Journal of Learning Development in Higher Education ISSN: 1759-667X
Issue 14: November 2018

Students' perceptions of the learner attributes required for (and resulting from) heutagogical learning

John Stoszkowski
University of Central Lancashire, UK

Liam McCarthy
St Mary's University, UK

Abstract

Heutagogy, a form of self-determined learning, is a learner-centred approach to learning and teaching, grounded in constructivist principles. This case study explores final year undergraduate students' perceptions of the learner attributes required for (and resulting from) heutagogical learning. As part of a larger research study, data were collected at two UK universities using an online survey that was intended to elicit their perceptions and experiences of a module designed using heutagogical principles. Results indicate that foundational knowledge, skills and attitude are a requirement for, and an outcome of, heutagogical learning. Potential implications for the use of heutagogical approaches to learning and teaching are discussed.

Keywords: heutagogy; self-determined learning; autonomy; sports coaching.

Background

University education has traditionally been seen as a didactic, top-down relationship between the lecturer and the student, with the lecturer deciding the knowledge and skills students need, as well as where, when and how they should be taught (Snowden and Halsall, 2016). In recent years, however, teaching within higher educational institutions has undergone a transformational shift toward increasingly student-led pedagogies, grounded in constructivist learning assumptions that seek to improve student autonomy, motivation, and achievement (Paquette and Trudel, 2018; Rowley et al., 2018). Heutagogy (Hase and

Kenyon, 2000), a form of self-determined learning, has been positioned in the literature as being ideally suited to achieving such aims (Abraham and Komattil, 2017). The heutagogical approach puts learners firmly in control of their own learning, moving beyond the development of knowledge and skills, and instead focusing on capability, that is, the ability to integrate and effectively apply one's knowledge and skills in novel and unanticipated situations (Hase and Kenyon, 2007). Heutagogical learning is grounded in real-world practice and is said to nurture autonomous, adaptive and critically reflective learners, better aligning higher education with the needs and complexities of the 21st century workplace (Blaschke and Hase, 2016), where the pace of change is rapid and innovators, complex problem solvers, and good communicators are in demand (Kizel, 2016).

Context of the case study

As part of an 18-month long 'innovation in teaching and learning' project, funded by the Higher Education Funding Council for England, our current work involves the application of heutagogy on undergraduate degree programmes at two different UK institutions. Over the course of a 15-week semester and consistent with the protocol outlined by Stoszkowski and Collins (2015), two final year cohorts, studying an optional applied sports coaching practice module, used collaborative online group blogs, created using WordPress (www.wordpress.com), to share and discuss relevant resources, as well as their ongoing self-determined learning and practical experiences. Students on the module self-sourced a community-based coaching placement to undertake applied coaching practice and it is this which formed the basis of their discussions. Each student's module grade was based on the quality and quantity of their participation in their group blog.

Our role as module tutors was that of a facilitator as opposed to a provider of content; indeed our primary aim was to encourage students to take personal responsibility for, and ownership of, what and when they learned (Ashton and Elliott, 2007). Furthermore, we wanted students to become active participants and co-producers of knowledge by facilitating engagement in cross-institutional dialogic reflection and supportive peer mentoring. In this case, we define peer-mentoring as students supporting, educating, guiding and counselling one another (Sims-Giddens et al., 2010). Remaining consistent with principles of heutagogic learning design as far as we could within the constraints of a

taught undergraduate degree programme, we involved learners in negotiating how and what they learned, maintained flexible curricula, encouraged learners to learn from each other, provided formative and personalised feedback, and embedded opportunities in the learning environment for learners to explore and reflect (Blaschke and Hase, 2016).

Our ongoing experiences on the module have been mixed, however, leading us to doubt the efficacy of heutagogical approaches when deployed over relatively short-term periods (i.e. over the course of a semester or academic year), especially when part of a formal (i.e. structured, assessed and certificated) programme of study. We suspect that, although heutagogical approaches offer clear potential for developing more autonomous and self-determined learners, many students appear to lack the learner attributes needed to engage in more autonomous and self-determined learning in the first place.

