Planning for classroom teaching

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ABSTRACT

Many variables affect the outcome of classroom teaching. Planning is needed to consistently achieve success. This includes the creation of a lesson plan, with teacher and learner activity focused on achieving the intended learning outcomes. Key issues to be considered are class size; creating a physical and psychological environment for learning; and supporting learning with 'scaffolding' and formative assessment.

Key words: teaching, planning, classroom, lesson, learner

INTRODUCTION

Teaching is a practice, and no class is ever quite the same. Careful preparation supports more consistently successful practice. Here, we continue our series on healthcare teaching by discussing how to plan for classroom teaching.

PLANNING CLASSROOM TEACHING

Planning classroom teaching takes time, but it is time well spent. When planning a class, we think about the students' needs and capabilities, our aim, and how we will achieve it. Planning helps ensure that the session is purposeful, that it engages students in a range of appropriate activities, and that it reflects the wider goals of the curriculum, within the constraints of time and resources. In creating our plan, we mentally rehearse our teaching. The plan provides a checklist of the teaching resources that we will need. During teaching, it acts as a prompt, helping us stay on track and keep to time. Following teaching, we can review and amend the plan for future use. Figure 1 illustrates a basic format for a classroom teaching plan.

Figure 1. A format for a teaching plan

The aim is a brief statement of the purpose of our teaching. For example: 'To rehearse general paediatric clinical assessment procedures, in preparation for clinical placement'.

Intended learning outcomes state precisely what students should be able to do on completion of the session. They comprise a verb and some conditions. For example: 'Explain how to maintain the confidence of babies and infants when carrying out a clinical assessment'; 'Perform a general health assessment and physical examination of a paediatric patient, under supervision'; 'Record assessment findings clearly and accurately, using appropriate documents'. Taken together, the aim and learning outcomes provide a focus for our teaching, inform students of what to expect, and provide criteria for measuring success.

We then need to decide how to go about achieving our aim. Here, we also need to consider the overall goal of the curriculum. It may, for example, be threefold: to develop the students' healthcare knowledge, professionalism, and 'metaknowledge' (their self-awareness, and knowledge of their own strengths and weaknesses). How we approach teaching our particular topic should support the overall goal.

Teacher activity concerns what we will do in order to deliver our lesson. Learner activity concerns what the students will do. Teacher activity typically includes presenting information, asking, and answering questions, discussing, showing, setting tasks, and assessing. Learner activity includes listening, making notes, answering, and asking questions, but goes beyond this to include presenting, discussing, and engaging in tasks such as role play and problem solving.

Success is more likely when teachers know their students' existing knowledge in relation to the topic, and the gap between this and the intended learning outcomes.

Teachers can then select appropriate content. However, teaching and learning are a joint endeavour. Rather than treating learners as passive receivers of information, we want them to be actively engaged in their own learning. To maintain this engagement, and stimulate learning through thought and action, we might plan a variety of activities, with a change of pace every 20 minutes or so. Learner activity can then be structured to progress from more basic to more advanced challenges: recalling facts, explaining, practicing, solving problems, analysing, evaluating, and generating ideas.[1]

HOW DOES CLASS SIZE AFFECT TEACHING?

Class size affects communication, group-work, and the relationship between the teacher and students (see Table 1). A class of eight students offers different possibilities from a class of fifty. Class size enables and constrains possibilities for teaching, but within these limits the teacher selects the optimal approach for achieving the aim.

CREATING A LEARNING ENVIRONMENT

As well as arranging for breaks and refreshment, we should consider the physical and psychological conditions of the classroom,[2] both of which influence learner behaviour. Physical conditions comprise room size, temperature and lighting, classroom equipment, and seating arrangements. Seating arrangements have a significant influence on the nature of class discussion, and seating should be arranged to facilitate the activities required by the teaching plan. Options include traditional classroom or boardroom arrangements, which tend to be formal and teacher focused; and less formal, more learner focused circles or small groups, with or without tables.

The suitability of the physical environment may be offset if students do not feel 'psychologically safe'[3] enough to

Table 1. Some distinctions between large and small group teaching

Large Group Teaching	Small Group Teaching
Physical aspects of the room are largely fixed, with students in rows facing the teacher.	Physical aspects of the room allow for various seating arrangements. Students can face each other.
Hierarchy between teacher and students is maintained.	Hierarchy between teacher and students can be reduced.
Individual students may go unnoticed. It is difficult to assess individuals and attend to individual need.	All students within the group are noticeable to the teacher. It is easier to assess individuals and attend to individual needs.
The teacher communicates with many students, but students are less able to communicate with each other or the teacher. The openness of communication may be constrained.	Students can communicate more easily, and perhaps more openly, with each other and with the teacher.
Scope for groupwork is limited, although students may work in twos and threes.	There is ample scope for group activities.

