

Discursive psychology as a methodology to explore how multiculturalism affects use of learning technologies

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Abstract

Networked learning remains a new field and many methodological, theoretical and other perspectives are used to learn more about it. Moreover, there is encouragement for the field's interdisciplinary researchers to take alternative methodological approaches. This paper provides valuable insights into a methodological approach which is little used in networked learning research. It reports an exploratory study to establish the value of a discursive psychology lens to understand uses of technology by international learners, and specifically how the language students' use conveys their practices. The study was prompted when I questioned how multiculturalism might affect an institution's virtual presence and whether students from alternative cultures had varying online learning needs. Discursive psychology was selected as the methodological approach as it has the potential to show how the social world is enacted in a more insightful and sophisticated way than happens when qualitative data are accepted at face value. The study involved secondary analysis of an ESRC-funded dataset and this paper illustrates analysis of talk by four undergraduate learners from Africa and Asia. The paper shows how participants constructed their identities and gave meaning to their talk. It also exemplifies the dynamics of talk and the work undertaken via the expression of thoughts, and how these supplement the descriptive meaning of words. Aspects of what is emotional about participants' talk are highlighted, including their sense of struggle. A gap is found between students' uses of technology for learning purposes and what would be required in a networked learning environment. There is also evidence of threshold moments within learners' positioning. It is clear that educational experiences could be enhanced by educators recognising that students' needs vary, evolving over time. An argument to place the learner at the centre and to design from learners' perspectives to be better able to lead them forward from where they are regarding use of technologies to where learning can take place is made. Given this paper's focus on talk from international students it is particularly relevant that those in global online learning contexts appreciate the extent of meaning suggested by this paper's findings. A lack of such awareness carries with it a risk of not sufficiently appreciating what learners are thinking and this gap will leave educators ill-prepared to provide optimal learner-centric support structures.

Keywords

Discursive psychology, networked learning, threshold moments, positioning, multiculturalism

Introduction

This paper grew out of a study to explore a methodology little used in networked learning contexts. It reports on what is primarily an exploratory methodological study to establish the value of using a discursive psychology framework to understand uses of technology by international learners, and specifically how the language students' use conveys their practices. The study was prompted when I questioned how multiculturalism might affect an institution's virtual presence and whether students from alternative cultures had varying online learning needs. I wondered what I could learn about uses of technology for learning purposes that might be potentially valuable. This paper's significance lies in use of this unusual lens to extract meaning. Discursive psychology's focus on the dynamics of language and consideration of the actions performed as individuals express their thoughts interests me. Furthermore, I want to understand what Wittgenstein means by language as "the vehicle of thought" (2009, p. [329] 113) and wonder whether discursive psychology can illuminate learners' practices meaningfully. In focusing on use of this framework rather than on accounting for multiculturalism in networked learning I explain what is meant by discursive psychology and illustrate, via secondary analysis of talk by undergraduate learners from Africa and Asia, the potential of this framework to inform this field.

Background

A review on the back cover of 'Networked Learning: Perspectives and Issues' applauds this edited book for its insights into the exploitation of technologies to produce meaningful learning and, arguably, the networked learning community has come to view this text as a "line in the sand", establishing, as it does, that "the focus of networked learning is both learning and the network" (Jones & Steeples, 2002, p. 1). Jones and Steeples (2002, p. 2) set down an acknowledged definition of networked learning which is regularly upheld, e.g. Conole (2010).

Networked learning is learning in which information and communication technology (C&IT) is used to promote connections: between one learner and other learners, between learners and tutors; between a learning community and its learning resources.

Spector, in the foreword to this significant text, highlights the need for a more holistic perspective to understand what is happening to affect learning in "complex and dynamic" networked learning environments (2002, p. xvi). Indeed, much has been done to further inform networked learning since this book was published and various methodological approaches have been used, as has been made evident at each Networked Learning Conference since its inception in 1998. Similarly, in 2002 the Journal of Interactive Media in Education published a special issue on Theory for Learning Technologies. In his editorial Oliver reports the papers were "varied and eclectic", as were the approaches, topics and contributors' disciplines (2002 p. 1). He recognises the diversity and constant challenge, considering it "always impossible to tell quite what perspective might be brought to bear on your problem next" (2002 p. 1). Unsure that it would ever be possible to fully define such a fast changing landscape, he is fascinated by the revelations that new perspectives bring to similar topics. More recently, Conole published an informative chapter summarising the state of theory and methodology in networked learning (2013). This builds on debate in her positional paper for the 2010 Networked Learning Conference hotseat (2010). Even now, this is a new field and its interdisciplinary participants take many methodological, theoretical and other perspectives; ones which align with varying world views and epistemologies. Suffice to say that discourse analysis and specifically discursive psychology are not much featured.

