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Conceptions of teaching: an illustrated review

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Conceptions of teaching: an illustrated review

Faculty development review for The Clinical Teacher, February 2017 issue

Structured summary

Introduction.

Asking teachers what the term 'teaching' means to them can be a useful first activity in a faculty development session, as it typically leads to an engaging and enlightening discussion for participants and facilitators. Mapping their responses to 'conceptions of teaching' (sets of assumptions, knowledge and beliefs about teaching) in the literature seems particularly helpful in illuminating inconsistencies, gaps and additional ways of thinking about teaching which participants may wish to consider.

Literature review.

At least twenty-five conceptions of teaching can be identified in the literature. Each of these are briefly described and illustrated in this article, along with detailed examples and suggestions of how conceptions of teaching can be explored in faculty development. There is evidence that a teacher's conceptions of teaching affect the way they approach their teaching, which in turn can affect learner learning. There is also some evidence that helping teachers examine and develop their conceptions of teaching may be more effective and have more impact on learner learning than other forms of faculty development.

Take-home messages.

Different conceptions of teaching seem to be more or less appropriate in different teaching situations and contexts. It is likely that the more ways in which teachers can

conceptualise and reflect on what they are doing and why, the more adaptable, responsive and effective their teaching will be. Teachers have much to gain from learning more about themselves, their values and assumptions, and how these can influence their practice. This article offers a practical approach aimed at helping them achieve this.

Introduction

What does the term 'teaching' mean to you? If possible, before you read any further or look at the illustrations in this article, write a list of everything teaching means to you right now. This question, followed by categorization and discussion of participant responses, has been the first activity in most faculty development I have delivered over the past ten years. I have incorporated it into half-hour tutor-training workshops for novice teachers (Box 1), in continuing professional development and faculty induction, and as part of formal credit-bearing training and Masters courses. Participants have typically been clinical teachers at various stages from students and trainees through to very experienced clinical academics, although I have also used it with other groups. I am particularly fond of this question because it is simple enough to ask of anyone, yet the responses and resulting discussions are typically profound. Useful insights can be gained into how participants view and approach their teaching, as well as their motivations, potential concerns, and previous engagement in training as a teacher. By encouraging teachers to reflect upon, articulate and discuss what teaching means to them, they can become more aware of their own motivations and aims, and hopefully identify any inconsistencies between their aims and the way they typically approach their teaching. Facilitators and other participants can also suggest alternative perspectives and approaches for them to consider. The rest of this article summarises the literature in relation to such 'conceptions' of teaching before returning to this

question to offer a practical approach to interpreting, categorising and facilitating participant discussion of their responses.

Background and definitions

'Conceptions of teaching' have been defined as, "Idiosyncratic… largely unarticulated composites of individual teachers' assumptions, knowledge and beliefs about teaching and learning".[1] Participant responses about what teaching means to them can be thought of as their explicit conceptions of teaching, recognising that they could have additional implicit conceptions of teaching of which they may be unaware, or be unable or reluctant to articulate. Most research, including my own, has shown that individual teachers tend to hold multiple conceptions of teaching.[2] They may also articulate different conceptions of teaching for different educational roles.[3] As Irish poet and educationalist Geoffrey Squires reflects, conceptions (which he calls 'paradigms') of teaching "Do not usually manifest themselves in pure or discrete form, but rather in the messy, semi-conscious and eclectic use that characterizes much of our practice. We may espouse one paradigm, and act out another… We may shift from one to another over time… different paradigms may reflect different aspects of our work."[4] Research suggests that an individuals' conceptions of teaching affect how they teach, which in turn can affect the learning of their students or trainees.[5, 6] We know that conceptions of teaching can change over time, and there is some evidence that faculty development which helps participants to critically examine their conceptions of teaching, rather than the practicalities of leading a small group or lecturing, will have more impact on teaching and learning.[6] The education literature is saturated with conceptions of teaching, some explicitly and fully described in detail, and others only partially-articulated or labelled as 'paradigms', 'philosophies', 'theories', 'roles' or 'teaching approaches'. Some authors use different words to mean the same thing, or the same

word to mean different things. For these reasons, when trying to thematically review the literature for my doctoral thesis, I found it helpful to summarise each conception of teaching with a simple pictogram rather than words. By doing this I became aware of patterns, similarities and differences between conceptions which may otherwise have been missed. Each of the twenty-five conceptions of teaching are briefly introduced below and summarised in Table 1. I think they are best represented by pictograms, which reduce potential confusion introduced by words that typically imply only intentions, actions or specific roles. For practical reasons, however, the pictograms have been substituted with my preferred names for them in capitals in the text. Full details of the literature review and empirical studies undertaken to triangulate and refine these conceptions are available online in my thesis.[2] This article seeks to provide an accessible summary and illustrated review of conceptions of teaching in the literature, help readers reflect on their own conceptions of teaching, and help faculty developers undertake a similar activity with groups of novice or experienced teachers as part of a training session or course.

