

# LEARNER ENGAGEMENT IN POSTGRADUATE MEDICAL EDUCATION



**Galway University Hospitals**

Ospidéal na h-Ollscoile Gaillimh  
UNIVERSITY HOSPITAL GALWAY  
MERLIN PARK UNIVERSITY HOSPITAL

C.McCarthy, O Morris, M Kelly

University College Galway



**NUI Galway**

## Introduction

It is known from the literature that the effectiveness of workplace learning programs such as postgraduate medical education is directly linked to learner motivation (Noe et al., 2010). The need to create an active learning environment that favours engagement and critical reflection is vital to successful learning (Doucet et al., 2009). Research has shown continuing medical education improves doctor performance (Mamede and Schmidt, 2004).

## Background

In today's society of lifelong learning it is expected of doctors to constantly update their knowledge of the newest advances in medicine. The constructivist model of learning suggests that learner's engagement and attention are important in learning. This shift in focus from the traditional teacher centred approach to the more student or learner centred approach is a vital concept of modern teaching. Research into postgraduate engagement is sparse in the literature with even less on continuing medical education or postgraduate medical education. Research has shown continuing medical education improves doctor performance, new educational approaches improving educational outcomes and individual reflection can help identify learner needs positively improving clinical performance.

## Aims

This study attempts to address the following research questions:

1. How do postgraduate medical learners engage?
2. What are the enablers and barriers to learner engagement?
3. How is learner engagement effected by technology such as clicker technology for this study?

## Methods

A triangulation convergent mixed method approach using semi-structured interviews were conducted with Non Consultant Hospital Doctors (NCHDs) and a quantitative In class engagement measurement (IEM) Tool was applied using two observers with and without audience response systems. A mixed methods approach was used to integrate qualitative and quantitative findings.

- Kuh's definition of learner engagement which is, the time and effort learners invest in studies and other activities to student success (Kuh, 2001).
- Engagement refers to both student and institutional activities that lead to desired outcomes of all the stakeholders whereas involvement refers to student activities only (Heaslip et al., 2014).
- Motivation is the translation of a person's basic psychological needs and drives, filtered through their view of the world, toward an action with an anticipated result (Brissette and Howes 2010)

Box 1 – Key terms defined

## Results

Eight semi-structured interviews were undertaken and 20 postgraduate medical education sessions incorporating didactic, case based audience response system teaching sessions. The 4Rs of learner engagement: readiness, reflection, recap and retain are core building blocks of learner engagement before during and after a teaching session. Learner wellbeing and responsibility of the instructor to enable learner engagement as two key elements to learner engagement.

## Discussion

Postgraduate medical learners engage through the 4 Rs of LE (readiness, reflection, recap and retention). The 4Rs could be seen as the core building blocks of LE. These elements were evident throughout the process of data collection. The hidden underrecognised role of the instructor in enabling learner engagement has been highlighted by this study. Questions that arise are, are these actions learned from a young age and applicable throughout the educational career and becoming second nature to these learners? And are these factors of active learning only relatable to this cohort? It became clear that this approach to engagement seems to be a recipe for success among this study's participants. This idea of active learning has been incorporated into the majority of today's educational strategy's and its importance as it has shown increased participation, retention and learner centred time (Schuller et al., 2015). This cohort is high achieving from early on in their educational career to attain a place in medicine.

