

Using andragogy to teach pedagogy: expecting heutagogy - using against-the-grain teaching practices for desired outcomes.

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ABSTRACT

This position paper discusses a dichotomy that lies at the heart of Initial Teacher Education – that many of those involved in preservice teacher education identify themselves as social constructivists and espouse personal pedagogical practices that lean towards learner-centrism rather than didactic praxes but are obliged to teach in a rather more transmissionist style due to the exigencies and contingencies of the courses they run. Teaching adults is different to teaching children, but where we are teaching adults to teach children, how do we plot a course between the two extremes? The conclusions are that allowing adults to learn for themselves leads to both more effective learning and better teaching, but that within the parameters of the preservice teacher education courses run at HEIs in the UK teacher educators often have to sacrifice their constructivist principles and anticipate that trainees will fill in the gaps for themselves.

Keywords: pedagogy, andragogy, heutagogy, preservice teachers, teacher education

Introduction

As an initial teacher trainer in HEI, it is my contention that, through immersing trainees in the culture we espouse (Smith, 2013), I aim to instil in them the same values that we hold to in order that they will in turn espouse and practise them. These values may be seen as the 'signature pedagogies of our profession' (Shulman, 2005). Shulman's central thrust is that trainees must come to understand in order to act, and they must act in order to serve. At a

cultural level, the members of the Primary Initial Teacher Education team at my HEI espouse the social constructivist view that knowledge is constructed socially through dialogue and experiential learning, and we would wish our trainees to understand our principles and to act them out in class-based realities in order to best teach children. We would also ascribe to the view that not just practices but attitudes and values themselves are not acquired by practice or telling alone, but enculturated through interaction with human role-models (Bandura, 1969). Whilst not identified as such, much of the rhetoric is around the principles of Bereiter's (2002) theory of knowledge building, Engeström's (2001) theory of expansive learning, and Nonaka and Takeuchi's (1995) model of knowledge creation: learning as participation; knowledge and skills being learned/produced that are not stable, not even defined or understood ahead of time; important transformations that are literally learned as they are being created. A key element is that learning is also seen as 'horizontal', through peer talk rather than from top-down 'delivery' methods, and is developed through boundary-crossing interactions (e.g. between two interacting activity systems, such as formal and informal learning methods, or theory-based and practical activities [see e.g. Akkerman & Bakker, 2011]), generally in socially-supported pathways. For this to happen, it is posited (Smith, 2013) that intellectual skills and cognitive strategies such as problem solving or managing one's own learning require prior knowledge, guidance and application in other contexts (Bruner, 1970).

Orientations towards teaching

Feiman-Nemser defines four orientations towards teaching. The first of these is the academic, which highlights the fact that teaching is primarily concerned with transmitting knowledge and developing understanding, with a clear emphasis on the teacher as master and the student as novice (see e.g. McDiarmid, Ball, and Anderson, 1989; Shulman, 1986, 1987, all in Feiman-Nemser, 1991). Second is the personal orientation, which places the teacher-learner at the centre of the educational process and shifts the emphasis from teaching to learning. Learning to

teach is construed as a process of learning to understand, develop, and use oneself effectively. The teacher's own development becomes a central goal of teacher education (this can be seen as heutagogy, to which we will turn presently). A key aspect of this approach (Combs, 1978; Fuller and Bown, 1975) is the importance of personal interactions with teacher educators who “function as counsellors, helping prospective teachers explore problems, events, themselves, and others” (Feiman-Nemser, 1991: 4). The third approach – the critical orientation – “combines a progressive social vision with a radical critique of schooling: an optimistic faith in the power of education to help shape a new social order; with the understanding that schools have been instrumental in preserving social inequities” (op. cit. p6). Teacher education is seen in this paradigm as playing a part in the larger strategy of creating a more just and democratic society (see e.g. Freire, 1970; Giroux, 1997). Finally Feiman-Nemser describes the technological orientation, which focuses on knowledge derived from the scientific study of teaching. The key aim is to equip teachers with the means to apply professional knowledge to the tasks of teaching. Learning to teach means acquiring and using research-based principles and practices (Berliner, 1985; Brophy and Good, 1986; Gage, 1978). The technological orientation is generally associated with a training model of learning to teach (Joyce and Showers, 1980).

Feiman-Nemser makes the point that these different orientations and approaches exist because people hold different expectations for schools and teachers. Taking this relativist position – that people understand, conceptualise and interpret the same goals and the correct pathways to them differently – as being true, teacher educators cannot avoid making choices about which approaches to adopt, whether consciously or unconsciously. I therefore agree with Feiman-Nemser that these decisions must be foregrounded, with deliberations and discussions about the most worthwhile goals and the most appropriate means thus needing to be an ongoing activity in the teacher education community.

