

Process Engineering Student Perceptions of Lecturing Methods

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While active learning is often the preferred method of student learning,^[1] traditional instructor-driven lecturing remains a key method of teaching in almost all universities. The presentation style chosen is often based on the instructor's preferred method. However, this study investigated the students' own perceptions of various lecturing approaches. Chemical and metallurgical engineering students at the University of the Witwatersrand, Johannesburg, were asked which method of lecturing styles they preferred.

Method

Using a basic 5-answer survey, students were asked to rate each teaching method as "Waste of Time," "Average," "Good," "Excellent," or "Not Applicable." The methods investigated are listed in Figure 1. The survey was sent to undergraduate students in their second year of study and upward. The responses were further analyzed as a "Positive Response" if the feedback was "Good" or "Excellent."

Results

Using the positive metric as an indicator, the worst performer was seen to be MS PowerPoint®. The chalkboard and overhead projector (OHP) methods were seen as equally bad, being the

second-worst option. Electronic notes using a tablet, videos, and hands-on materials were equally well received, with the most popular form of lecturing being the document viewer (Figure 1).

Conclusions

Irrespective of the educational benefits, the students responding here found MS PowerPoint® as the least favorite method of instruction, but did enjoy some of the other more modern methods of lecturing. Although outdated, chalkboards and OHP were still acceptable, possibly due to the more interactive nature of the instruction.

References

- 1 Prince, M., "Does Active Learning Work? A Review of the Research," *J. Eng. Ed.*, **93**, 223–231. (2004) doi: 10.1002/j.2168-9830.2004.tb00809. □

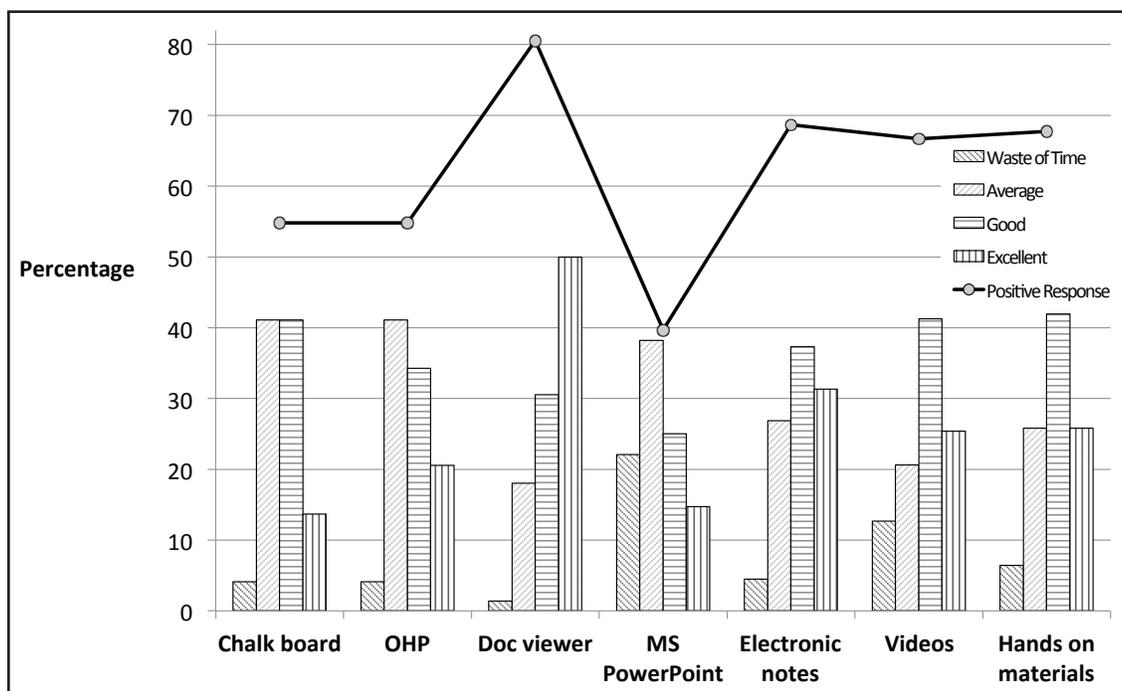


Figure 1. Student opinions on lecturing methods offered in undergraduate teaching ($n = 73$)

This one-page column presents practical teaching, advising, and diversity tips in sufficient detail that others can adopt the tip. Focus on the teaching method, not content. The column should be maximum 550 words, but subtract 50 words for each figure or table. Submit as a Word file to Phil Wankat <wankat@ecn.purdue.edu>.