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The Socratic Method and Pimping: Optimizing the Use of Stress and Fear in Instruction

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Many faculty and clinical instructors in medicine profess to use the "socratic method" as an approach to teaching. From the basic sciences to the clinical years, medical students can and should expect to be questioned "socratically." The socratic method, in its pure form, births a new level of understanding in learners. In a clinical context, it uses questions to draw out a learner's knowledge—bridging the gap between textbooks and clinical care [1]. What, then, does the term "pimping" refer to? Is it synonymous with socratic instruction? Those who have experienced an emotionally charged "pimping" session in which a professor peppered the group with difficult questions may have been scarred by the event. But is there a legitimate role in medical education for the fear and stress pimping inspires?

The Socratic Method versus Pimping

Socratic instruction. When teachers ask questions using the socratic method, the "answer" and the "goal" of instruction should be known. Questions and follow-up questions lead the learner to solve the problem him- or herself—often applying baseline knowledge to a clinical scenario. Instruction then, should focus on diagnosing the learner's knowledge level and teaching to it. The method is used most effectively one-on-one, where potential humiliation and embarrassment are minimized. The ultimate goal of socratic instruction is to help the learner develop new conceptual relationships or reaffirm a baseline level of knowledge, leaving the students more engaged in self-directed learning, which is rewarding to their instructors.

"Pimping." Pimping is poorly defined in the medical literature, but can be loosely understood as a form of questioning of junior colleagues by a person in power that affirms the hierarchal order in medicine [2, 3]. Pimping starts with the lowest on the totem pole and moves up the chain—medical students, interns, residents, and then chief residents are all questioned.

On the surface, pimping appears similar to the socratic method, and the two terms are sometimes used interchangeably. However, there are clear differences in the means and goals of the two approaches. In its worst form, pimping uses the power of status to embarrass and humiliate the learner in a group environment [3]. At its foundation, the goal of pimping is evaluative. Who knows the answer? Who doesn't? But answering questions becomes a competition among peers, and, to the student, learning may appear secondary to the social dynamic invoked through the

questioning. Prototypical pimping questions are conceptually different from those used in the socratic method. They are often difficult or impossible to answer and often focus on trivial matters, such as irrelevant eponyms or arcane historical points that may be interesting yet devoid of educational value [2]. See table 1 for the difference between the socratic method and pimping.

Table 1. The socratic method versus pimping

Technique	Socratic method	Pimping
Goals	• Connect new knowledge to existing knowledge • Teach	• Evaluate students • Establish hierarchal order • Teach
Types of questions	Probing and leading: making connections Ex: Why do patients get hypotensive when pyelonephritis is treated with antibiotics?	Factual, pertaining to history, eponyms, lists Ex: What is the Jarisch-Herxheimer reaction?
Optimal setting	One-on-one	Small group

Better Pimping?

There are few opportunities in the medical school curriculum for one-on-one clinical instruction and socratic teaching because, while it may be ideal, it is often time-consuming. Second, the fact of the matter is that professors must evaluate the students in some fashion and cannot always teach solely for the sake of imparting knowledge. Third, there is research to suggest that some stress and anxiety can be beneficial in learning. There appears to be a certain level of tension and disequilibrium needed to stretch and challenge students to learn [4].

But, as noted by Allan Detsky, pimping can be kinder and gentler [5]. One way to mitigate fear is to provide praise, public or private, after a good presentation. Detsky encourages instructors to take the "high ground" of pimping, with the goal of teaching rather than reinforcing hierarchal order. A small-group setting with different levels of learners is arguably the optimal setting for appropriate pimping. Handled this way, pimping can engage students more than lectures and stress them enough to increase retention of key learning points. Done well, pimping can help check the knowledge of the learner in order to reinforce key learning points. Exposure of students' knowledge gaps can focus and enhance their self-directed reading and learning [3].

Practically, medical school teaching can be best accomplished in small groups like those of an inpatient ward team, consult service, or clinic. This format allows interactive reflection and the setting of standards for the learners.

What Students Want

One study reported on student perceptions of effective small-group teaching and identified several characteristics of the best small groups [6]: the environment is perceived by the students as not threatening, promotes problem solving, encourages group interaction, and is led by an effective tutor who emphasizes clinical relevance while optimizing student participation and working to adhere to the group's goals. For example, the tutor will identify quiet students and give them a chance to add items to the discussion or will redirect the group to stay focused on a session's goal. Students like to be able to think aloud and ask questions while checking their understanding of the material. They found particular value in learning from one another and applying content to real clinical situations to develop their problem-solving skills. Students also preferred instructors who did not "lecture" in a small group and appeared relaxed, engaged, and excited to be present.

Overall, the students emphasized the value of a small-group teacher as a "metacognitive guide." This type of teacher is able, without giving answers, to help the students raise the questions an expert physician would ask when thinking through a case. An expert tutor is described as an active listener focusing on the needs and skills of each participant [7].

Can students be engaged with thought-provoking questions without the fear of humiliation or embarrassment in small-group settings? We believe it is possible. Here are some key points from both a teacher and student perspective.

Pointers for Teachers

1. *Diagnose the learners (and teach to that level).* Ask questions to assess their baseline knowledge level. But don't embarrass; ensure that your goal is to help and motivate them to learn.
2. *Avoid asking questions for questions' sake.* Do students really need to know what year the stethoscope was invented? Avoid trivia, historical facts, nonmeaningful eponyms, and impossible, guess-what-I'm-thinking questions.
3. *Tell students your goal in asking questions.* Tell students up front that you will ask questions not to harm, humiliate, or embarrass, but to teach.
4. *Emphasize important learning points.* Link topics discussed to a clinical context for patient care, perhaps one in which clinical pearls are given to help to solve complex clinical problems.
5. *Do not attempt to intentionally embarrass or humiliate the students.* We all make mistakes, and reflection on the teaching encounter helps you to determine if you've asked irrelevant questions or if your learning outcome was unintended embarrassment or humiliation. Use this to improve your approach and questioning for future teaching opportunities.

Pointers for Students

1. *Give professors the benefit of the doubt.* If attending physicians ask difficult questions and if a student feels humiliated, the effect was most likely unintentional.

2. *Don't be afraid to speak up*. Be courageous and give teachers some feedback, whether directly or through your school's feedback system, especially if humiliating behavior becomes a recurring theme.
3. *Use the answers you know to reinforce your learning.* When you do know the answers, even if you don't say so out loud, take that as positive reinforcement that you are on the right track in learning the key points.
4. *Use the questions you don't know to motivate you to read and learn.* If you didn't know the answers, then write them down and hit the books hard and learn it well. This becomes a great needs-assessment tool to help you to learn and focus your studies.

Conclusion

The socratic method and pimping, while similar, are distinct teaching strategies with some areas of overlap. Small-group instruction is arguably the best way to teach clinical medicine and questions, whether asked "socratically" or by "pimping," will persist in medical student teaching. Fear and stress can be useful when they spur the student to pursue self-directed learning and minimize embarrassment or humiliation. Perhaps most importantly, students should remember that they learn for the sake of their future patients—that one day, a patient may depend on them to know the correct "answer." This, ultimately, is the type of fear that should drive the teacher to teach and the student to learn.

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