Towards the co-identification of threshold concepts in academic reading

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Abstract

This paper seeks to identify threshold concepts in academic reading. It builds on existing research on the subject by working in collaboration with three groups of academic readers (1: academic staff and subject lecturers; 2: learning developers and librarians; 3: students) to co-identify a list of potential threshold concepts of academic reading. The Delphi Method was used to build a consensus between the different groups. Throughout the study, participants were invited to suggest and discuss threshold concepts across three rounds of asynchronous online surveys, which resulted in the identification of eight threshold concepts. It is hoped that these threshold concepts will enable and empower the teaching and learning of academic reading in a more transparent and explicit way.

Keywords

Introduction

Reading is at the core of academic activity. It enables us to gain knowledge, keep up with academic debates and develop our own ideas (Bharuthram 2012, p. 205; Cox, Friesner & Khayum 2003, p. 171; Fairbairn & Fairbairn 2001, p. 3; Volentine & Tenopir 2013). This means there is a close relationship between reading and success in higher education (Bohlman & Pretorius 2002, p. 15; Wilcoxson, Cotter & Joy 2011). However, with the increased diversity of the student population in response to governmental widening participation agendas, in both Australia and the UK, assumptions can no longer be made about the effectiveness and/or ability of students to read academically (Gourlay 2009; Hamilton 2018; Hilsdon 2011). Therefore, it is important to support all students to develop their reading throughout their studies (Gorzycki et al. 2016). Although important work has been conducted, research on academic reading has not received the same attention as other aspects of academic literacies, particularly academic writing. Even a cursory look at study and/or research skills self-help books aimed at university students shows an overwhelming concentration on writing, rather than reading. Literature for reading in higher education still also lags behind research on reading in secondary and further education (Staudinger 2017, p. 3). This study seeks to help redress this balance by identifying threshold concepts (TCs) of academic reading.

In the words of Meyer and Land (2003, p. 1): "A [TC] can be considered as akin to a portal, opening up a new and previously inaccessible way of thinking about something. It represents a transformed way of understanding, or interpreting, or viewing something without which the learner cannot progress". TCs have attracted increased interest in the scholarship of teaching and learning (Nicola-Richmond, Pépin, Larkin & Taylor 2018), as they are believed to have a strong impact on learning, which can often have a transformational effect on students (Meyer, Land & Baillie 2010; Monk et al. 2012; Perkins 2008). Research has been conducted to identify TCs and their usefulness in a variety of disciplines and other areas such as problem-solving (Wismath, Orr & Mackay 2015) and even doctoral study (Kiley 2009). However, in relation to academic literacies, TCs have predominantly been applied to academic writing (Adler-Kassner & Wardle 2015; Thomson 2018; Todd 2013). This study will build on existing work on TCs in academic reading (Abbot 2013; Gogan 2013) by investigating students' perspectives of academic reading equally alongside those of learning developers and librarians, who are often responsible for teaching academic reading in both extra-curricular and embedded environments, as well as academic staff and subject lecturers. The Delphi Method will be used to build a consensus between these different stakeholders and co-identify TCs in academic reading. Survey responses from all three groups will be analysed and synthesised to produce a proposed list of TCs in academic reading. Synthesising the perspectives of different practitioners of academic reading and learning to read academically may lead to a broader understanding of what defines reading as a fundamental academic literacy.

The co-identification of threshold concepts can potentially help reinforce the importance of academic reading alongside other key academic literacies in higher education. It has been claimed that students start to feel they belong more at university and within their discipline's community as their knowledge of academic practices and TCs increase (Gourlay 2009; Irvine & Carmichael 2009). Therefore, the identification of academic reading TCs can have a positive impact on transition support and embedding strategies. Identifying academic reading TCs can help make the implicit, or even hidden, aspects of academic reading, explicit, and has the potential to aid the development of students' academic reading in a number of ways. They could be consulted by lecturers and learning developers when designing workshops to support academic reading practices, as well as supporting students making the transition from FE to HE.

Threshold concepts and academic literacies

It is important to begin by questioning the suitability of TCs in academic literacies, which are socially situated and often exist in specific disciplinary contexts. Meyer and Land (2003) believe that learning involves the occupation of a liminal space in which students fluctuate between old and new understandings. TCs, it is argued, help students navigate this liminal space, by providing waypoints to greater understanding. Students arguably occupy this liminal space most when transitioning to university (Palmer, O'Kane & Owens 2009). This view of learning, therefore, seems particularly pertinent for academic literacies, as, upon entering university, students are required to develop their previously acquired study habits towards those required in higher education. Importantly, academic skills support and development is believed to be a key component of effective transition and success in university (Harvey, Drew & Smith 2006, p. 13; Lea & Street 1998). Therefore, TCs may help provide students with important guides and waypoints as they seek to develop their own academic literacies.

Consequently, TCs are useful for both teaching and learning and are increasingly used in curriculum design (Barradell 2013, p. 267; Lucas & Mladenovic 2007). TCs in academic literacies seem particularly useful in assessment design and assessment literacy. Assessments generally consist of two elements: skills and knowledge. Assessment tasks are designed to allow students to showcase their subject-knowledge through the use of a particular academic skill or academic literacies. The two must, therefore, be combined in successful curriculum planning and transition support. Importantly, in this regard, Irvine and Carmichael (2009, p. 115) note that "threshold concepts can certainly act as a stimulus for activities in which the processes and ends of a set of practices are inseparable from the discourse, enquiry and reflection which accompany and generate them". One criticism of current university approaches to transition support is that they generally opt for a one-size fits all approach (Baker 2018, p. 392-93; Palmer, O'Kane & Owens 2009, p. 38). The identification of TCs in academic literacies may, therefore, aid this process, by potentially allowing for more tailored transition support based upon student reflection and engagement with the TCs they as individuals find most troublesome.

However, the listing of TCs in any subject can be problematic. It has been argued that TCs cement very specific ideas of what is 'correct', which can privilege particular forms of thinking and knowledge, and entrench the dominant, implicit conventions and expectations of academia (O'Donnell 2010). On the surface this goes against the transformative ideal of academic literacies (Lillis 2019), as well as the emancipatory values of Learning Development, as it forces students to adapt themselves and/or limit their own thinking into existing expectations. Importantly, the involvement of students in the co-identification of TCs in academic reading will help to mitigate against this. In this regard, it can be argued that ideas presented in TCs are often held implicitly, as an extension of the hidden curriculum, and that by bringing them out and making them visible, students are empowered to discuss and critique their relevance and appropriateness.

