relevant) things; otherwise, his disk gets full. The human brain has the capacity to sort through millions of bits of information, discard the useless data, and store the more important facts for future retrieval and utilization. Sometimes, it's even a blessing that students forget some of the "facts" their teachers tried to teach them because they may have taught them things that are wrong. Every instructor does this unintentionally, but not all instructors admit they do.

12. A good teacher is part dictator, part coach, part noxious stimulus, and part cheerleader. As a benevolent dictator, the teacher directs the pace and depth of instruction and thus has the responsibility of "dictating" what is expected of the students, in what time frame, and how the students' work will be evaluated. As a coach, the teacher tries to bring out the best in each student, encouraging and correcting them with both positive and negative reinforcement. The noxious stimulus role is used to prod students to do certain things (for example, write a paper) for their own benefit, because without the noxious stimulus they would not have taken the time or put out the added effort to do it. As a cheerleader, the teacher displays excitement and enthusiasm in the accomplishments of his students, not only during the time the student is under his direction but also, more importantly, afterward. Taking pride in the successes and accomplishments of one's former students is really what it's all about. It is the greatest reward any teacher can receive.

Ramsden Quoted that 'I hate to say it, but what you have got to do is to have a list of 'facts'; you write down ten important points and memorize those, then you'll do all right in the test ... If you can give a bit of factual information - so and so did that, and concluded that - for two sides of writing, then you'll get a good mark.'

## CONCLUSION

For students to find teaching 'challenging', 'stimulating', 'thought-provoking' and even 'enjoyable', instructors should not over-teach and allow students to do some background reading. All students are motivated, energetic and intelligent.

When students join a medical college with the burning desire to become good doctors, they are perfectly capable of comprehending basic information while at the same time gaining an appreciation of how that information is going to be important to them in the future. They expect that an effective teacher would be one who has taught the subject before and will guide them regarding the important facts they require to become good doctors. At the same time, whenever they require the information in the future, they would not be totally lost, in trying to recollect the information.

### **COMPETING INTERESTS**

The authors declare that they have no competing interest.

### **AUTHORS' CONTRIBUTIONS**

SPS draft the manuscript, performed the literature review & SR assisted with writing the paper.

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