

Infographics

Faculty: Medicine

Department: School of

Medicine

Module name: Clinical Science Integrative Cases

(CSI)

Degree: MBBS

Level: Undergraduate (pre-

clinical) Year 1-3

Approximate number of

students: 400

Duration: 1 hour 15 minutes

(tAPP)

Module ECTS: 10 (per year)

Module type: Core

Insights colour key

Educational Developer

Inclusivity

Learning Designer

Registry

Careers

Assessment overview

This case study involves a group-based undergraduate (MBBS) summative assessment that involves creating an infographic within a tight time limit. These infographics address a certain medical topic. Students are made aware of the generalised topic of the infographic prior to the session, with pre-reading that is encouraged to be used. At the start of the session, all groups are given the same poster title, with the task to create an illustrative poster that addresses the topic and title. Students are given one hour to complete the poster. Posters are then assessed by examiners, and feedback is provided, at some time after the session.

Design Decisions

Rationale for Infographics

The world is moving to a shorter attention span, with 'TikTok style short videos' and other social media providing easy, instant information to consumers. As a result, many people now benefit from convenient information that is attractive to digest. Educational use of infographics – easily digestible visualisations of information designed to impart knowledge with speed and clarity - therefore lends itself well to higher education as it consists of the creation of visually appealing media that permit rapid accumulation of information.

Task Design

In this summative assessment, 32 groups are given the same title and task to create a poster surrounding the title's topic. Students are given 75 minutes to complete the task. Students are provided with templates and asked to annotate their posters with speech bubbles to elucidate their choices on their infographics posters in relation to two things:

to explain the key messages that they have chosen and to explain their thinking and rationale as to why these messages were chosen to reach their target audience;

to describe the barriers that they can identify in reaching their target audience and how their infographic has overcome these barriers to engage them in behavioural changes that result in more collaborative language and interactions with patients with diabetes

Alignment with other assessments and the programme/ module

This assessment is delivered as part of the TBL sessions and is linked to the tApp part of the TBL. You can find more information about the department's approach to TBL assessments here.

There is some overlap with an aspect of the closed book exam at the end of the year, where students may be asked a question about appropriate use of

Interviewee: Heather Hanna Role: Senior Clinical Teaching Fellow



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language towards a patient. There is a design task in a later Year 2 module where students create a poster. The infographics exercise indirectly prepares and sets these students up well for the creative and illustrative aspects of that upcoming module.

Practicalities

Preparing students for assessment

Students get randomly allocated to groups prior to them commencing Year 1. Before the infographics summative assessment, students are provided a preparative teaching session surrounding teamwork.

In terms of the infographics, students are also given the mark scheme beforehand and are given a runthrough of total marks, the weighting of each section of the marking criteria, what the examiners expect, and other aspects of the rubric.

There are also preparatory readings that the students are provided with that may help with shaping their posters, but students are welcome to use other sources if they wish. The readings direct the students to appropriate sources that can inform the content of their posters.

Marking arrangements

Given how different it is from other assessment types, making a good mark scheme for infographics is a challenging exercise. Despite being a fun, creative style of assessment, students are expected to treat it as an assessment just as any other. The marking criteria is therefore very discriminating for this reason, with most students achieving 'meets expectations' or 'deserves merit', but 'distinction' mark is a rarer occurrence. Full marking scheme is available on our webpage and here.

Training markers involves bringing all markers together at a markers meeting. Four infographics are selected at random, they are marked silently by everyone individually, and then a discussion is held where every marker explains why and how they marked, and people thence adjust their grades, until a consensus is reached for all four. Following this meeting, markers split off into pairs and begin

marking. One examiner writes their mark, as does the other. They discuss their marks for the infographic, reach an agreed mark and move on.

Feedback arrangements

Written feedback is provided within two weeks of the infographic being submitted. Examiners tell students what they did well, what they could have done differently and give them hints and tips as to what they saw when they looked at their infographic.

Online adaptations (COVID)

With the assessment moving online during COVID, groups were placed in breakout rooms. Each tutor had four or five groups to hop in and out of breakout rooms and to see how they were progressing, ask them to share screen, and so on.

Advantages of the assessment type

- The students like the assessment and they are enthusiastic about it. They have grown up in a world with heavy exposure to creative content production (such as on YouTube and TikTok) and they enjoy being able to use their imagination and creativity to produce an infographic;
- It is strongly apparent to students what skills they are gaining out of the exercise (notably teamwork, creativity and critical thinking) and this makes the students work hard for their assessment;
- It is a lot more interesting and easier to mark from an examiner's perspective;
- Teaching the module is also a lot more fun from a teacher's perspective. The progress the students make is visible through their output, and noticeable through observing the teams grow and become better at teamwork and role delegation;
- students really think about the material taught and its application to the scenario, so they both assimilate and utilise the learning very well;
- Infographics is a different way to how information would usually be presented in some parts of medicine whereas other parts, especially the more patient focused parts like GP clinics and Public Health professionals are embracing it.



Infographics

Limitations of the assessment type

- Not all of the medical world is ready for infographics, so this limits what can be assessed (postgraduate student assessment is formative). Much of medicine is very traditional in their assessment approaches, so this novel approach may seem too "simple" to be a summative assessment to some, but the feeling is that attitudes are changing. Infographics may need a slow transition before it can become widely accepted;
- This specific assessment is a relatively small percentage of the overall mark for the module it's part of a whole sequence of programmatic assessments so a nice way of introducing more 'innovative' ways to communicate knowledge;
- In the undergraduate assessment, it is difficult
 to know where students have accessed their
 resources because, although preferred,
 there is no requirement for references or
 acknowledgements as their work is not being
 published;
- It is also difficult to ascertain who is responsible for what work in the group without close monitoring, regarding who has worked more, and who has worked less. When it is seen, it is fixable and students can be advised and encouraged, but to monitor every team closely enough is a difficult task;
- Sometimes for international students, the unusual style of the assessment can confuse them and make them unfamiliar with how to work. This is usually rectified with other students in the group, who may be more familiar with such assessment styles, to help guide the international students;

Advice for implementation

 For more creative assessments, it is useful to consider if there are specific resources that students need access to. Also, if there are specific skills required or skill which will be assessed e.g., use of a software package to produce the infographic that they might not have previously learnt. If so, this should be made clear to students and students should have the opportunity to learn and develop these skills;

- Adjusting to new ways of learning can be tricky especially for the students who are used to being high achievers. It is important to support students in this transition between school learning and university learning. This can be done through supportive feedback that highlights strengths as well as areas for improvement to help students maintain motivation and maintain positive mindset;
- It is important to ensure that enough time is spent to help students develop group working skills.
 This should involve negotiating ground rules and discussions around expectations and patterns of work. This case study contains some useful activities for preparing students to work in groups.
- When preparing students for group work, consideration needs to be given to how include the needs of students with specific learning difficulties. It is advisable to make the discussion around difficulties that some student groups might face open so that students who need the support but don't want to disclose it to team members can articulate their needs in a safe environment;
- With innovative assessment types a lot of effort needs to be spent to ensure that students understand how the ILOs are tested and what they are going to be marked on. This can be done through the use of exemplars, formative assessments and/ or explicit discussion and application of assessment criteria to different pieces of work;
- Ensure that reasonable adjustments, such as extra time added for students with declared learning difficulties is factored in into the assessment design;
- Having a common, pre-designed template for displaying the finished work is helpful in introducing a level of parity and reinforcing expectations for pieces of work that are more creative in nature;