Meyer and Land (2003) list the characteristics of TCs as: transformative, irreversible, troublesome, integrative and bounded. These characteristics themselves seemingly necessitate the involvement of students in the identification of TCs; how can we know what students find 'troublesome' or 'transformative' about a particular topic or literacy, if we do not invite them into the discussion. Importantly, however, the validity of these characteristics in relation to TCs in academic literacies has been debated. For example, what one reader finds troublesome may not be troublesome to another (Rowbottom 2007). This is perhaps particularly true for the potentially widely divergent experiences students will have of academic literacies based upon their previous educational background (Gourlay 2009). Likewise, student awareness of what they should be doing when reading academically may be irreversible at a superficial level. However, during difficult periods, such as exams, students are likely to fall back on old knowledge and habits, which they may feel more comfortable with (Edwards 2011, p. 6; Felton

2016, p. 6; Sengupta 2002, p. 24; Salmarsh & Saltmarsh 2008, p. 626). Consequently, the usefulness of the irreversible characteristic of TCs can be questioned when seeking to develop student behaviour-change in relation to academic literacies. Similarly, as academic literacies are cross-disciplinary, they are less likely to be bounded than subject knowledge (Edwards 2011, p. 6; Felton 2016, p. 7). There is, therefore, a need to consider if Meyer and Land's TC characteristics need to be altered when working with academic literacies.

One potential alteration is the argument that TCs should be reconceptualised as threshold practices (Gourlay 2009; Rowbottom 2007). This idea is worth considering from an academic literacies perspective. A strong argument can certainly be made that academic literacies are focused more on an individual's ability to do something, rather than understand something. Indeed, the ability to do something may in turn lead to deeper understanding, as evident in educational theories of active and experiential learning (Race 2015; Kolb 1984). For example, Rowbottom (2007, p. 226) uses a sporting analogy: knowing what is expected to be good at a sport and being able to do those things are two completely different things. In other words, knowledge of something does not necessarily translate into ability. This does also seem to align with Learning Development's focus on troublesome processes, not troublesome knowledge (Edwards 2011, p. 4). There are certainly important considerations in this argument, and the idea of threshold practices is an appealing one.

There are also reasons for caution with the idea of threshold practices, however. Firstly, the boundary between doing and understanding is arguably more blurred in academic literacies than it is in subject knowledge. Secondly, the focus on practices seems closely related to the much-maligned study skills, deficit approach, in which student deficiencies can be 'fixed' by simply giving them a set of tools and tricks to use, rather than the academic literacies approach as proposed by Lea and Street (1998). It is arguably more important that students are supported to understand the purpose and nature of academic literacies, to ensure a deeper, rather than surface-level understanding, that allows them to adapt their use of academic reading, for example, in different contexts, purposes and assignments, rather than reducing this to a list of things that students should do. Indeed, from a Learning Development perspective, it is not our place to dictate what practice or strategy students should be using, but to work together with students, as partners, to help identify what practice or strategy may work best for them (Hilsdon 2011, p. 16; Sinfield et al. 2011). Thus, rather than dictating what students should do, TCs can play an important role in helping students identify aspects of academic reading were they may need to use or adapt different strategies to enhance their practice. Importantly, in this regard, TCs also focus on the "student and the student's experience of learning" (Barradell 2013, p. 269). Therefore, despite valid criticisms of some aspects of TCs, they do align well with Learning Development's own values in its mission to work together with students to develop their own academic literacies.

Methodology

Identifying TCs is a difficult task to which researchers have applied a variety of techniques, including: interviews, questionnaires, observations, workshops and focus groups (Abbott 2013; Basgier & Simpson 2019; Cousin 2009; Felton 2016; Gogan 2013; Irvine & Carmichael 2009). Regardless of the technique used, conversation and collaboration is regarded as central to the identification of TCs (Barradell 2013; Cousins 2009, 2010; Irvine & Carmichael 2009). This suggests that a consensus-building method is particularly useful. Consensus-building methods are often used to determine the extent to which people, experts or otherwise, agree on a contested issue, where there is a lack of scientific evidence (Jones & Hunter 1995, p. 376). Identifying TCs is certainly not a scientific procedure, and is one that, as noted above, requires consultation and collaboration with a broad audience of experts. For these reasons, the Delphi Method of consensus building was chosen as the methodological approach for this study.

The Delphi Method is a qualitative method used to build consensus and/or collect and analyse data between experts and practitioners in a particular field. Through the use of multiple rounds of communication, participants are able to discuss, debate and analyse their own views on a topic, as well as the views of fellow participants, in order to come to a joint decision (Cape 2004; Linstone & Turoff 1975). The use of different rounds allows participants valuable thinking time to gather their thoughts, react to others' ideas, conduct their own further research or even change their mind. This is particularly useful in consensus-building and the co-identification of TCs, which "takes time, reflection, discussion and most probably debate" (Barradell 2013, p. 272). The Delphi Method's focus on consensus through communication has also been criticised, however. For example, it is claimed that it lacks the rigorous standards usually expected in scientific research, and that unless collaborated with other evidence, it cannot be certain whether the correct answer has been found (Jones & Hunter 1995, p. 379; Sackman 1975). Linstone and Turoff (1975, p. 5), however, view this as a strength and argue that the Delphi Method is particularly useful when "The problem does not lend itself to precise analytical techniques, but can benefit from subjective judgements on a collective basis". The extensive range of methods used to identify TCs, as highlighted above, certainly suggests this is the case in the identification of TCs. Importantly, the Delphi Method has been used successfully in previous studies to identify TCs in other disciplines and literacies, including subject as diverse as information literacy (Townsend et al. 2016) and holocaust studies (Cape 2004). Furthermore, as academic reading crosses disciplinary boundaries, its multi-staged approach to consensus building is particularly well-suited to this study, which aimed to include as many voices and perspectives as possible.