Conceptions of teaching in the literature

As early as 330 BCE, Aristotle distinguished between the capacity to make or craft things ('poesis'), the capacity to deliberate well and act with regard to what is good for people and society ('praxis'), and the capacity to demonstrate knowledge and understanding ('theoria').[7] He referred to these as 'intellectual virtues', but several authors have since elaborated and developed these into the conceptions of teaching as PRODUCTION, PRACTICE and SCIENCE respectively. For example, Carr emphasised the importance of determining right ends (PRACTICE) over selecting means to achieve pre-determined ends (PRODUCTION) in teaching.[8] Also Korthagen and colleagues argued that faculty development should draw on teachers' own examples and experiences of teaching (PRACTICE) rather than generalised ideas about what makes good teaching

(SCIENCE).[9] In his review of the literature, Squires described paradigms of teaching which map to these three conceptions (which he calls 'craft', 'professional activity' and 'applied science'), as well as five others which conceptualise teaching as COMMON-SENSE; ART; SYSTEM; REFLECTIVE PRACTICE; and COMPETENCE.[4] Elsewhere there is an extensive body of literature which differentiates between 'teacher-centred' (TRANSMISSION) and 'learner-centred' (FACILITATING UNDERSTANDING) conceptions of teaching.[10] In his systematic review of teaching conceptions, Kember placed these on a continuum from a more extreme teacher-centred conception not tailored to learners (IMARTING INFORMATION), to a more extreme learner-centred conception not necessarily focussed on learning specified content (SUPPORTING GROWTH), with a further conception between them in which learners interact with teachers and gradually think and act similarly (APPRENTICESHIP).[11] Ramsden also distinguished between teacher-centred and learner-centred conceptions of teaching and, in summarising and exemplifying these, described an additional conception of teaching as DIRECTING ACTIVITY.[10] Others have argued that good teaching aims not just to help learners grow and develop, but rather to fundamentally change the way they perceive the world (SUPPORTING TRANSFORMATION).[6, 12]

As well as four conceptions on the teacher-centred to learner-centred continuum, a large multinational study involving 253 interviews identified a fifth conception of teaching as an activity which explicitly seeks to change society (SOCIAL REFORM).[13] This conception was excluded in Kember's review because he felt the conception, and the examples of teaching aligned with religious doctrine or political ideology, seemed inconsistent with critical thinking and plurality of viewpoints in higher education.[11] For some, however, the main purpose of teaching and education in general should be to help create a better, fairer society in which individual learners are "Not afraid to confront, to listen, to see the world unveiled."[14] Another literature review described additional

conceptions of teaching as MANAGED PROCESS, arising from business models of efficient processes, and as SCHOLARSHIP,[15] in which teaching is viewed as one of four academic activities alongside the discovery, integration and application of knowledge. Adopting a rather different perspective, Knowles distinguished between teaching conceptualised as 'andragogy' (ADULT-ADULT INTERACTION) and as 'pedagogy' (PARENT-CHILD INTERACTION), arguing that the former is more suitable for adult education.[16] Another conception, commonly discussed in relation to peer-assisted learning and elaborated by Race,[17] is that of teaching as a LEARNING ACTIVITY in itself. Harden and Crosby identified six 'areas of activity' of medical teachers - four of which map to conceptions of teaching described above (TRANSMISSION, APPRENTICESHIP, FACILITATING UNDERSTANDING and DIRECTING ACTIVITY) and the others conceptualise teaching as ASSESSMENT and as PROVIDING RESOURCES.[18] Another conception of teaching rarely described as such but commonly articulated in the literature is teaching as TARGETING LEARNING NEEDS. In this, content to be learned is defined, typically with a core curriculum and / or by helping learners identify their own learning needs, to which teaching and learning are 'constructively aligned'.[19] I did not initially identify the final conception of teaching as GENERATING ENTHUSIASM when reviewing the literature, but it is often articulated in faculty development sessions and emerged from my own empirical research.[2]

