

ANAESTHESIA EDUCATIONAL ACTIVITIES

Anaesthetic themed educational activities: novel resources for introducing novices to anaesthesia .

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Introduction

Anaesthetists routinely deliver teaching in the clinical environment. Learners vary from novice to experienced anaesthetists, and increasingly medical students and foundation doctors. These learners come with a wide range of learning styles and learning objective. Providing learners with a valuable learning experience can be challenging for anaesthetists, especially in busy clinical environments and with increasingly time pressured theatre lists. We wished to aid anaesthetists in providing a useful learning experience in the theatre environment. The aims of the project were:

- 1.To create a teaching resource for anaesthetists delivering teaching in theatre.
- 2.To support the anaesthetist in providing valuable learning experiences in the clinical environment
- 3.To produce flexible content within the resource that can be tailored to learning objectives and appeals to different learning styles.

Methods

After a group brainstorming session, we developed six educational activities or ‘games’ that learners can engage with in theatre. These activities were then compiled into a single digital resource that can be accessed online via a QR code for free. These activities cater to a variety of different learning styles as described by Kolb¹. and are illustrated in Figure 1.

The resource was introduced to our Department of Anaesthesia during the local governance meeting and to medical students via the year 3 perioperative module lead. QR codes accessing the resource were made available in theatre. Both learners and teachers were asked to provide feedback.

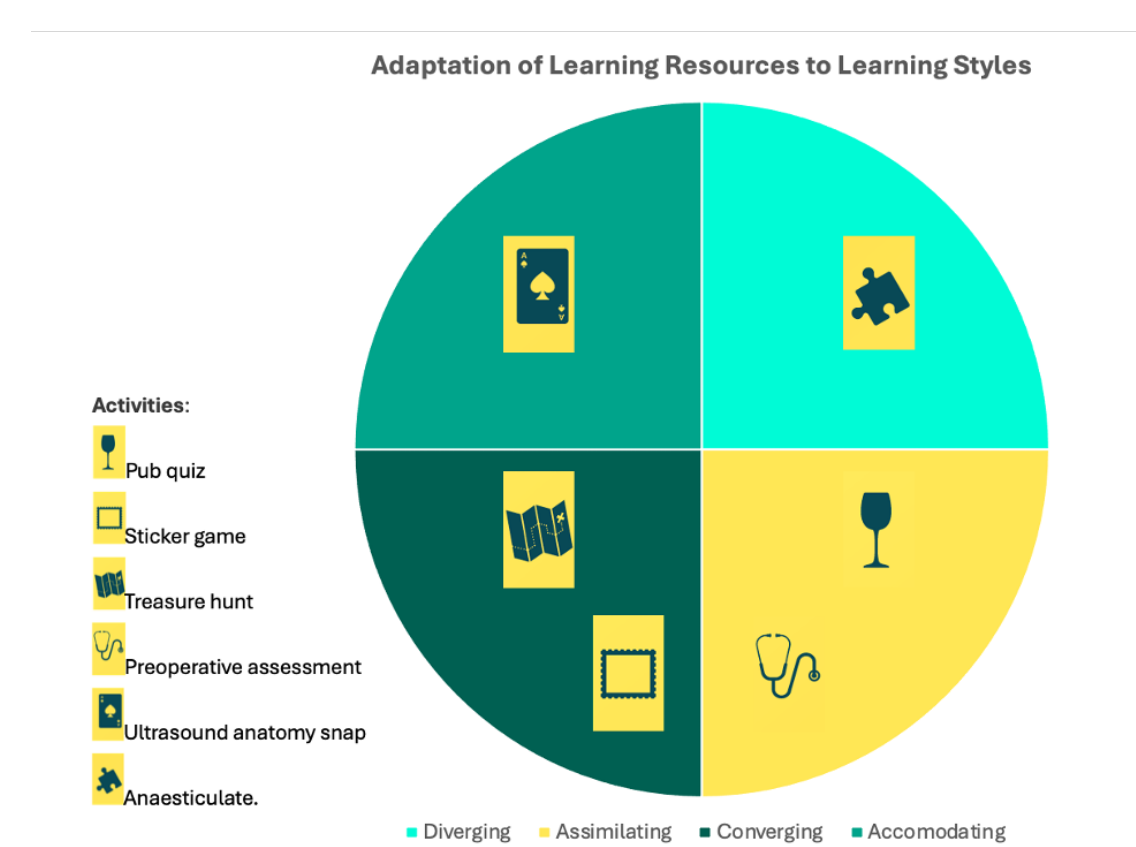


Figure 1. Diagram illustrating how the six different activities within the learning resource apply to different learning styles.
Adapted from Kolb's Learning Cycle: Kolb, D. A. (1984). Experiential learning: Experience as the source of learning and development (Vol. 1). Englewood Cliffs, NJ: Prentice-Hall.

Figure 2 – Proportion of learners using each resource.