The particular approach used for this investigation is that of an adapted "Delphi Exercise" (Linstone & Turoff 1975, p. 5-10). The researcher's position as a mediator between participants, rather than an instigator, is a defining feature of the approach used. Unlike similar studies (Townsend et al. 2016), no TCs were suggested by the researcher at any stage. This avoided one of the common downfalls of a Delphi study: "Imposing monitor views and preconceptions of a problem upon the respondent group" (Linstone & Turoff 1975, p. 6). The study included three rounds of debate and discussion:

- In Round One, participants were asked to identify their role from the three participant groups and give their thoughts on six questions about academic reading. After answering these questions participants were invited to suggest a maximum of three things they believe were TCs for academic reading and asked to give their reasons for their suggestions.
- In Round Two, participants were invited to discuss the TCs that had been suggested by other participants and collated by the researcher. This discussion centred on whether participants agreed or disagreed with the list of collated TCs for academic reading. If they agreed, they were asked to list the TC characteristics (Transformative, Irreversible, Troublesome, Integrative and/or Bounded) they believed each suggestion met. Alternative phrasings could also be offered if participants did not agree with that used by the researcher when grouping and collating the suggestions together.
- In Round Three, participants were asked to decide upon the specific phrasing of the identified TCs from those that had been contested in previous rounds. This was done through a simple vote; the phrase with the most votes was then chosen to represent that TC. Where any split decisions occurred, the researcher would have the deciding vote.

The selection of participants was an important consideration. Including as many relevant viewpoints as possible is essential in the success of Delphi studies (Goldschmidt 1996). Therefore, three main groups were identified and invited to participate to ensure a broad range of perspectives of academic reading were included. These three groups were: 1) academic staff and subject lecturers; 2) learning developers and librarians; 3) students. In some examples of Delphi-based studies, participants are chosen explicitly by the researcher, to ensure they are

'experts' (Cape 2004); however, as Jones and Hunter (1995, p. 378) warn, the direct selection of participants can potentially lead to bias. This could also potentially limit the diversity of ideas and perspectives amongst participants. As a result, although student participants were invited directly in order to ensure their equal involvement, an open invitation was sent to academic staff/subject lecturers and learning developers/librarians. Invitations were sent to three mailing lists: LDHEN@jiscmail.ac.uk (Association for Learning Development in Higher Education), SEDA@jiscmail.ac.uk (Staff and Educational Development Association), and tcs@jiscmail.ac.uk (threshold concept interest list). Academic staff and subject lecturers, as well as learning development and librarian participants came from different higher education institutions (HEIs) from a range of countries, and had different disciplinary specialisms. The student participants invited directly are all members of the University of Manchester Library Student Team. However, the majority of these students were new team members still undergoing their induction training at the time of the survey; therefore, the material was still new to them, and they were still largely unfamiliar with the Learning Development perspective of academic reading. Although the students all came from the same institution, there was still an important level of diversity amongst them. They are all from different disciplinary backgrounds, a mix of undergraduate and postgraduate level, and are from a range of nationalities. The diversity across the three participant groups ensured the consensus was built from a broad range of perspectives. Given this diversity, however, it could not be taken for granted that all participants shared a clear understanding of what TCs were. Therefore, in the initial email invitation, all participants were invited to read a paper by Meyer and Land (2003) to familiarise themselves with the underlying ideas and characteristics of TCs.

It was important to negate the traditional power imbalance between the three groups to ensure each was given equal weighting in building a fair consensus. Consequently, anonymous surveys, using SelectSurvey, were used, as opposed to workshops, focus groups or observations. In the words of Townsend et al (2016, p. 28), who followed a similar model, this approach ensured that "influence relating to professional reputation and personal demeanour is precluded", and the views of all participants are given equal weighting. Furthermore, although summaries of each individual group's answers to the six general questions in the first survey were identified and provided to the other groups, the individually suggested TCs were not identified as coming from either academic staff/subject lecturers, learning developers/librarians or students. This allowed each individual suggestion to be evaluated on its own merits, rather than on the position of the person who suggested it. The asynchronous approach also ensured that the discussions were not dominated by a single individual, or one of the three groups, which is perhaps more likely in a focus group or workshop. Although a face-to-face approach may have allowed for more in-depth discussions between participants, unless done online, which brings its own limitations, it would likely have precluded participants from different institutions and countries taking part.

Continued participation in this study was limited to those who took part in the first round and no new participants were invited after the close of Round One. Participants in Round One included: six academic staff and subject lecturers, eight learning developers and librarians, and fifteen students. Round Two saw ten students and four learning developers/librarians participate. Participation rose slightly in Round Three with a total of fifteen participants across the three groups: one academic/subject lecturer, three learning developers/librarians and eleven students. Such change between rounds is arguably an inherent limitation of the Delphi Method, particularly when using asynchronous surveys, as participants may drop out, lose motivation or not have the same time to engage in the process between rounds. This may have been mitigated by opening each round up with further open invitations to participate; however, participation was kept only within the initial participation group to ensure consistency and wider awareness of what went before within the consensus-building approach. In our aim for the co-identification of academic reading TCs, the lack of academic staff/subject lecturers in Round Two was disappointing.

The higher number of student participants was important in ensuring that the student voice was not absent from this discussion, which is a criticism often levelled at studies in the identification of TCs (Felton 2016, p. 3). In contrast, Shinners-Kennedy and Fincher (2013) believe that it is better to focus on teachers' identification of TCs, as they are the experts, whereas students are still developing their knowledge of an area, and, therefore, cannot know what counts as TCs. However, students are the experts in how they perceive, use and learn academic reading in their own right. It is for this reason that partnership and emancipation are at the core of Learning Development (Association of Learning Development in Higher Education [ALDinHE] 2019). As such, we cannot create a true consensus of academic reading TCs, if we do not include all the main practitioners with equal value.