Aim of the case study

As part of a larger research project exploring staff and students' experiences of a module designed using heutagogical principles, this case study had two distinct purposes:

1. To identify the attributes that students perceive they need if they are to succeed on a module that employs a heutagogical approach to learning and teaching.
2. To identify the attributes that students perceive they develop on a module that employs a heutagogical approach to learning and teaching.

Method

Prior to data collection, ethical approval was obtained from both authors' institutional ethics committees. At the midway point of the module (8 weeks), each student on the module (N = 62) was e-mailed an explanation of the study aims, information about confidentiality and anonymity, and a web link to a survey, which was hosted by the online survey tool SurveyMonkey (www.surveymonkey.com) and developed to provide feedback about their ongoing experiences and perceptions of the module. It was made clear at this point that participation was voluntary and the sample was self-selected by their own volition.

The first page of the survey repeated the information contained in the e-mail, and explained that all answers would remain anonymous, with students notified that by 'clicking' continue they would give informed consent for any submitted answers to be used as data in the study. It was also made clear that, because answers were anonymous, they could not be withdrawn once submitted as no identifying information would be tracked or recorded at any stage of the data collection process. A mid-module survey was chosen deliberately to capture students' perceptions of the skills that they felt they had already developed (over 8 weeks) as a result of heutagogic learning experiences. Further, the survey compelled the students to consider their future selves and the skills which would be required to successfully complete the module.

Thirty-five students (9 females and 26 males, *Mage* = 21 years, SD = 1.03), completed the survey. The data reported in the current paper relates to two specific items in that survey. Firstly, students were asked to list up to three attributes they felt students need if they are to succeed on a module that employs a heutagogical approach to learning and teaching. Secondly, they were asked to list up to three attributes they felt students develop on a module that employs a heutagogical approach to learning and teaching. Open-ended survey questions were used to allow for detail, meaning and unexpected insight to emerge. Responses were transferred to a Microsoft Excel 2010 spreadsheet and then the first author conducted an inductive analysis of the raw data to generate relevant themes (Patton, 2002). Information rich statements were identified as stand-alone meaning units (Thomas and Pollio, 2002), then they were listed and labelled, before being compared for similarities and clustered together into raw data themes. The initial themes were audited by the second author to establish trustworthiness and credibility (Lincoln and Guba, 1985) then, in a collaborative analytical approach (Bean and Forneris, 2017), the two authors established relationships between raw data themes and grouped them together to generate broader themes where appropriate (Holt et al., 2012).

Results

Table 1 depicts the attributes that students perceived they need if they are to succeed on a module that employs a heutagogical approach to learning and teaching, while Table 2 shows the attributes students perceived they develop on a module that employs a heutagogical approach to learning and teaching. Significant overlap was apparent between

the emergent raw data themes in both sets of attributes, which were grouped into three main umbrella themes: knowledge, skills and attitude. Twelve of the thirteen raw data themes in Table 1 are also represented in Table 2 (92.86%), with the addition of two new raw data themes (writing skills and reflection).

Table 1. The attributes students perceive they need to succeed on a module that employs a heutagogical approach.

Raw Data Theme	Lower Order Theme	Higher Order Theme
Knowledge and understanding (9)	Knowledge and experience (12)	Knowledge and experience (12)
Applied experience (3)		
Organisation (10)	Self-regulation (27)	Skills (51)
Consistency (5)		
Time management (12)		
Communication (1)	Peer discussion (12)	
Peer discussion (11)		
Criticality (9)	Criticality (9)	
Reading skills (1)	Reading and research skills (3)	
Research skills (2)		
Motivation/drive (16)	Motivation/drive (16)	Attitude (32)
Confidence (6)	Confidence (6)	
Open mind (6)	Open mind (6)	
Independence (4)	Independence (4)	

(Numbers refer to number of meaning units, not students)