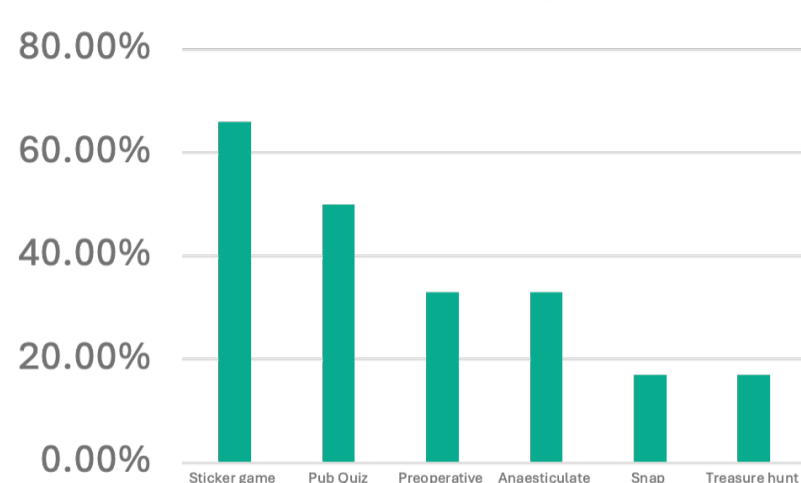


Figure 3 – Learners' Feedback regarding resource content

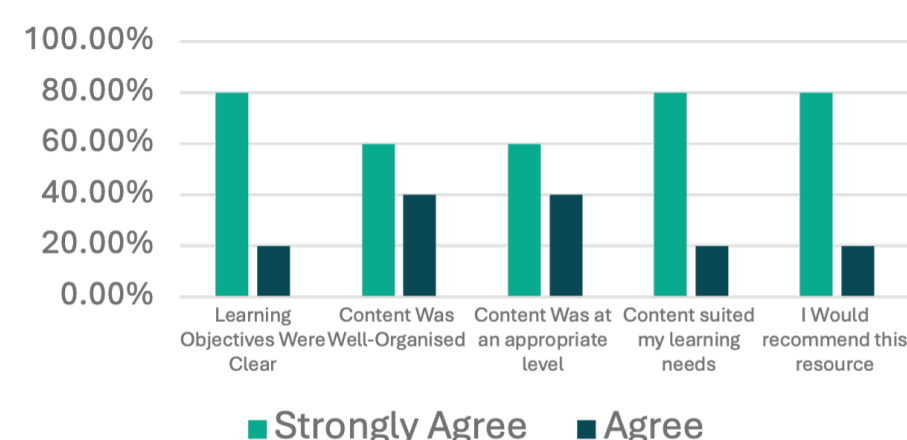


Figure 4 – Learners' reported knowledge before and after using resource

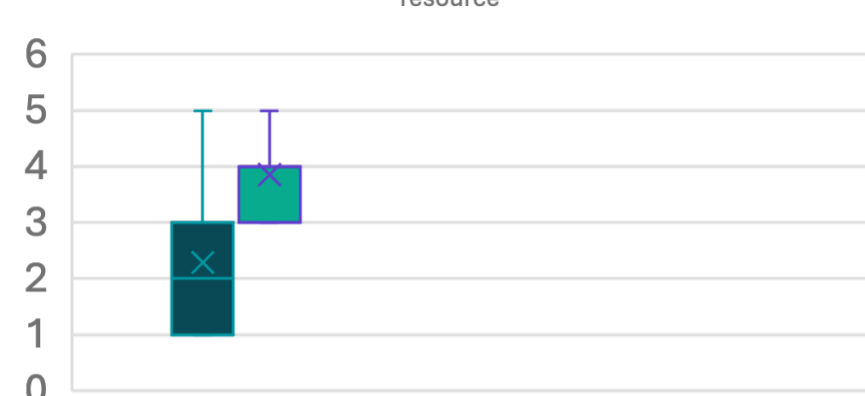


Figure 5 – Word cloud highlighting common feedback from learners regarding the resource.



Results

We have had excellent engagement with the resource, with all resources being utilised by learners. Our most used exercises are the anaesthesia sticker game and pub quiz, as outlined in Figure 2.

Feedback has been overwhelmingly positive with all learners ‘Agreeing’ or ‘Strongly Agreeing’ that they found the content to be well-organised, suited to their learning needs, and that they would recommend this resource, as outlined in Figure 3. Learners surveyed had an increase self-reported knowledge, with average scores moving from ‘Poor’ to ‘Very Good’ following engagement with the interactive educational resource (Figure 4). Similarly, we found that teachers reported an increase in confidence following the use of this resource.

We collected individual feedback and through this, have been able to adapt and improve our resource in real-time. Key messages outlined in the word cloud in Figure 4, with the most commonly quoted area for improvement being students expressing a desire for the resource to be more widely available.

Conclusions

Gamification has been shown to increase engagement and encourage active learning. Feedback obtained from learners in our region demonstrates these resources are improving the experience of both teachers and learners. We are working to expand the content of the learning resource and welcome entries from other anaesthetists.