Findings

Round 1

A total of 31 TCs were suggested by participants in Round One. Many of these suggestions were similar and overlapped with one another. Therefore, they were grouped together into eight broader TCs based on these similarities and overlaps. The full list of individual TCs and how they were grouped can be viewed at the following URL: https://tinyurl.com/TheshConc. The eight TCs that resulted from this first round were:

> TC 1: Academic reading is complex; understanding may take time and multiple readings.
> TC 2: Academic reading is intertextual and conversational; ideas and arguments are built through interaction and debate.
> TC 3: Academic reading is a critical activity; it allows us to build and develop our own understanding, which may agree or disagree with what we read.
> TC 4: Academic reading is purposeful and evaluative/selective; reading a text cover-to-cover is not always necessary.
> TC 5: Academic reading requires more than reading only the text itself; understanding the genre, social, chronological, cultural and political context is essential in fully understanding ideas and arguments.
> TC 6: Academic reading is active; understanding is developed through interaction and engagement with the text.
> TC 7: Academic reading is not an isolated activity; how and what we read directly effects our wider thinking, writing and planning skills.
> TC 8: Academic reading goes beyond the assignment/research; it enables us to reflect how knowledge and ideas connect to ourselves and inform our wider perspectives and identities.

Round 2

No objections were raised about how the TCs were grouped from the previous round. Similarly, as seen below, the majority of participants agreed that the broader TCs suggested did constitute as TCs. There was some debate, however, about how these TCs were phrased, and alternatives were offered for six suggested TCs.
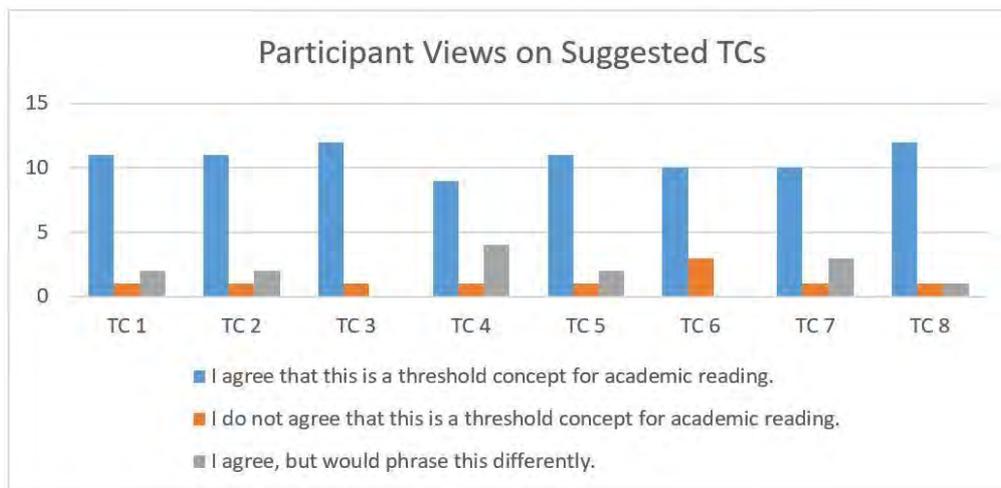
Figure 1. Participant Views

The justification, based on Meyer and Land's (2003) TC characteristics, of why participants believed these were TCs, alongside objections and alternative phrasings are recorded below for each individual TC.

TC 1: Academic reading is complex; understanding may take time and multiple readings

I agree that this is a threshold concept.	Number of times listed by participants.
Transformative	9
Irreversible	5
Troublesome	9
Integrative	3
Bounded	3
I do not agree that this is a threshold concept.	**Objections.**
	This could be said of different types of reading, and is not specific to academic reading
I agree, but would phrase this differently.	**Alternatives/Comments.**
Alternative	The complexity of academic reading means that understanding may take time and multiple readings.
Alternative	Understanding academic texts may take time and multiple readings.

TC 2: Academic reading is intertextual and conversational; ideas and arguments are built through interaction and debate

I agree that this is a threshold concept.	Number of times listed by participants.
Transformative	11
Irreversible	6
Troublesome	6
Integrative	11
Bounded	2

I do not agree that this is a threshold concept.	Objections.
	Academic reading does not involve ideas and arguments built through interaction and debate, rather it involves ideas and arguments based on facts.
I agree, but would phrase this differently.	**Alternatives/Comments.**
Alternative	Academic reading is intertextual and conversational; ideas and arguments are built through interaction and debate.
Alternative	Academic reading is entering into a wider conversation, debate or argument.
Alternative	Academic reading refers to other works and texts; ideas and arguments are built through interaction and debate.

TC 3: Academic reading is a critical activity; it allows us to build and develop our own understanding, which may agree or disagree with what we read.

I agree that this is a threshold concept.	Number of times listed by participants.
Transformative	11
Irreversible	5
Troublesome	5
Integrative	8
Bounded	2
I do not agree that this is a threshold concept.	**Objections.**
	It doesn't match the characteristics.

TC 4: Academic reading is purposeful and evaluative/selective; reading a text cover-to-cover is not always necessary

I agree that this is a threshold concept.	Number of times listed by participants.
Transformative	6
Irreversible	7
Troublesome	2
Integrative	3
Bounded	5
I do not agree that this is a threshold concept.	**Objections.**
	I didn't disagree but am unsure on this one. Most students know this before university but practice experience tells me not all do.
	Sometimes it is necessary to read a text cover to cover especially where it is lays out a concept that other scholars subsequently engage with.
I agree, but would phrase this differently.	**Alternatives/Comments.**
Alternative	Academic reading is purposeful and evaluative/selective; reading may involve

	using search terms, contents pages and indices to pinpoint the information needed/wanted.
Alternative	Academic reading is purposeful and evaluative/selective; reading a text in its entirety may not always be necessary.
Alternative	Academic reading must involve reading selectively in order to be purposeful and productive
Comment	I'm not sure if there isn't some overlap with reading being active - selection is making active choices about what you read...

TC 5: Academic reading requires more than reading only the text itself; understanding the genre, social, chronological, cultural and political context is essential in fully understanding ideas and arguments

I agree that this is a threshold concept.	Number of times listed by participants.
Transformative	10
Irreversible	7
Troublesome	5
Integrative	9
Bounded	2
I do not agree that this is a threshold concept.	**Objections.**
	This is too much to expect of a student at threshold level. Rather it is something that would develop gradually, later in their university life.
I agree, but would phrase this differently.	**Alternatives/Comments.**
Alternative	Academic reading is complex; understanding the genre, social, chronological, cultural and political context is essential in fully understanding the text.
Comment	I think the list of contexts is biased towards a humanities point of view and would be less relevant within science and engineering.