Table 2. The attributes students perceive they develop on a module that employs a heutagogical approach.		
Raw Data Theme	**Lower Order Theme**	**Higher Order Theme**
Knowledge and understanding (20)	Knowledge and experience (23)	Knowledge and experience (23)
Applied experience (3)		
Planning and Organisation (2)	Self-regulation (10)	Skills (57)
Consistency (3)		
Time management (5)		
Communication (6)	Peer discussion (16)	
Peer discussion (10)		
Critical thinking (11)	Critical thinking (11)	
Research skills (8)	Research skills (8)	
Writing skills (5)	Writing skills (5)	
Reflection (7)	Reflection (7)	
Confidence (3)	Confidence (3)	Attitude (9)
Independence (2)	Independence (2)	
Motivation/drive (3)	Motivation/drive (3)	
Open mind (1)	Open mind (1)	
(Numbers refer to number of meaning units, not students)		

Knowledge and experience

Knowledge was an attribute that students felt they needed to succeed, especially in terms of 'understanding' coaching practice and/or broader course content (e.g. 'being able to engage with and make sense of the course content'). Similarly, knowledge and understanding were viewed by some as being a requirement to engage in effective peer discussion. For example, one student highlighted the importance of being 'able to pick out key things to have a discussion about'. Some students also referred to the importance of having experience of applying their content knowledge in practical scenarios (e.g. 'try the things we talk about... and see the impact for yourself'). Encouragingly, students perceived the development of knowledge and understanding to be an outcome of the module, with the number of meaning units almost doubling in that regard. Several students simply referred to 'knowledge' as an attribute that they develop, while some were more specific. For example, one student referred to 'knowledge on topics some coaches wouldn't normally come across', with others referring to specific types of knowledge (e.g. 'different coaching styles' and 'different reflection methods').

Skills

Self-regulation was a key theme describing learner attributes that students felt were necessary to succeed. As part of this, 'time management' was mentioned both explicitly and in more explanatory terms (e.g. 'create time to input on the blog over the week'), while 'organisation' and 'consistency' were also referred to. Interestingly, these same elements of self-regulation were also alluded to as attributes that students felt they developed on the module, but on far fewer occasions.

Being able to engage in peer discussion was cited as an attribute that was needed. For example, one student referred to being able to 'interact with other students', while another stated 'good at discussion and giving their opinion'. Peer discussion was also viewed as an attribute that students developed, with some referring directly to 'communication' and others being more specific about the ability to 'debate' ideas (e.g. 'discussing your point and arguing why it is valid').

Criticality in terms of analysis was also highlighted as being required, with students referring to the 'ability to critique' and 'critical analysis skills'. This criticality was also viewed as being an attribute that engagement in the module develops; however, it was referred to more directly as 'critical thinking' or 'critical thought'.

Reading and research skills were mentioned as being required attributes on three occasions, while research skills were mentioned more often as an outcome of the module. Writing skills (e.g. 'formal and informal writing') and reflection (e.g. 'ability to self-reflect') were both reported as attributes that some students felt they develop on the module.

Attitude

Having a facilitative attitudinal disposition was viewed as being an important attribute to succeed on the module. Being motivated and driven to learn was most commonly seen as important (e.g. 'motivated', 'self-driven', 'dedication'), with being confident (e.g. 'confidence'), having an open mind (e.g. 'open to new concepts') and independence (e.g. 'independent study ethic') also mentioned. Importantly, these same components of 'attitude' were mentioned as outcomes of the module, but on far fewer occasions, especially in terms of motivation.

Discussion

The students in the current case study appear to recognise that the heutagogical approach we employed on the module has the potential to develop a range of attributes we as educators aspired to develop. However, it also appears that to be successful (i.e. engage in and pass the module), students might need a foundational level of many of those attributes in place prior to starting. For example, although Bangura (2005) suggests that heutagogical learning helps students develop confidence and competence, it has also been suggested that if an individual is to reason independently and engage in successful problem-solving type activities, a foundational level of domain-specific knowledge is required upon which to build new knowledge (Kirschner et al., 2006). Without this background knowledge, and if simultaneously aligned with an absence of explicit instruction, students are likely to become demotivated pretty quickly. Indeed, our results suggest that students recognise the importance of motivation if they are to take control of their own learning, however, the heutagogical approach taken did not appear to be inherently motivating for many in and of itself. It even appears that if students lack some specific attributes (e.g. knowledge and/or skills), it could be actively demotivating and taking such an approach with those students could therefore be detrimental. Indeed, Blumberg (2008) suggests that open-ended situations or situations lacking structure may frighten less motivated students.