Preservice, or trainee, teachers need a blend of content and pedagogy that is unique to the profession (Feiman-Nemser, 1991). Shulman (1986) labelled this "pedagogical content knowledge", and defined it as an inclusion of both useful ways to conceptualise and represent the key material in specific subjects and understanding why different students will find learning those topics difficult or easy (Wilson, Shulman, and Rickert, 1986), to which I would add *along with the professional knowledge of what to do with this information*, which can be seen as an interpretation of Shulman's 'signature pedagogies of our profession' (Shulman, 2005).

How should we teach teachers?

I have previously discussed how I believe children learn, and how I believe teachers should teach – the broad pedagogical methods they should employ (Smith, 2013; 2014) – so I now turn to the question of teaching the teachers how to teach. Should we as Teacher Trainers employ the same pedagogical methodologies, or should we look to a different set of principles? Are we aiming for the same styles of learning in adults as children? Do we want teachers to be led to understanding or to find it for themselves? And – critically for this paper – can we practise what we preach, or do the contingencies and exigencies of authentic classroom-based realities insist that what we do is not what we would espouse doing?

Andragogy

Adult learners are considered distinct from child learners due primarily to the work of Knowles (see e.g. 1975; 1984), who developed the principle of Andragogy. He identified five main characteristics of adult learners: self-direction; a wide variety of experiences from which to draw; a readiness to learn relevant information; a life-centred rather than subject-centred orientation; and barriers that they must overcome in order to be effective learners (Eberle and Childress, 2007; 2009). Andragogy is traditionally seen as teacher-centred, but learners are actively involved in identifying their needs and planning on how those needs will be met (McAuliffe *et al.*,

2008). A key attribute of andragogy is *self-directed learning*, defined by Knowles as “a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes” (Knowles, 1975: 18). A key aim of this self-directed learning is that learners develop the capacity for self-direction, supporting *transformational learning*. Transformational learning can be defined as where learning happens at points on a trajectory directed by the learner; as they reflect on their learning in relation to their changing and maturing perceptions and understandings: as they re-establish equilibrium through an expanded worldview (cf. Piaget’s cognitive construction) and reflect on this from a perspective of wider experience, the learner perception is adjusted and transformative learning can occur (Mezirow, 1997). There are parallels and shared concepts here with actor-network theory (Latour, 1987), the expansive learning model (Engeström, 1987), the model of knowledge creation (Nonaka and Takeuchi, 1995), communities of practice (Lave and Wenger, 1998, cf. also Wenger, McDermott & Snyder, 2002) and the theory of knowledge building (Bereiter, 2002). What all of these models have in common is the explicit aim of the integration of learning with the systemic reconstruction of the social contexts within which they operate (Senteni and Taurisson, 2005).

Heutagogy

The role of the educator in an andragogical approach is that of tutor and mentor, with the instructor developing the capacity of the learner to become more self-directed in their learning through key support mechanisms: directing learners in how to find information, relating significant information to the learner experience as relevant to their current understanding, ability and progress, and focusing on relating all theoretical content to real-world situations (Eberle and Childress, 2007; McAuliffe *et al.*, 2008).

The key principle of self-directed learning has been given an even stronger voice in Heutagogy. Heutagogy (from εϋρετικός *heurista* “to discover” and άγω *ago*, literally the skills needed *to lead to discover* [oneself]) was defined by Hase and Kenyon in 2000 as the study of self-determined learning. Learners are “the major agents in their own learning, which occurs as a result of personal experiences” (Hase and Kenyon, 2007: 112). The instructor facilitates learning through guidance, but fully surrenders the learning journey to the learner, who negotiates learning and determines what will be learned and how it will be learned (Hase and Kenyon, 2000; Blaschke, 2012).

There are clearly issues here, then, for teacher trainers who have a duty to ensure that certain knowledge and key skills are passed on to the learners. It is not enough, I would argue, to merely ensure access to the learning whilst abdicating all responsibility for its being learned. If it were, then centre-based University training in any field would become redundant, and the distance learning model would become the only sensible option. Indeed, much of the writing on heutagogy is specifically about online learning (see e.g. Eberle and Childress, 2007; Hase and Kenyon, 2007; McAuliffe *et al.*, 2009).

However, there are some useful elements of heutagogy that we may press into service for our adult learners as they strive to become teachers of children. One of these is self-reflection. We expect our trainees to keep learning journals and to complete a series of reflective tasks. In these, we ask the trainees to discuss critical incidents where they felt they learned something useful: Mezirow’s transformative learning experiences. This again has elements of knowledge construction: building on their own experience. We also encourage discussion and dialogue around these critical incidents, leading once more to social construction and learner engagement.

Learner autonomy?

