The pro - con debate: educational, or just another blood sport?

Recently, I agreed to take part in a ‘pro-con’ debate regarding the Stewart approach to acid-base balance (i.e. ‘Is the plasma pH regulated by strong ions?’). I took the ‘con’ position (i.e. the Stewart approach is flawed or ‘Strong ion difference: a new paradigm or new clothes for the acid-base emperor?’). However, I promptly found myself on the back foot when I learnt that one of my co-chairmen was a ‘pro’ supporter who had been embarrassed by me 24 hours ago when I, as his chairman, implied in front of a large audience that he had run over time. I waited for my invitation to the podium with some trepidation.

The pro side was advanced first, with the dialogue varying, along with various relevant points, from light humor to outright vilification of the con position. No problem, I had a reasonably robust ego – although it was telling me that I had not included enough ‘clever’ slides for my talk. I began (half expecting the time buzzer to be pushed ruthlessly and relentlessly) and soon found that my Powerpoint® presentation had a font variance with the venue’s computer, producing postbox and bifocal icons within important equations – confusing all as I tried to emphasise my point of view. Not a good start.

The right of reply involved a denigration of each other’s position. However, my opponent had gone to much more trouble than I, using video ‘bites’ from various science fiction films depicting me as a prince of darkness who was also of questionable intellect. My response was less confronting, and I was left wondering whether I should have done more – perhaps using the sort of sensory stimulus that is followed by an announcement that ‘Elvis has now left the building’.

Nevertheless, the session went reasonably well and I was interested in the audience’s response. This ranged from a misunderstanding of the principles of hydrogen ion metabolism (“can someone explain why water with a pH of 7.0 at 25°C becomes more acidic when its temperature increases?”) to an astute observation of the data presented (“In your slide listing five equations, the fourth one was wrong as there was a positive rather than negative superscript and a subtraction rather than an addition of factors”), indicating that at least some were not distracted by the session’s ‘cut and thrust’ approach.

After the meeting I wondered as to the educational value of the pro-con debate. Normally, techniques used to present medical data range from the 10-minute scientific report to the didactic lecture. In this regard, the pro-con debate is a relatively new educational ‘tool’, employing an adversarial structure where denigration of one position is used to support the validity of another. The presenters are generally unwilling to acknowledge any area of common ground and as the adversarial structure tends to promote the entertainment aspects of an argument, fidelity and precision of the evidence may be sidelined.

When discussing the topic informally with some of the registrants after the session, I found no swinging voters (i.e. those who had changed their mind after the event). The session appeared to polarise the audience; strengthening preconceived ideas and prejudices, rather than promoting an analysis or evaluation of the facts, indicating that we perhaps had not encouraged any serious thinking.

Science (if that’s what Medicine is), unlike art (unless that is what Medicine is), does not boast an eternal truth. With constant questioning and experimentation, facts and theories change. With this in mind, one should teach the student to think critically, to question paradigms and to challenge all past, present and future models with an open mind.

Nevertheless, it is not just knowledge or understanding that one wishes to impart, it’s curiosity, enthusiasm, skepticism, excitement and passion. Education is not filling a bucket, but lighting a fire and humor is often used to achieve this. However, the teacher is not just an entertainer and the humor used to facilitate learning is probably not that of derision.

“Academic disputes are so bitter because the stakes are so small”

Henry Kissinger

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