Table 2. Examples of 'scaffolding'

Written task instructions that are available for students when needed.

Visual aids, diagrams, and images, to help students grasp the topic.

Thoughtful 'Socratic' questioning[8], using questions to clarify, probe, and uncover assumptions, reasons, alternatives and implications.

Asking students to complete tasks in pairs, before completing similar tasks individually.

Using 'Think, pair, share'[9]: ask students to think about a question, then ask them to share their thinking in pairs; if time permits, pairs can share their conclusions with another pair, or the class.

Table 3. Examples of formative assessment

Assess student progress, provide guidance on goals, standards, and how to improve.

Observe, listen, question; diagnose the learning problem and discuss.

Design activities that prompt students to present the outputs from their task, allowing learning to become visible to the teacher and the class.[12]

Incorporate self-assessment and peer-assessment into tasks, so that students can develop responsibility for their own learning.[13]

engage fully in classroom activity. A lack of psychological safety can reduce risk taking activity, such as speaking up in class or involvement in activities. More acute stress can affect learning by inhibiting 'cognitive flexibility'[4], the ability to think flexibly about more than one idea.

Of course, healthcare professionals work in stressful conditions. Their education should prepare them to be resilient and to overcome challenge. In this, confidence in one's capability, or 'self-efficacy'[5] is important. Self-efficacy helps reduce stress, and enhances commitment to sustaining effort and mastering tasks. It can be promoted, in the classroom, by encouragement, by seeing peers succeed, and by experiencing success. Setting students' appropriate challenges can motivate learning and help develop self-efficacy. Challenge is best offered, though, in conditions of psychological safety, and selected with the capabilities of the learners in mind.

The relationship between students and teacher is central to creating a learning environment. How we demonstrate our trustworthiness, care, and respect for students is likely to be shaped by our personality, as well as social and cultural norms. It is important, though, to remain genuine.[6] Approaches include:

- Making personal connections with students.

- Starting the session with a brief 'icebreaker' exercise, to relieve any tension and promote readiness to engage.

- Not disparaging students' efforts, or allowing students to disparage each other.

- Treating questions as genuine, and worthy of an answer.

- Encouraging and giving time for students' contributions.

SUPPORTING LEARNING WITH 'SCAFFOLDING'

Teachers should always remain alert to the needs of their students, providing support to the class and to individuals. Knowles[7] advises that teachers should find out what the learners already know and build from this, constructing new learning on the foundation of existing knowledge. The construction of new learning may require 'scaffolding': temporary support that can be withdrawn as learners' move towards more independent and confident understanding. This comes in many forms, both practical and psychological. It may, for example, mean offering visual, verbal, and practical ways of grasping a topic; simple encouragement; managing the class to enable student-to-student support; or providing ways for students to find help when needed. Table 2 offers some more examples of 'scaffolding'.

THE IMPORTANCE OF FORMATIVE ASSESSMENT

'Formative assessment'[10, 11] is a process of evaluation and feedback that is integral to teaching. It is used to motivate and direct learning, offering information to students about performance, standards, and ways to improve. Formative assessment may be authoritative or provisional, it may focus on the learning objectives or on students' interim needs, but to be truly 'formative' the information has to be accepted and put to use. Although teachers may initiate formative assessment, because it is processed and put to

Table 4. Applying these ideas to your practice

What is your overall educational goal? How can your approach to teaching support this goal?

Think of two new ways to engage students in activity during a class.

Think of two new ways to encourage psychological safety in your class.

Think of two new ways to encourage student self-efficacy in your class.

Think of two new ways to demonstrate your trustworthiness, care, and respect for the learners in your class.

Think of two new ways to 'scaffold' learning in your class.

Think of two new ways to provide formative assessment in your class.

Use the template provided to develop a teaching plan for one of your teaching sessions.

How will you set out your classroom to support your teaching plan?

Following your teaching, review your teaching plan to amend and improve it for the future.

use by the learner it is ultimately a joint accomplishment between teachers and students. This requires students to apply metacognitive skills, and so formative assessment can contribute to developing both clinical knowledge, and 'metaknowledge'.

Table 3 offers some examples of formative assessment.

IMPROVING TEACHING PRACTICE

Teaching and learning are conditional and uncertain practices. What works best in any situation is open to discussion. Teaching requires perseverance, adaptation, and experimentation to build a repertoire of expertise. Planning teaching, then reviewing and amending plans in the light of experience, supports this process. In Table 4, we encourage you to think further about these ideas, discuss them with colleagues, and apply them to your situation as you continue to develop your own teaching repertoire.

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