Returning to my point that we as instructors cannot renounce all accountability for learning, the heutagogical answer is that it is important that learners acquire both competencies and capabilities (Stephenson, 1994 as cited in McAuliffe *et al.*, 2008: 3). Competency is seen here as the ability to acquire knowledge and skills, and capability is characterised by learner confidence in their competency and, as a direct result of it, the ability “to take appropriate and effective action to formulate and solve problems in both familiar and unfamiliar and changing settings” (Cairns, 2000, as cited in Gardner *et al.*, 2007: 252). I would still argue, however, that this learner autonomy does not limit nor exempt the instructor from actively passing on subject-specific knowledge or advice from gained experience that the trainee necessarily cannot have. In the heutagogical approach, then, it will be up to the learner to decide whether or not this is worth learning. This has its limits: a trainee teacher cannot decide not to learn what the principles of Systematic Synthetic Phonics are, for example: this is a condition of meeting the current and future standards needed to qualify as a primary teacher (DfE, 2012). In this instance, it would be incumbent upon the instructor to ‘enforce’ this knowledge-gaining, although there are different ways to do this. Heutagogically, the most effective would be through the use of reflective work requiring autonomy and maturity, but still requiring proof. Perhaps a more realistic alternative would be facilitated learning (e.g. ICA-SAE, 2005), whereby trainees are encouraged to take more control of their learning process and instructors facilitate personalised learning of course content, for example having participants work independently to develop an action plan, related to the course content but tailored to their needs.

However, the exigencies of a key course I teach on, the PGCE “Core” Module, gives me merely nine sessions – under eighteen hours – with which to prepare trainees to teach all the elements of English proscribed by the National Curriculum (DfE, 2014) to all primary age children. Whilst this is clearly impossible, it is still incumbent upon me to give trainees the maximum input in this

time. Along with most practitioners, I aim to offer the most important elements of a subject, and also discuss the key pedagogical approaches to take when teaching these: to bridge the gap between epistemic espousal and pedagogical practice (cf. Feiman-Nemser, 1991 and Shulman 1986, amongst others, discussed previously). This was highlighted recently when I took part in a stimulated recall interview for a colleague's doctoral research. It was very noticeable on the video that I consciously exposed trainees to my pedagogic thinking at every factual point, discussing at least one practical way that each piece of knowledge could be conveyed to primary children of different ages. An example of this is poetry. It is impractical and unattainable in a two hour lecture to equip trainees with all the subject knowledge they could possibly need to teach poetry adequately – let alone well – to children in the vast age and ability range found within the 5-11 curriculum. Instead, I can hope only to show them to the best of my ability key generic elements that they will be able to draw upon when faced with specific learning objectives in the authentic situations they will encounter in the classrooms, and to foreground the pedagogical approaches they might consider when teaching these elements.

As previously stated, I believe both children and adults learn best experientially; that discovery is more meaningful and transformative than received wisdom. Meaningful learning is “active, constructive, intentional, authentic, and collaborative” (Jonassen *et al.*, 2003, in Blaschke, 2012: 6). Learners need to be “active participants who articulate, reflect, and understand the relevance of what they learn” (Blaschke, 2012: 4). So the question of how to facilitate this within a two-hour session remains. Teacher educators must make conscious decisions about the approaches they adopt in sessions. In my poetry example, I try to be as collaborative and facilitative as possible, allowing trainees to act and do – to engage in writing poetry individually, in groups and with me modelling a shared writing (Routman, 1994; 2005) pedagogical approach – but I must perforce didactically instruct a lot as the ‘master’ to the trainees’ ‘novices’ in Vygotskian parlance. This choice, and its explicit message – that there is and will be much that

the trainees will need to read up on, revise and learn for themselves – leads to an expectation on my part that trainees will become heutagogic: will lead themselves to the requisite knowledge, based on the foundations that my input has given them. This is particularly realistic for those trainees who are actively seeking a deeper participation in the culture and community of practice of teachers. It also inevitably leads to an accusation of instructionism. I will return to this shortly.

Enculturation or deepened participation?

Underpinning and acting as a catalyst for meaningful learning are the experiences that the trainees undergo. These are pivotal in transformative learning and in trainees' emerging and developing perceptions of their professional identity. Although the trainees experience the teacher-led andragogical processes described above in University-based training, I contend that an even more fundamental role is played by the school-based experiences that the trainees encounter. It is in these authentic environments (Herrington and Herrington, 2006) that 'situated learning' (Lave and Wenger, 1991), or learning that takes place in the same context in which it is applied, best takes place, as demonstrated earlier. This ties in with the developing identities previously discussed: the "student teachers' identity trajectories (Luckmann, 1982) intersect with the processes of mentoring in schools to produce particular versions of professional identity" (Edwards & Ogden, 1998: 174). I have already explored two dichotomous views of this 'becoming' (forced enculturation as against active participation – see Smith, 2014), arguing that the second of these is imbued with a more empowering and self-deterministic character. I concluded that, whilst there are parallels between the paradigms, it is the self-actualising participatory model rather than the oppressive that not only should we as teacher educators espouse but that we enable and see in practice.