It is clear that interdisciplinarity is central to research in this field and that "people need to bring a wide range of different skills, perspectives and research tools to bear upon a particular problem" (Conole, 2013, p. 26). This is my intention here. Coming from a human factors or ergonomics background where, historically, laboratory-derived data are prominent, my practice has foregrounded a much more participative and exploratory perspective. I came to value observational ethnographic and dialogical approaches to gain insights on complex, messy situations involving people and what is likely to work to improve their situations. It is this latter perspective I incline toward in considering learner-centric networked learning environments.

Culture, interaction and networked learning environments

Culture is assumed to be part of online interactions, with some arguing that culture is characterised by national identities where there is a confluence of views, beliefs, values and practices (Hofstede, 1986). McSweeney, meanwhile, argues this is too simplistic and that a more pluralist or multidimensional system exists – new technologically-mediated spaces so learners can construct identities through interactive practices (2002). Indeed, Goodfellow and Lamy believe that the complexities associated with culture make it inseparable, not only from technological, linguistic and educational aspects of online learning but also from matters like curriculum, assessment, language, interaction, collaboration and pedagogy (2009). They see "implicit questions that a 'cultural' perspective throws up explicitly: who the participants are, what determines how they relate to each other, who values what and why, who has power and who has not." (2009, p. 1). Discursive psychology has occasionally been associated with researching multiculturalism and networked learning, so my usage is not entirely unwarranted. For example, Friesen (2009) uses it as a methodological lens regarding computer-mediated interactions. Likewise, Ladegaard (2009) looks at cross-cultural teleconferencing and humour.

Discursive psychology

Discursive psychology is a form of discourse analysis – "a way of finding out how consequential bits of social life are done" (Wetherell, Taylor, & Yates, 2001, p. 2) and Wittgenstein (2009, p. [329], 113) in portraying language as "the vehicle of thought" was an influence on the development of discursive psychology (Potter, 2001, p. 42). In fact, whatever kind of discourse analysis is being done, it has to amount to much more than treating talk and text as the expression of views, thoughts and opinions, as standard survey, ethnographic and interview research often does; arguably, "analysis means a close engagement with one's text or transcripts, and

the illumination of their meaning and significance through insightful and technically sophisticated work" (Antaki, Billig, Edwards, & Potter, 2003, p. 10). Discursive psychology is a hybrid approach to discourse analysis and "embodies many of the tensions between fine-grain analysis and more macro-social discourse work" (Wetherell, 2001, p. 189). For discursive psychologists the objects of study are social interactions mediated by discourse rather than the more traditional psychological considerations of hidden internal cognitive processes; and discursive psychologists study "the ways that language is used in practice ... to observe directly what now appears to be hidden and secret" (Billig, 2001, p. 210). Discursive psychology's focus is on the talk of naturally occurring social interactions "through which people live their lives and conduct their everyday business" (Edwards, 2005, p. 258). Discourse is used to actively construct internal states such as beliefs, motives, intentions and feelings (Wetherell, 2001, p. 187). Indeed, "attention should be paid to the ways in which people talk about their memories, perceptions and emotions" to facilitate study of "the processes of thinking" (Billig, 2001, p. 212). So, in using a discursive psychology framework psychological themes are considered via application of methods and principles from discourse analysis.

Methodology

Dataset

This study undertook secondary analysis of a dataset distributed by the UK Data Archive. The dataset was created, deposited and the copyright retained by Gu, Schweisfurth, and Day (2008) whose study 'International Students' Intercultural Experiences: A Comparative Study, 2006-2008' was sponsored by the Economic and Social Research Council (ESRC). None of these aforementioned parties bears any responsibility for the further analysis or interpretation represented by this paper. The anonymised interview data met the archive's ethics standards; likewise, my application to use this dataset was approved. The original study did provide participant information sheets and obtain signed consent forms, and participants consented to the dataset being archived for re-use. Originally, eleven case study participants were selected from a questionnaire survey of 1,288 international undergraduates at four UK universities. The researchers used semi-structured interviews to draw on participants' evolving experiences. I anticipated that responses to questions about study experiences would include content related to use of technologies, hence choice of this dataset for secondary analysis. The interviews were in English though this was not the participants' primary language; however, most survey participants (80%) had reported confidence in use of English for learning (Gu et al., 2008).