Consequently, we believe that some students might require more direct hands-on guidance and support, at least initially, and especially if they lack previous experience of being self-determined in their learning (Stricker et al., 2011). After all, it is not unreasonable to suggest that the education system has a reputation for defaulting to rewarding quantities of knowledge rather than qualities of behaviour (Nickless et al., 2015), and previous research has suggested that a focus on 'teaching to the test' contributes to students being underprepared for university study (Suto, 2012). Might we therefore need to 'teach' some of the attributes that emerged from this study in a more explicit way, rather than simply hope they emerge? That is, teach students how to learn in a heutagogical way before expecting them to learn heutagogically? If so, developing attributes such as self-regulation will likely take time and we encourage both programme developers and module tutors to embrace that. To mitigate against, or at least minimise any potential knowledge and skills gaps, we would also encourage programme developers and module tutors to think carefully about what is most appropriate for their learners, when, and why, and to

carefully develop heutagogical learning experiences over longer time periods where necessary.

Conclusion and future plans

In order to facilitate effective heutagogical learning, educators need to carefully consider the timescale over which they intend to utilise approaches of this type, as well as the educational and intrapersonal background of their students and the existing knowledge, skills and attitude they bring to the table. At the very least, it appears that there is a need for the carefully staged and deliberate introduction of such approaches over time – heutagogy is not a quick fix. This is consistent with the work of Thomas et al. (2015), who suggest that learners develop independent learning skills over time or may never develop them at all! As such, educators need to ensure they work with their teaching reality, rather than idealised models of practice. Moving forward, we intend to conduct more focussed and in-depth investigation into the underpinning mechanisms and students' experiences of heutagogy. For example, work employing a realist-inspired approach to explain a single student's interaction with the module is currently underway.

References

Abraham, R.R. and Komattil, R. (2017) 'Heutagogic approach to developing capable learners', *Medical Teacher*, 39(3), pp. 295-299. Available at: https://doi.org/10.1080/0142159X.2017.1270433 (Accessed: 21 August 2018).

Ashton, J. and Elliott, R. (2007) 'Juggling the balls – study, work, family and play: student perspectives on flexible and blended heutagogy', *European Early Childhood Education Research Journal*, 15(2), pp. 167-181. Available at: https://doi.org/10.1080/13502930701321378 (Accessed: 21 August 2018).

Bangura, A.K. (2005) 'Ubuntugogy: an African educational paradigm that transcends pedagogy, andragogy, ergonagy and heutagogy', *Journal of Third World Studies*, 22(2), pp. 13-53.

Bean, C. and Forneris, T. (2017) 'Examining the role of needs support in mediating the relationship between programme quality and developmental outcomes in youth sport', *International Journal of Sport and Exercise Psychology* [Online]. Available at: https://doi.org/10.1080/1612197X.2017.1350825 (Accessed: 21 August 2018).

Blaschke L.M. and Hase S. (2016) 'Heutagogy: a holistic framework for creating twenty-first-century self-determined learners', in Gros, B., Kinshuk and Maina, M. (eds.) *The future of ubiquitous learning. Lecture notes in educational technology*. Heidelberg: Springer, pp. 25-40. Available at: https://doi.org/10.1007/978-3-662-47724-3_2 (Accessed: 21 August 2018).

Blumberg, P. (2008) *Developing learner-centered teaching: A practical guide for faculty*. San Francisco, CA: Jossey Bass.

Hase, S. and Kenyon, C. (2000) 'From andragogy to heutagogy', *Ultibase Articles*. Australia: Southern Cross University.