However, whilst this is a desirable outcome, and is the trajectorial model of 'becoming' that I both advocate and – for the most part – observe in my role as teacher and tutor of trainees, this reliance on practical experience in school-based attachments does not solve the conundrum I posed initially, and to which I wish to return: whether didactic, instructional methods of teaching work best andragogically for preservice teacher trainees in short timeframes, or whether the facilitative, learner-centric models of pedagogic practice I espouse can work.

A key criticism of the didactic, transmissionist approach is that the learning that results from direct instruction can be seen as lacking in conceptual depth and lacking transferability of understanding to other areas of knowledge or situations (Johnson, 2014). Moreover, it fails to access and engage higher level cognitive skills – those at the upper end of Bloom's ubiquitous taxonomy (Bloom, 1956). The belief that knowledge can be transmitted through a linear method of instruction is the most common model today, maintains Singh (2009). The constructionist approach, he continues, claims that knowledge cannot be transmitted to a learner; rather the learner needs to construct knowledge by themselves. This freedom to structure knowledge as their inclination and instinct directs them may lead to incorrect understandings and mistakenly accepted truths. Singh, amongst many other writers, argues that to overcome the shortcomings of both these pedagogical approaches, an integrated approach to teaching may prove to be more useful.

Johnson is scornful of some of the positivist and positive meanings I have attributed to certain terms used by constructivists (following, amongst others, Jonassen *et al.*, 2003; Blaschke, 2012), arguing that "terms such as meaningful learning and student-centred instruction are dogma and are not useful in daily classroom practice" (Johnson, 2005: 15). She draws on some key writers (Dahl & Freppon, 1995; Fisher, 1991) to suggest that it is rather active student involvement, intrinsic interest and self-motivation, and an innate satisfaction with learning that

form the fundamental benefits of the constructivist approach (see also Hogan & Peterson, 2001; Martinez et al., 2001). And yet, she maintains, direct instruction, whilst undeniably “mechanistic and thereby, to some, dehumanizing” (*op. cit.* p15), is highly effective in facilitating student skill acquisition (Carlson & Francis, 2002; Kameenui & Carnine, 1998). That such an approach can still yield positive learning outcomes seems undeniable, but the question remains of whether it is troubling. Johnson highlights the core strengths of the instructionist approach as being time given over to task- and goal-oriented activity, teacher organisation, corrective feedback, and fixed learning objectives (Hoover & Fabian, 2000; Swanson, 2001).

A tentative reconciliation?

With clear advantages to elements of both approaches, are teacher educators thus obliged to reconcile the learner-centric freedoms and widely accepted tenets of constructivism with the utility of instructionism? Epistemologically and paradigmatically, knowledge is both objective and subjective: it is “dependent on one’s perspective on it whilst shared understanding can be arrived at through negotiation” (Smith, 2013). The curriculum we must impart is an objective reality but our understanding of it is subject to personal, subjective and contextual interpretation of meaning which may be influenced by any number of factors, for example previous experience, teacher attitude and/or situation-specificity (Steffe & Gale, 1995).

There is literature to show that a combination of the two – tentatively called “instructionist-constructivism” (Johnson, 2005) – may combat the faults of each approach and, in the best practice, embed specific skill instruction in enjoyable and meaningful tasks. The constructivist method’s ability for learners to self-select goals and learning approaches, and the thematic style of programme construction (Honebein, 1996), may contribute to off-task learner behaviour, whereas the teacher-controlled instructionist approach, often using group response, and clear learning criteria (Snow et al., 1998), may be motivational for learners, if not used exclusively or

overmuch. This dual approach would allow for systematic instruction not being taught in isolation but within a context of personalised meaning and individual interest for learners. “In this context, teaching specific skills is a consequence of student need where meaning and comprehension are emphasised” (Strickland, 1998, in Johnson, 2005).

Conclusion

In my own practice, this seems to be the tacit approach I have adopted. Where I have more time – for example, on the undergraduate course where trainees have twenty-four two-hour sessions of English input in each of the first two years – I can adopt the more constructivist, learner-centric approach, albeit with the explicit understanding between me and my colleagues, and between my learners and me, that there are elements that will be directly instructivist in approach, such as the aforementioned systematic synthetic phonics). However, within the very tightly constrained parameters of the PGCE course I do have to adopt an approach that is counter to my wishes, and one which I explicitly state to my learners not to follow when discussing the previously-discussed “signature pedagogies of our profession”. I advise them specifically to avoid this instructivist method of teaching children and to utilise the constructivist approach for all the reasons described throughout. I teach pedagogy andragogically, and expect the learners to heutagogically lead themselves to full, personal, understanding.

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