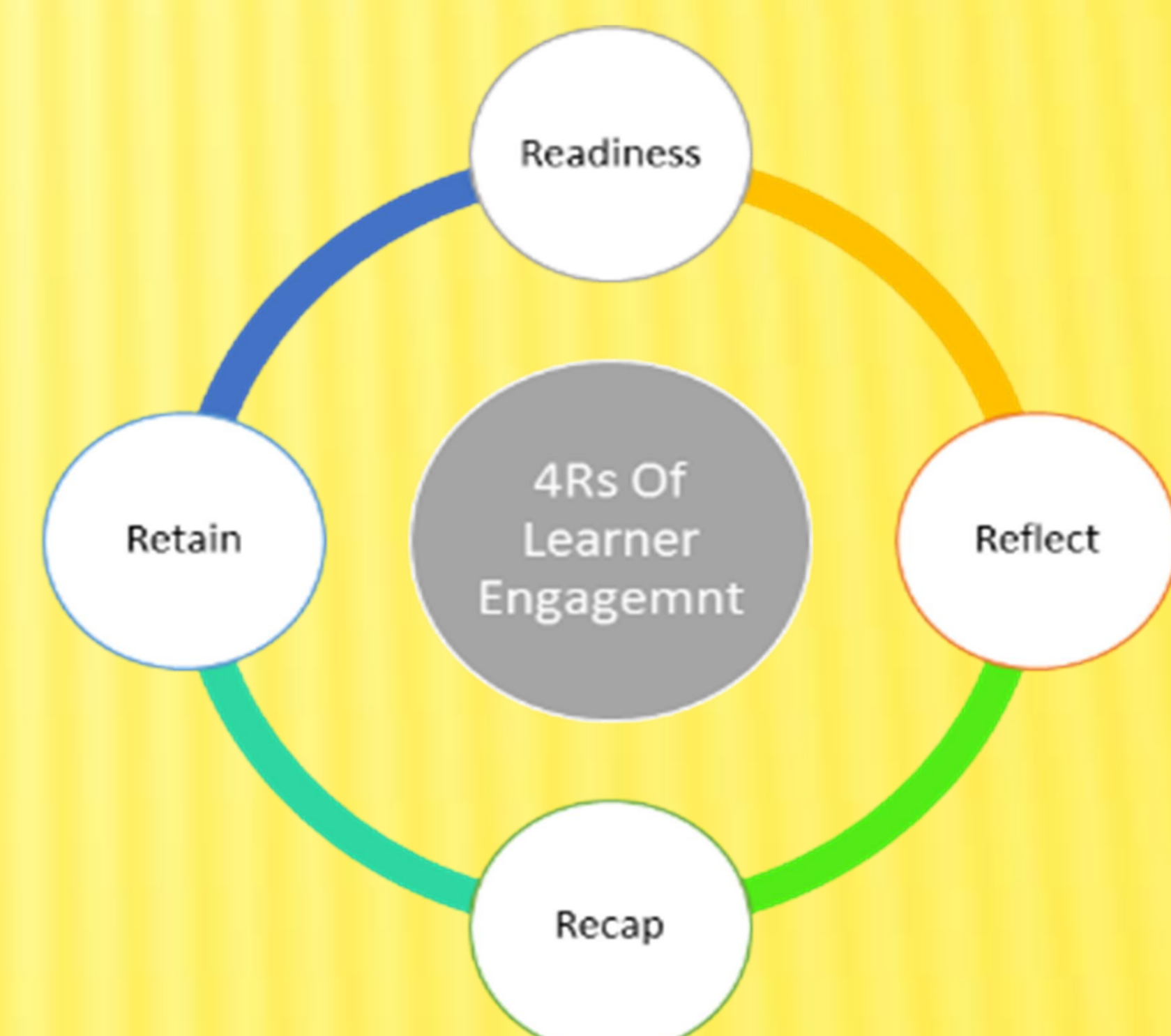


Figure 1. 4Rs of Learner Engagement

## Conclusion

In summary postgraduate medical education is the responsibility of the learner and the instructor. Postgraduate medical learners engage through the 4 Rs of LE (readiness, reflection, recap and retention). The wellbeing of the learner cannot be underestimated and is a major influential factor in LE that must be considered by all parties involved in learner needs. Clickers influence engagement through the enablement and enhancement of the 4Rs of LE and the indirect positive effect on wellbeing.

### References

- NOE, R. A., TEWS, M. J. & DACHNER, A. M. 2010. Learner engagement: A new perspective for enhancing our understanding of learner motivation and workplace learning. *Academy of Management Annals*, 4, 279-315.
- DOUCET, M., VRINS, A. & HARVEY, D. 2009. Effect of using an audience response system on learning environment, motivation and long-term retention, during case-discussions in a large group of undergraduate veterinary clinical pharmacology students. *Medical Teacher*, 31, e570-e579
- MAMEDE, S. & SCHMIDT, H. G. 2004. The structure of reflective practice in medicine. *Medical Education*, 38, 1302-1308.