Exploring conceptions of teaching in faculty development

When teachers respond to my question and articulate what 'teaching' means to them, I write up each 'conception' as a short statement in their own words, and keep asking if there is anything else until they stop. By then we usually have an impressively long list of statements. I then explain what conceptions of teaching are and why they are important, in a similar way to the introduction above. If we are pressured for time and the group are new to teaching I may just discuss their responses and describe some
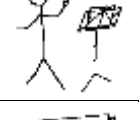
other conceptions to consider (Box 1). For most groups, however, I will show them a slide depicting the twenty-five conceptions of teaching in Figure 1 and quickly highlight how their responses map to this. Conceptions they have clearly articulated may need no further explanation. Others less-obviously related may require some clarification of terminology or elaboration of concepts. I will then usually highlight some or all of those not represented in their responses, describing the conception and some potential implications for teaching and learning. I acknowledge there may be other conceptions of teaching not represented in Figure 1, but after years of using and refining this framework I have yet to find any. Some question why there are so many conceptions in this framework, yet attempts to combine these or map participant responses to pre-existing frameworks always leave responses which will not map to conceptions, although more formal factor analysis or evaluation research may offer additional insights in this regard. The twenty-five conceptions do seem to naturally cluster however, and have been arranged to reflect this in Figure 1. Conceptions in the first column focus loosely on managing the educational **process**; the second on (clinical) **practice** - including the view that all practitioners can teach; the third on the **teacher** and what they are able to do; the fourth on **content**; and the fifth on **values**, including valuing learners as adults and teaching as an art. Similarly, although even more loosely, the first row can be considered as relating to underlying **philosophies**, including the importance of content; the second to **expectations** and goals; the third to the format of learner-teacher **interactions**; the fourth to **approaches** to teaching and faculty development; and the fifth to **measures** of teaching quality. Many authors describe certain conceptions of teaching as inherently 'better' than others, but I would argue they are just more or less appropriate in different situations and contexts. For example, consider a student asking how to open the airway of an unconscious patient. In a classroom setting, FACILITATING UNDERSTANDING of applied anatomy or PROVIDING RESOURCES for private study may be the most appropriate response; but in an
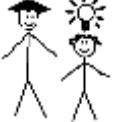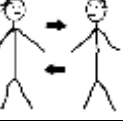
emergency situation with an asphyxiating patient, telling them (TRANSMISSION) or doing it yourself and discussing later (APPRENTICESHIP) would probably be best. It is notable that in ten years of asking what 'teaching' means to thousands of teachers, students and academics involved in clinical education, only one or two have articulated a conception of teaching as SOCIAL REFORM. However, many public inquiries and reports into failures of healthcare systems suggest that clinicians are sometimes aware of problems but do not feel empowered to raise their concerns. The UK 'Francis Report', for example, highlighted this issue and recommended mandatory "Reporting of incidents of concern relevant to patient safety" by all involved in healthcare.[20] Considering teaching as a vehicle for SOCIAL REFORM may threaten independent thinking as Kember suggested, yet not teaching in a way which explicitly encourages learners to challenge concerning practices and defend what they believe is right, could pose a greater threat to them, their patients and society.

Take-home messages

Different conceptions of teaching seem to be more or less appropriate in different teaching situations and contexts. Asking teachers what 'teaching' means to them can be a useful faculty development activity, which typically leads to an engaging and enlightening discussion. Teachers and learners have much to gain from learning more about themselves, their values and assumptions, and how these can influence their practice. With these points in mind, I would ask you now to go back to your list of what 'teaching' means to you, map it to the framework in Figure 1, reflect on the conceptions you did not articulate, and write down your own take-home messages.

Table 1 – Summary of Conceptions of Teaching in the literature.[2]

Pictogram	Description of conception with references and selected alternative terms
	PRODUCTION (*poiesis*) (sometimes known as 'craft') Making or crafting something using a range of technical abilities (*techne*) to achieve predetermined goals or outcomes.[4, 7, 8]
	PRACTICE (*praxis*) ('professional activity') Deliberating with wisdom (*phronesis*) gained through experience, and acting on judgements about what is good for people and for society.[4, 7-9]
	SCIENCE *(theoria)* Developing and applying theoretical knowledge and principles (*episteme*) to identify patterns and to predict and achieve outcomes.[4, 7, 9]
	COMMON SENSE Teaching relates closely to other day-to-day activities (e.g. patient care) and so generally doesn't need special skills or training.[4]
	ART Teaching is an original, contingent and personal performance. Good teachers are born, not made.[4]
	SYSTEM Teaching should be considered as part of a complex system which includes the context, learning environment and barriers to learning.[4]
	REFLECTIVE PRACTICE Helping learners reflect and develop skills in reflective practice and experiential learning.[4, 15]
	COMPETENCE Teaching involves the application of a number of different techniques and abilities which can be defined, developed and assessed.[4]
	DIRECTING ACTIVITY Ensuring learners are active, busy and engaged in learning activities, including timetabling and careful session planning.[10, 18]
	IMPARTING INFORMATION Presenting information on a given topic accurately and completely. It can take many forms, including written, verbal or practical demonstration.[11]
	TRANSMISSION Packaging information in a structured format and transmitting it to learners.[6, 10, 11, 13, 18]
	APPRENTICESHIP ('contextual', 'vocational', 'role modelling', 'situated') Regular interaction, with contextualised role modelling & feedback, so the learner gradually thinks & acts like the teacher.[11, 13, 15, 18]