TC 6: Academic reading is active; understanding is developed through interaction and engagement with the text

I agree that this is a threshold concept.	Number of times listed by participants.
Transformative	6
Irreversible	3
Troublesome	3
Integrative	7
Bounded	2
I do not agree that this is a threshold concept.	**Objections.**
	I'm not convinced that this is about academic reading in particular - I suspect this is true of reading in general.

	Academic reading is a short and concise way to explain the information without any engagement of the reader.
	I agree that this is necessary, but I don't think it's a separate concept - this active engagement is also covered by concepts 8, 7, 4 and 3.

TC 7: Academic reading is not an isolated activity; how and what we read directly effects our wider thinking, writing and planning skills

I agree that this is a threshold concept.	Number of times listed by participants.
Transformative	9
Irreversible	8
Troublesome	4
Integrative	8
Bounded	0
I do not agree that this is a threshold concept.	**Objections.**
	Sometimes we do not agree with the views expressed in a text, in which case they do not influence our planning skills, decisions, etc.
I agree, but would phrase it differently.	**Alternatives/Comments.**
Alternative	Academic reading is part of a wider process linked to planning, researching and writing, as well as connecting ideas to life experiences.
Alternative	Academic reading is not an end in itself; it effects our wider thinking, writing and planning skills and decisions.
Alternative	Academic reading is not an isolated activity; what we read affects our wider thinking and how we read affects our writing.

TC 8: Academic reading goes beyond the assignment/research; it enables us to reflect how knowledge and ideas connect to ourselves and inform our wider perspectives and identities

I agree that this is a threshold concept.	Number of times listed by participants.
Transformative	13
Irreversible	6
Troublesome	5
Integrative	10
Bounded	0
I do not agree that this is a threshold concept.	**Objections.**
	I think this depends on what source is being read.
I agree, but would phrase it differently.	**Alternatives/Comments.**
Alternative	Academic reading has two purposes: to identify immediately relevant information and to share our thinking long term.

Round 3

In Round Three, participants debated the alternative phrasings that were suggested for six TCs in the previous round. The results of these can be found below.
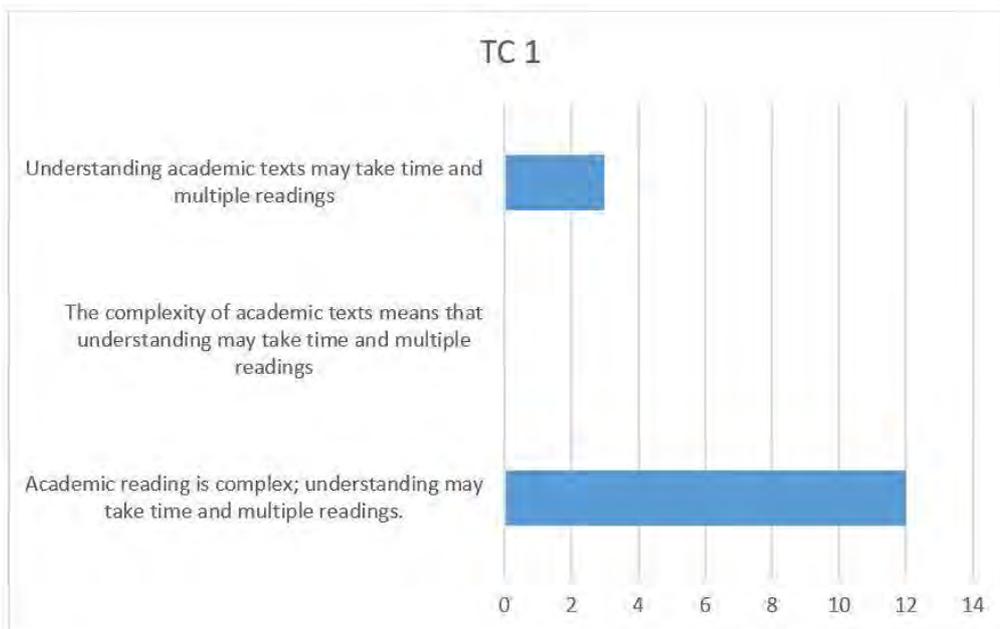