Hase, S. and Kenyon, C. (2007) 'Heutagogy: a child of complexity theory', *Complicity: An International Journal of Complexity and Education*, 4(1), pp. 111-118.

Holt, N.L., Knight, C.J. and Tamminen, K.A. (2012) 'Grounded theory', in Armour, K. and Macdonald, D. (eds.) *Research methods in physical education and youth sport*. Abingdon: Routledge, pp. 277-294.

Kirschner, P.A., Sweller, J. and Clark, R.E. (2006) 'Why minimal guidance during instruction does not work: an analysis of the failure of constructivist, discovery, problem-based, experiential, and inquiry-based teaching', *Educational Psychologist*, 41(2), pp. 75-86. Available at: https://doi.org/10.1207/s15326985ep4102_1 (Accessed: 21 August 2018).

Kizel, A. (2016) 'Philosophy with children as an educational platform for self-determined learning', *Cogent Education*, 3(1) [Online']. Available at: https://doi.org/10.1080/2331186X.2016.1244026 (Accessed: 21 August 2018).

Lincoln, Y.S. and Guba, E.G. (1985) *Naturalistic inquiry*. Newbury Park, CA: Sage.

Nickless, S., Stoszkowski, J. and Palmer, C. (2015) 'Education's not black and white, it's vibrant grey', *Journal of Qualitative Research in Sports Studies*, 9(1), pp. 73-100

Paquette, K. and Trudel, P. (2018) 'The evolution and learner-centered status of a coach education program', *International Sport Coaching Journal,* 5(1), pp. 24-36. Available at: https://doi.org/10.1123/iscj.2017-0038 (Accessed: 21 August 2018).

Patton, M.Q. (2002) *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage.

Rowley, C., Fook, J. and Glazzard, J. (2018) 'Adopting a student-led pedagogic approach within higher education: the reflections of an early career academic', *Reflective Practice*, 19(1), pp. 35-45. Available at: https://doi.org/10.1080/14623943.2017.1351352 (Accessed: 21 August 2018).

Sims-Giddens, S., Helton, C. and Hope, K.L. (2010) 'Student peer mentoring in a community-based nursing clinical experience', *Nursing education perspectives*, 31(1), pp. 23-27.

Snowden, M. and Halsall, J.P. (2016) 'Self-determined approach to learning: a social science perspective', *Cogent Education*, 3(1) [Online]. Available at: https://doi.org/10.1080/2331186X.2016.1247608 (Accessed: 21 August 2018).

Stoszkowski, J. and Collins, D. (2015) 'Using shared online blogs to structure and support informal coach learning—part 1: a tool to promote reflection and communities of practice', *Sport, Education and Society*, 22(2), pp. 247-270. Available at: https://doi.org/10.1080/13573322.2015.1019447 (Accessed: 21 August 2018).

Stricker, D., Weibel, D. and Wissmath, B. (2011) 'Efficient learning using a virtual learning environment in a university class', *Computers and Education*, 56(2), pp. 495-504. Available at: https://doi.org/10.1016/j.compedu.2010.09.012 (Accessed: 21 August 2018).

Suto, I. (2012) 'How well prepared are new undergraduates for university study? An investigation of lecturers' perceptions and experiences', *Conference of the Society for Research in Higher Education*. Newport, Wales 12-14 December.

Thomas, S.P. and Pollio, H.R. (2002) *Listening to patients: a phenomenological approach to nursing research and practice*. New York, NY: Springer.

Thomas, L., Hockings, C., Ottaway, J. and Jones. R. (2015) *Independent learning: student perspectives and experiences*. York: HEA.

Author details

John Stoszkowski is a Senior Lecturer in Sports Development and Coaching at the University of Central Lancashire, UK, and a Fellow of the Higher Education Academy, UK. E-mail: JRStoszkowski@uclan.ac.uk

Liam McCarthy is a Lecturer in Sports Coaching at St. Mary's University, Twickenham, UK, and a Fellow of the Higher Education Academy, UK. E-mail: liam.mccarthy@stmarys.ac.uk