	FACILITATING UNDERSTANDING ('working with difference', 'acquire') Helping individual learners to really understand content, so they can acquire new knowledge and build their understanding.[6, 10, 11, 13, 15, 18]
	SUPPORTING GROWTH ('develop', 'promote autonomy') Nurturing and supporting learners, and creating suitable conditions for their growth and development.[6, 11, 13]
	SUPPORTING TRANSFORMATION ('change') Challenging, supporting & empowering learners with the goal of personal change and transformation.[6, 12]
	SOCIAL REFORM ('critical pedagogy', 'emancipation') Empowering learners to challenge norms and assumptions, with the goal of changing society for the better.[13, 15]
	MANAGED PROCESS Teaching is a social process which can be managed, measured and audited.[15]
	SCHOLARSHIP Teaching is one aspect of a teachers' academic practice, closely related to the other aspects of discovery, integration and practice.[15]
	PARENT – CHILD INTERACTION Teaching is about facilitating learning through structure, behaviour management, reward and punishment.[16]
	ADULT – ADULT INTERACTION Teaching is about facilitating self-directed learning by applying adult learning principles to learners and situations.[16]
	LEARNING ACTIVITY Teaching and assessing are excellent learning activities, therefore all learners should be encouraged to teach.[17]
	ASSESSMENT Assessing learners formatively or summatively and giving feedback to help them learn.[18]
	PROVIDING RESOURCES Identifying, reviewing or developing learning resources and making these available to learners.[18]
	TARGETING LEARNING NEEDS Defining what needs to be learned, aligning teaching and learning to this, and helping learners identify and address their own learning needs.[19]
	GENERATING ENTHUSIASM Helping learners to become engaged, committed and enthusiastic about the subject.[2]

Sometimes as faculty developers, despite our best efforts, we may be expected to provide time-pressured 'training' to teachers we don't know, who are about to deliver teaching we have not done ourselves. Rather than trying to tell them how to teach, I find it helpful to explore their views, expectations and concerns by asking a series of questions. If, for example, there is only half an hour available to help prepare 20 new student peer tutors to run small group revision tutorials, or 10 junior doctors to deliver some bedside teaching, the following week, I would structure the session around the following six questions:

1. What does the term 'teaching' mean to you? [explore conceptions of teaching]
2. What do you hope to achieve in this teaching? [clarify aims & learning outcomes]
3. What are you actually going to do? [consider lesson plan, activities & alignment]
   If this includes giving feedback, also ask and then discuss: What are the principles of good feedback? What feedback models do you know?
4. What is the worst thing that could happen? [explore concerns & potential pitfalls]
5. How are you going to prepare for this teaching? [other revision, resources & planning]
6. How will you improve it for next time? [evaluation, reflection & further training]

I ask each question and encourage group discussion of the responses, typically adding some points or examples related to the teaching participants are going to undertake. If the group is quiet, I first ask them to discuss their responses in pairs. This training can be delivered without visual aids, but a printed handout with the questions and space for participants to record their responses can be useful. If there is enough time and participants are unlikely to be overwhelmed by the complexity, Figure 1 can be presented and discussed after participants respond to the first question.

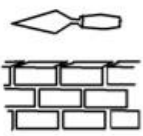Box 1 – Example of brief intervention faculty development for novice teachers.
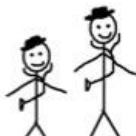
PRODUCTION (poiesis)	PRACTICE (praxis)	SCIENCE (theoria)	IMPARTING INFORMATION	SOCIAL REFORM
MANAGED PROCESS	SUPPORTING GROWTH	SCHOLARSHIP	TRANSMISSION	SUPPORTING TRANSFORMATION
PARENT - CHILD INTERACTION	APPRENTICESHIP	LEARNING ACTIVITY	FACILITATING UNDERSTANDING	ADULT - ADULT INTERACTION
SYSTEM	COMMON SENSE	COMPETENCE	TARGETING LEARNING NEEDS	ART
DIRECTING ACTIVITY	REFLECTIVE PRACTICE	PROVIDING RESOURCES	ASSESSMENT	GENERATING ENTHUSIASM

Figure 1 – Framework of 25 conceptions of teaching

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