Inter & Intra-cohort bonding (and peer learning) in statistics teaching

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Teaching statistics to a mixed cohort is often challenging due to:

1. student’s preconceptions about what statistics entails,
2. prior (negative) experiences and
3. student’s confidence in their ability within the subject.

In order for students to feel invigorated and motivated it is vital that they are assisted to in realizing for themselves the relevance and application of the theoretical concepts and frameworks taught to their discipline as a whole and specific research areas.

Polling for text ideas is an effective way to challenge students to engage incrementally with the core building block concepts. In this presentation I’ll demonstrate how polling tolls can be used in statistics teaching to a) visually demonstrate key concepts through live class-generated plots, b) reinforce ideas about data types, c) build a library of example ideas e.g. think of two variables which may be correlated. These student generated examples are automatically shared within their cohort through the polling tool: I then have been sharing/adapting examples with follow-on cohorts (PGT, PGR, DProf groups) so that students gain an appreciation of relevance of statistics to a wide range of disciplines. Thus the students learn from each other within and between cohorts.

The advantage of such polling is that:

1. it encourages students to be creative,
2. builds their confidence in ability to formulate statistical hypothesis
3. underlines message that applying statistics is based fundamentally upon curiosity and formulating research questions as opposed to understanding complex maths,
4. allows me as instructor to gauge/check understanding,
5. builds rapport and engagement through a cohort often as a result of humorous examples contributed.

Overall, it is a simple way for an instructor to gain an appreciation of what topics/fields of study students are particularly interested in and hence take into consideration for following sessions thus helping build rapport. Additionally each response serves as fruitful material for instructor to elaborate upon and use as vehicle to reinforce and introduce follow-on concepts.