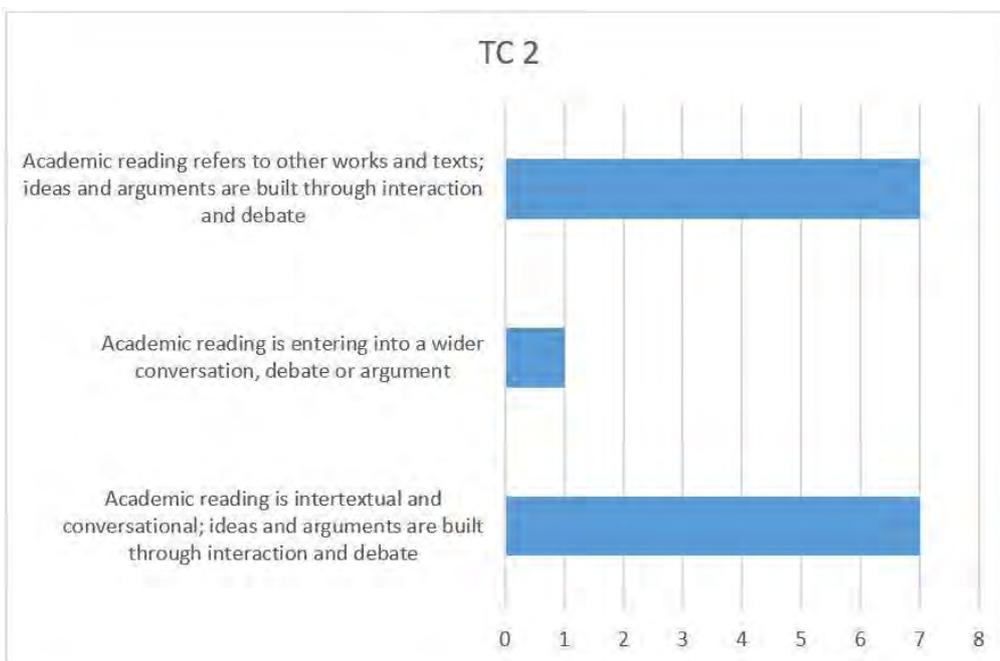Figure 2. Suggested Phrasings for TC 1

Figure 3. Suggested Phrasings for TC 2

As can be seen here, there was an even split between option one and option three for TC 2. As option one was suggested by a participant rather than the researcher, this shall be regarded as the preferred phrasing in this discussion.
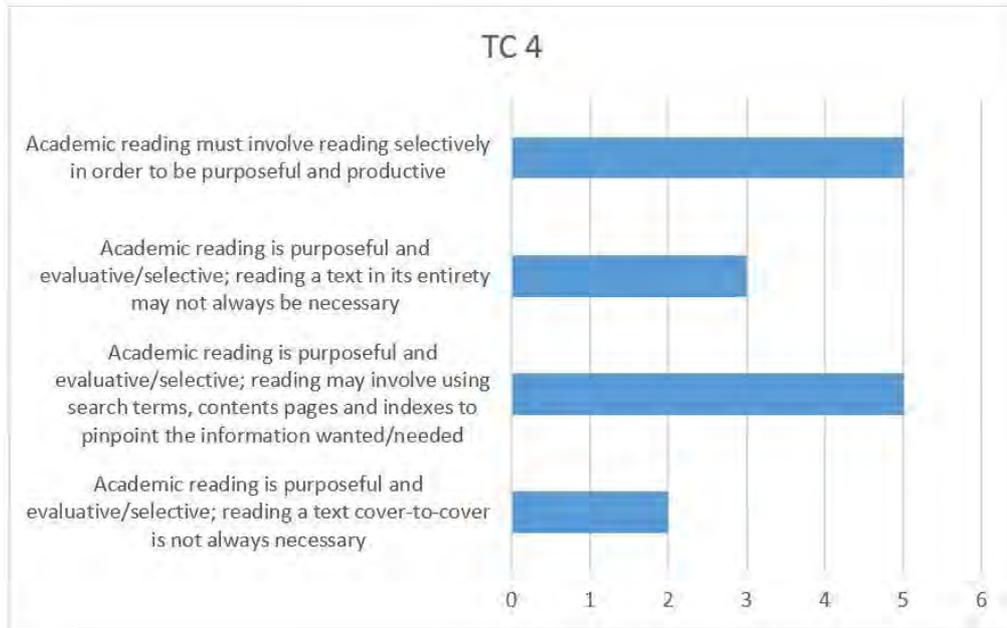

Figure 4. Suggested Phrasings for TC 4

Another split decision resulted from discussions on TC 4. Caution around the implied suggestion that reading can only be productive when it is selective in option one, means that the researcher's deciding vote went to option three here.
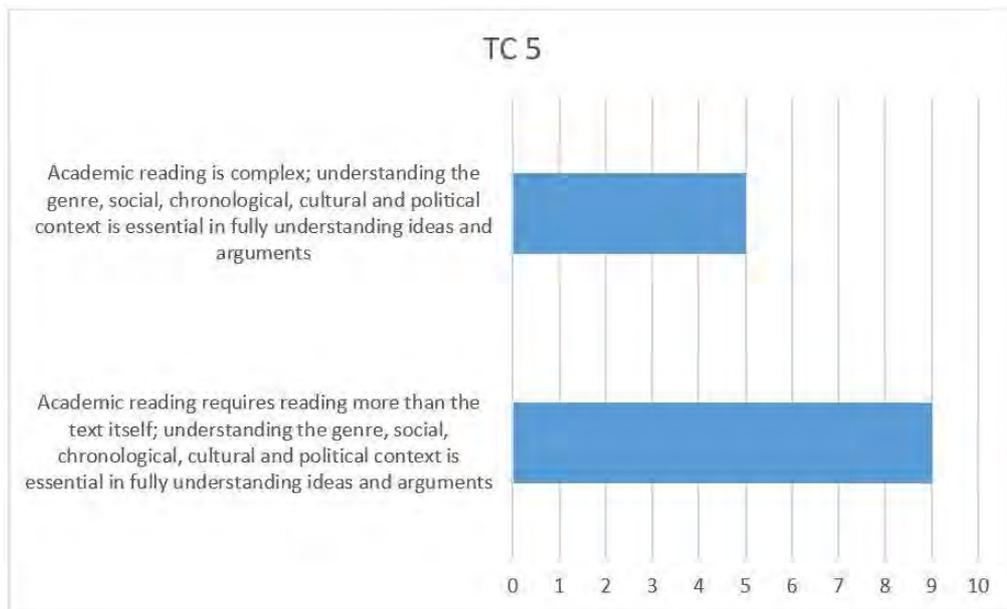