Data selection

The original corpus of data comprises 41 interviews with 11 students. I focused on nine females from Asia (5), Europe (2) and Africa (2), excluding the data from the two male students. First, I read two interviews for four students, marking and coding to identify categories using NVivo8 software. Significant terms by which to search the dataset electronically were identified, speeding up the process. The quantity of data remained large as my 'use of technology' categories produced 240 references – the most frequent being: telephone; internet; computer; and e-mail. Further selection occurred. Coding the data categorised as 'internet' was time-consuming so my focus returned to the original four students, designating each 'use of technology' reference as learning or social. Restricted references for Rina and Sophie persuaded me to include one further case, Guzal, chosen because she is also from Asia and her transcripts contain pertinent data. Table 1 summarises the excerpts identified for each of five students. These 17 excerpts (11 pages) representing use of technology for learning purposes were printed and keywords highlighted. Then four excerpts (2 pages of the 705 page dataset) were selected for analysis.

Name	Country of origin	Use of technology (No. of references)	Learning purposes (No. of excerpts)
Guzal	Kazakhstan (Asia)	7	2
Raveena	India (Asia)	12	6
Rina	Malaysia (Asia)	3	1
Sophie	Mauritius (Africa)	4	2
Tris	Cameroon (Africa)	16	6
Total		42	17

Table 1 Excerpts (number) related to use of technology for learning purposes by participant

Analysis

Drawing on Hsu and Roth's (2012) approach to discursive psychology excerpts from four of these five students were analysed. This approach focuses on how language is used to achieve social practices – drawing only on what is said rather than any extraneous associations. It highlights the plurality of statements, reformulation of interviewer's questions, and provides evidence of work done during the interview. Hsu and Roth stress the spontaneity of causal reasoning to provide justification – linking this with the interview context. Similarly they note instances of extreme case formulation to produce emphasis and legitimise claims; drawing on witnesses to provide corroboration; using disjunctive conjunctions such as “but”; and building contrasts. Footing (use of plural pronouns to distance or minimise blame) minimises speakers' stakes and shifts in footing manage identity portrayal. Next, analysis of excerpts from Sophie, Tris, Guzal and Raveena are presented and emotional aspects of their talk are then highlighted.

Sophie

From a descriptive perspective Sophie hasn't used the internet for learning before and has no experience of receiving feedback via an online learning environment (see Figure 1). Her previous face-to-face experience is altogether more personal, though she gets used to this new approach. A discursive psychology perspective suggests more meaning from the same excerpt. Sophie builds her image, positioning herself strongly four times:

- 1 "because we don't have" (L4)
- 2 "I didn't get that (L7)
- 3 "but to get used to it now" (L9)
- 4 "yes" (L12)

(N.B. L= line number in original transcript – see Figure 1)

1	Interviewer:	... aren't so different and... how about the resources and things? Are there ...
2	Respondent:	Oh there it was difference, ya...
3	Interviewer:	How so ?
4	Respondent:	because we don't have any like, like getting like our feedback sessions from the Internet like which questions we did wrong, things like that...
5		
6	Interviewer:	Right, right.
7	Respondent:	I didn't get that. I mean, it's a bit more... like in Mauritius it was more personal, like because it was a small class but... at first it was a bit like I lack some personal touch but to get used to it now...
8		
9		
10	Interviewer:	Presumably, even though you didn't use the Internet and e-mail for that purpose, in Mauritius, but you were used to using those kinds of things, ya...
11		
12	Respondent:	yes, and not for education...

Figure 1: Excerpt from Sophie's interview

Sophie works up a causal explanation to justify her position (L4/5), strengthening her sense of self. She moves from the anonymity/protection of “we” (L4/5) to the confidence of “I” (L7/8) and in linking herself with others shows that her experience is shared, perhaps emphasising it is not her that is lacking. Similarly, repeated use of “like” (L4) may imply hesitation as she builds confidence on the topic. She identifies vulnerability – something that was missing for her (L8/9), having first built a contrast with her previous experience in a different country (L7/8) – lack of familiarity (L4/5), variation in size (L8) and how she feels (L8/9) are noted. A transition is made though: “get used to it now” (L9). Instances add richness and meaning to her explanation, further justifying her position: “feedback sessions” (L4), “questions” (L5), and “small class” (L8).

