Assessing Classroom Teaching Techniques: Using the Triangulation Model and Learning Capture Technology for Evaluation in Higher Education

Armig Kalustian Henriquez, Pooja Maney B.D.S, M.P.H, Ph.D, Sridhar Eswaran B.D.S, M.S

Objective:

Evaluation of lectures can potentially enhance student learning and faculty teaching skills. To address evaluation retrieval challenges, we combined the triangulation model (student, peer, self) of evaluation and lecture-capturing technology (LCT) to develop a more comprehensive assessment. The role of LCT in assessing classroom teaching has been underexplored. The goal of this project was to develop a tool using the triangulation method and LCT to evaluate the organizational, presentational, and overall teaching components of a lecture and use it to compare perceptions of teaching skills.

Experimental Methods:

Periodontics faculty members and students at the University of Texas at Houston School of Dentistry accessed recorded periodontics lectures through the LCT software Panopto to evaluate teaching techniques. An assessment rubric was used for self, student (n=11), and peer (n=8) evaluations. The scores within organizational and presentational components, as well as combined scores of both sections were compared and analyzed. A post-study questionnaire was completed by each faculty, assessing study effectiveness.

Results:

The results indicated that faculty tended to score themselves lower than their peers and students. However, overall scores by faculty, peers, and students indicated that the lectures were satisfactory and effective in both organizational and presentation components. The post evaluation faculty questionnaire showed that all evaluation methods helped them improve their lectures.

Conclusion:

Our study demonstrated that using the triangulation model and LCT for comprehensive classroom teaching evaluations in higher education is highly effective in promoting faculty lecture development, that potentially enhances student learning.

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