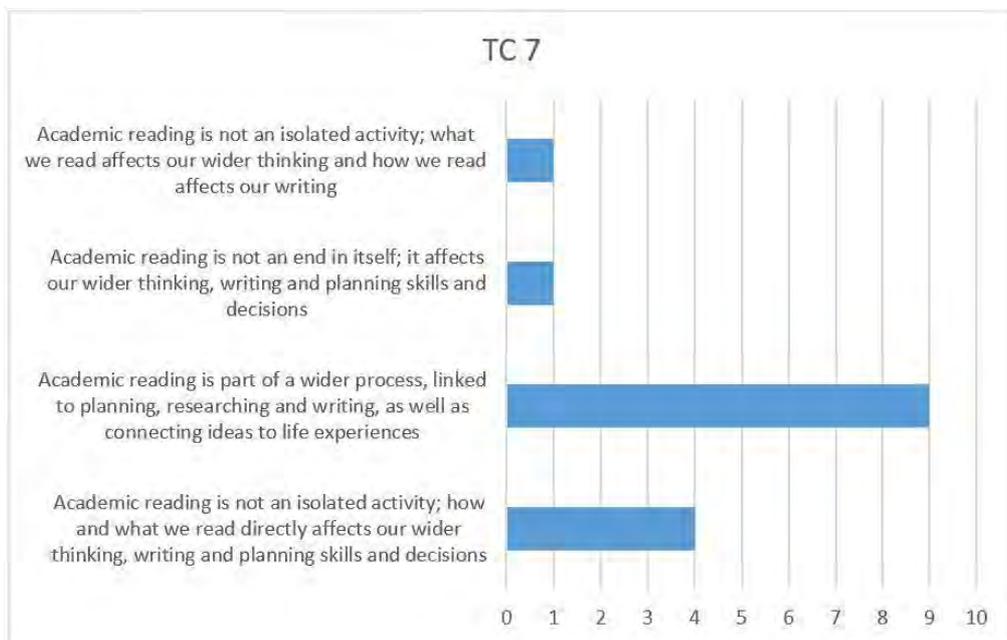Figure 5. Suggested Phrasings for TC 5
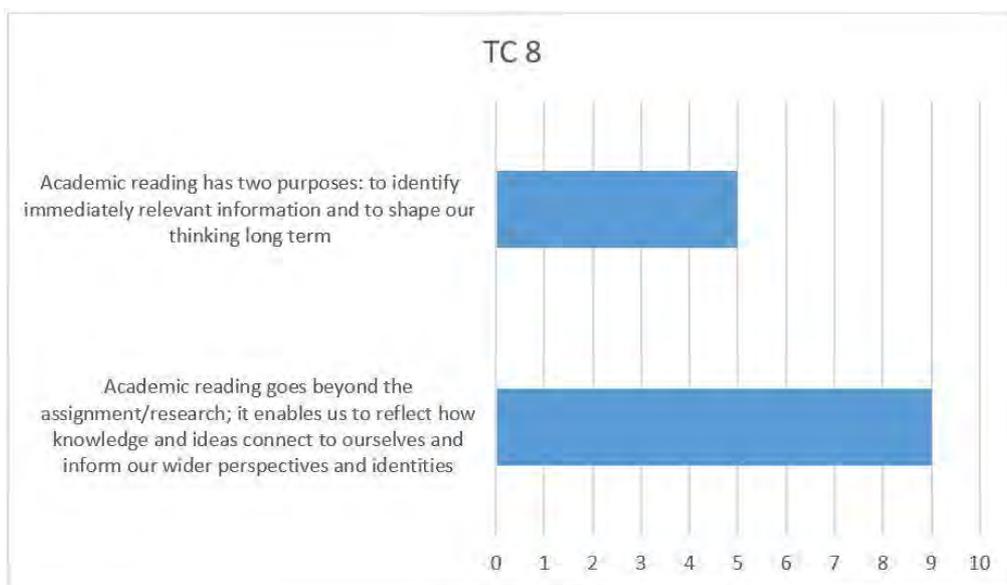
Figure 6. Suggested Phrasings for TC 7

Figure 7. Suggested Phrasings for TC 8

Following Round Three, the full list of co-identified academic reading TCs with altered phrasings was:

> TC 1: Academic reading is complex; understanding may take time and multiple readings.
> TC 2: Academic reading refers to other works and texts; ideas and arguments are built through interaction and debate.

TC 3: Academic reading is a critical activity; it allows us to build and develop our own understanding, which may agree or disagree with what we read.

TC 4: Academic reading is purposeful and evaluative/selective; reading may involve using search terms, contents pages and indexes to pinpoint the information wanted/needed.

TC 5: Academic reading requires more than reading only the text itself; understanding the genre, social, chronological, cultural and political context is essential in fully understanding ideas and arguments.

TC 6: Academic reading is active; understanding is developed through interaction and engagement with the text.

TC 7: Academic reading is part of a wider process, linked to planning, researching and writing, as well as connecting ideas to life experiences

TC 8: Academic reading goes beyond the assignment/research; it enables us to reflect how knowledge and ideas connect to ourselves and inform our wider perspectives and identities.

Discussion

An interesting observation from these findings is how similarly, in a broad sense at least, the three participant groups perceive academic reading. At least one suggestion from two of the three participant groups were present in each of the TCs listed at the end of Round One. Despite the different roles and purposes the three participant groups may have when reading academically or teaching academic reading, they all recognised these fundamental characteristics, both as individuals and as independent groups of practitioners. This is perhaps further evidence that TCs for academic reading certainly do exist.

The integrative nature of TCs is also visible in those identified in this study. There are clear links between the individual TCs, as also noted by one participant during the process. This underlines their interconnectedness and complementary nature; as a group they create a coherent and holistic understanding of academic reading. For example, there is an important interplay between the time it takes to read academically in TC 1 and the selective nature of academic reading in TC 4. These two TCs reinforce one another and work together to suggest that one method to deal with the time it takes to read academic texts is to read selectively and for a specific purpose, rather than reading a full text from cover-to-cover, which is likely to take much more time. Likewise, TC 2 and 3 together show that awareness of how arguments develop across multiple texts allow us to better develop our own ideas and critical thinking, as well as clarify why we believe some arguments over others. Elsewhere, TCs 3, 4 and 6 combine to highlight that direct engagement with texts at multiple levels is central to academic reading. There are other connections between the identified TCs, and it is likely that different readers will identify their own connections that are personal to them. Importantly, the TCs also support the view that academic reading is not simply about decoding information, but is a form of communication between the reader with themselves, and the reader and author (Mann 2000; Säljö 1982). For example, TCs 2, 3, 7 and 8 all highlight different elements of the dialogue that takes place between the reader and the text, and the effects this can have on the reader's wider development (Lea 1999; Saltmarsh & Saltmarsh 2008; Sengupta 2002, p. 2; Wisker & Savin, Baden 2009). The identified TCs, and the connections between them, therefore, reinforce the academic literacies approach to academic reading.

It should be noted that this list is not exhaustive, and debate will likely still exist on other aspects of academic reading that may constitute a TC. One area that this may be particularly true is how far the identified TCs may need to be adapted for different disciplinary contexts. The debates on how to phrase the TCs identified in Round Three of this study is evidence of this. As seen above, when discussing TC 3, one participant remarked that: I think the list of contexts is biased towards a humanities point of view and would be less relevant within science and engineering.

Likewise, different disciplinary perspectives of criticality (Moore 2013) may necessitate further nuance for TC 3 in particular when used in subject teaching. Nevertheless, the co-identified list can provide a useful starting point from which to further discuss, develop and teach academic reading in both broader and more specific perspectives.

