

## Examining Adult Learner and Lecturer Perspectives and Experiences Using Audience Response Systems (Clickers) in Higher Education

International Conference

## O'REILLY Maeve (1)

Athlone Institute of Technology, Ireland (1)

## Abstract

This research investigated through action research the impact of clicker-use on third-level veterinary nursing students and their lecturer. The study assessed how different methods of clicker-use in pharmacology class influenced learner engagement, motivation and learning in lectures, and how the assimilation of clicker quizzes transformed the lecturer's pedagogical design of classes. Data were gathered from student surveys, focus groups, and software records, from non-participant observations, and from lecturer observations, reflections and teaching materials. The data were analysed and interpreted in light of the current literature on this topic. The study concludes that having the facility to answer anonymously and gain immediate feedback using clickers enhanced engagement, motivation, and learning. The positive impact of clickers, and other aids which help to deliver student-centred pedagogy, within other veterinary nursing programmes, in other educational domains in AIT and in other educational institutes, and this research will be shared with other educators to inform educators of the findings.

Keywords: Technology, Clicker, Student-centred, Student engagement;

in SCIE

## References:

[1] Blasco-Arcas, L., Buil, I., Hernández-Ortega, B. and Sese, J. (2013) 'Using clickers in class: The role of interactivity, active collaborative learning and engagement in learning performance', Computers and Education, 62(3), 102–110, available: doi: 10.1016/j.compedu.2012.10.019.

[2] Buil, I., Martínez, E. and Catal, S. (2016) 'Do clickers enhance learning? A control-value theory approach', Computers & Education, 103(12), 170–182, available: doi:

10.1016/j.compedu.2016.10.009.

[3] Crouch, C. H., and Mazur, E. (2001) 'Peer Instruction: ten years of experience and results', American Journal of Physics, 69(9), 970-977, available: doi: 10.1119/1.1374249

[4] Felder, R. M. and Brent, R. (2016) Teaching and Learning STEM: A Practical Guide, San Francisco: Jossey-Bass.

[5] Han, J. H. and Finkelstein, A. (2013) 'Understanding the effects of professors' pedagogical development with Clicker Assessment and Feedback technologies and the impact on students' engagement and learning in higher education', Computers and Education, 65(7), 64–76, available: doi: 10.1016/j.compedu.2013.02.002.

[6] Hunsu, N. J., Adesope, O. and Bayly, D. J. (2016) 'A meta-analysis of the effects of audience response systems (clicker-based technologies) on cognition and affect', Computers and Education, 94(3), 102–119, available: doi: 10.1016/j.compedu.2015.11.013.

[7] Irish Survey of Student Engagement (ISSE) 2017 [dataset], Version 1, Irish Social Science Data Archive, available:

http://studentsurvey.ie/wp-content/uploads/2017/11/ISSE-Report-2017-final.pdf [accessed 17/05/18].

[8] McDonough, K. and Foote, J. A. (2015) 'The impact of individual and shared clicker use on students' collaborative learning', Computers and Education, 86(8), 236–249, available: doi: 10.1016/j.compedu.2015.08.009.

[9] Monk, S., Campbell, C. and Smala, S. (2013) 'Aligning pedagogy and technology: A case study using clickers in a first-year university education course', International Journal of Pedagogies and Learning, 8(3), 229–241, available: doi: 10.5172/ijpl.2013.8.3.229.