In relation to the practices and concepts debate discussed earlier, the TCs identified in this study contain a blend of the two. Although TCs 1, 2, 7 and 8 appear to be straight-forward concepts, TCs 3, 4, 5 and 6 blur the lines between being both a concept and a practice. For example, TC 3 focuses on academic reading as a critical activity. Criticality itself can be regarded as both a concept and a practice. Learning developers are certainly aware that teaching criticality involves both raising awareness of what 'being critical' means as a concept and also introducing readers to a number of strategies and techniques (or practices) that will enable them to 'be critical' (Saltmarsh & Saltmarsh 2008, p. 262). Likewise, academic reading as selective and evaluative, as identified in TC 4, is both an important piece of knowledge and an umbrella under which a number of active reading practices can be held. This could suggest that for academic reading, and academic literacies more broadly, the concept vs practices debate is not as relevant as it is in subject knowledge. Indeed, this blending of concept and practice seems a defining feature of academic literacies themselves, and a key difference between academic literacies and subject-knowledge. Importantly, this reinforces the call for collaboration between academics and learning developers in the development of academic literacies (Wingate 2019). While academics are the experts in how academic literacies work within individual disciplines and subjects, learning developers are better placed to help students identify and develop strategies and techniques that will them to practice academic literacies effectively (Cairns, Hervey & Johnson 2018; Daddow 2017; Turner et al. 2017). This may also suggests there is a need for a new term that captures the blend between concepts and practices that exist in academic literacies.

In regards to the nature of the identified TCs of academic reading, 'transformative' was the most commonly cited characteristic. It was cited 75 times across the eight TCs as a justification for why participants stated 'I agree that this is a threshold concept'. It is perhaps surprising that 'troublesome' was the second least cited (39 times) characteristic. This seems to run counter to the claim that students do not arrive at university with the required academic skills (Hilsdon 2011). However, we should not overstate this and, indeed, it is important to remember that our participants included more than students alone. Perhaps then, this lack of the 'troublesome' and abundance of the 'transformative' is indicative of the implicit or hidden aspects of academic reading, that are not always taught explicitly in a reader's academic career. It may be that these TCs are not difficult for readers to understand, but rather that readers are not always aware they are an expectation or fundamental characteristic of academic reading. The 'troublesome' characteristic may be due more to the implicit nature of this knowledge, rather than its difficulty to grasp (Sengupta 2002; Staudinger 2017, p. 5; van Pletzen 2006 p. 106). Importantly, it has been found that lecturers and students have different expectations of reading, in the Humanities at least (Weller 2010). Differing expectations have also been found between students and tutors for academic writing (Jones, Turner & Street 1999; Lea & Street 1998). It is likely that students are not always aware of these differences, which, therefore, remain hidden from them. This is perhaps exasperated by the private nature of academic reading itself, which is largely done individually and in isolation (Rhead 2019), which means readers to do not always have the opportunity to learn and assimilate new reading approaches, and identify what they do well or not so well. Once these TCs are made clear to readers, their understanding of academic reading is transformed and expectations become clear. This is arguably evident in the fact that TC 1 was regarded as the most troublesome, suggesting that it is not the act of reading academic texts itself that people find difficult, but rather the idea that academic reading is inherent in all academic activities: to be academically successful, one needs to be a successful reader. Arguably even more so than writing, reading is something we all likely believe we are experts at by the time we enter academia, and is, therefore, not a developmental priority (Fairbairn &

Fairbairn 2001, p. 7; Sharma, Van Hoof & Pursel 2013). However, as with other academic literacies, academic reading at university, and within disciplines, comes with its own set of socially situated ways of meaning-making, that readers are unlikely to come into contact with outside of academia (Gourlay 2009; Lea & Street 1998) Therefore, when discussing and teaching academic reading, more emphasis may need to be placed upon the fact that academic reading is a skill that needs to be further developed just as much as any other, such as writing or critical thinking.

Interestingly, 'bounded' was the least given characteristic of the identified TCs (32 times). This seemingly supports earlier assertions that TCs in academic literacies are, due to their inter-disciplinary nature, not as bounded as subject-specific knowledge (Edwards 2011, p. 6; Felton 2016, p. 7). This certainly makes the fact that 'integrative', listed 59 times, was the second highest-chosen characteristic even more interesting. Together, this supports the defining feature of academic literacies, of which reading is a part: the need to develop them holistically and embedded within the discipline (Lea & Street 1998; Wingate 2006). Although TCs 1, 2, 4 and 6 could arguably be developed in separate extra-curricular study skills workshops, the focus of TCs 3, 5, 7 and 8, suggests that reading skills can only be developed deeply and holistically when they are used and developed in conjunction with subject-specific skills and knowledge. Academic reading and subject-knowledge are inescapably linked; to separate them would likely result only in superficial and surface-level knowledge and understanding of both.

Conclusion

The eight co-identified academic reading TCs has shown the potential the Delphi Method has to build a consensus between participants with different perspectives, positions and statuses. The coherent view of academic reading presented by the identified TCs highlights the benefits of involving academic and professional staff, as well as students, in the identification of TCs. In other words, expertise of academic literacies does not belong to only one group. Indeed, the collaborative approach taken here has arguably resulted in a more credible and holistic view of academic reading than would have been possible if only one group was consulted or even if one of the groups had been omitted.

The TCs identified reinforce existing ideas of academic literacies and related pedagogies. Firstly, that they cannot be developed in isolation through extra-curricular teaching, but must be embedded directly into the curriculum. Secondly, the implicit nature of current approaches to the teaching of academic reading and expectations of academic reading, must be made explicit and clear to students. Students should be directly enabled and empowered to develop and reflect upon their own academic reading. It is hoped that the TCs from this study will facilitate these two goals by providing identifiable waypoints, potential learning outcomes and explicit expectations that can be used in curriculum planning, workshop design and student reflection.

On a practical level, these TCs can be used in a number of ways to enhance the teaching and learning of academic reading. For example, they could be used to narrow down exactly what students and lecturers alike want learning developers/librarians to focus on during requested embedded sessions, allowing these workshops to focus more specifically on the needs of different student cohorts. Likewise, they may also help students plan and reflect on their own development, by identifying which TCs they need to work on and develop towards. This could be helpful in both independent learning and reflection-based assessments. Perhaps most importantly, as argued above, they can be used to make the implicit or hidden expectations of academic reading clear to students upon first entering higher education.

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