Linked to her initial positioning (L4) is an anticipation of an altered version “because we don't have any”. In other words she is going to talk about something different from where she is initially positioned. Might this be interpreted as a point of struggle – a threshold she recognises and then crosses: “get used to it now” (L9)? Thus reaching an endpoint where a threshold moment occurs and is almost brusquely brushed-off, though nevertheless mentioned – subtle highlighting emphasising the moment. So, her narrative progresses from a position not only of no experience of receiving feedback online but one where, in Mauritius, she couldn't be expected to have had experience, to a new position where the event is sufficiently familiar to speak of it casually. Importantly, she identifies something that is missing – a point of contrast – the absence of the personal touch. Her second endpoint “not for education” (L12) affirms her progress in using technology for learning, thus emphasising both her innate ability/skills regarding use of technology and highlighting, in an understated way, her achievement; thus re-emphasising the threshold moment – a subtle highlight.

Tris

The descriptive utterances comprising Tris's talk show she is unaccustomed to learning using computers (see Figure 2). She positions herself:

- 1 "I'm learning" (L4/5/12)
- 2 "I work" (L14)

Also, she provides instances to expand on her position: "type assignments" (L9); "not use a computer" (L10); and "opening packages" (L16). The endpoint is highlighted: "I'm learning computer skills" (L12), and inserted between two contrasting situations where computer skills are alien, each of which acts as a foil for her ability (L5-6/17-18). Similarly, extreme case formulations exist: "throughout" (L9); "don't even" (L18); and "real trouble" (L18-19) to provide emphasis.

1	Respondent:	They give you notes, they lecture and you write out notes, handwritten notes.
2	Interviewer:	Yes.
3	Respondent:	You go and read. Questions are there. You answer your question. Here, you have
4		so much research to do. It's something new, I'm learning. Writing a lot of
5		essays, which is something new I'm learning. In Cameroon we're not so much
6		studied with electronics, using computers, you have to like type, no.
7	Interviewer:	No computers.
8	Respondent:	There are computers but it's not part of the learning thing, like you have to like
9		type assignments, no. So you can throughout your educational career in
10		Cameroon not use a computer if you chose not to.
11	Interviewer:	I understand what you mean.
12	Respondent:	I'm learning computing skills.
13	Interviewer:	Are you going to lessons for that?
14	Respondent:	Not really because I work in a call centre.
15	Interviewer:	Right, so that helps? (laughter)
16	Respondent:	Opening packages, software you know. So totally different new experience. I
17		have a friend in the US who had to stop a lecture and say, 'Excuse me, in
18		Cameroon, I don't even know how to use a keyboard, so you've got a real
19		trouble on your hands'. And the lecturer said, 'We'll take it gradually'.

Figure 2: Excerpt from Tris's interview

Guzal

Figure 3 ostensibly shows Guzal is very familiar with using the internet, particularly electronic resources. Guzal positions herself strongly:

- 1 "Oh yes, I am very proud" (L5)
- 2 "most of the time" (L10)
- 3 "I am always in the Internet" (L14)

1	Interviewer:	Ya, that's right. So they might regret it. How about your studying, I mean what
2		makes that easier for you? You talked about English for international students
3		you know, and so on, and the help they are giving you. Do you find that you can
4		get enough resources, can you get the materials that you need?
5	Respondent:	Oh yes. I am very proud of our library and also, I don't go often to the library,
6		but I use e-library. And I am so happy that I have Internet in my room and I have
7		like a xxxxxx (0:26:05) version so when I open my laptop, like the world is on
8		my table
9	Interviewer:	Ya ya. Fantastic. that's great so...
10	Respondent:	So I'm mostly... most of the time I work with electronic resources
11	Interviewer:	Ya, and was that something you had to learn once you got here, or were you
12		already used to use the Internet a lot before you came?
13	Respondent:	I used to use Internet a lot and some of my friends called me like: "email-
14		Internet-addicted girl" because I am always in the Internet. But the thing is that
15		here, in Kazakhstan we don't ...

Figure 3: Excerpt from Guzal's interview

Guzal uses "our" (L5) to denote a shared entity linking her with fellow students; whilst elsewhere her use of electronic resources is subject to a confident "I", also denoting a personal or solitary state. The strong positioning in L5 is worked up (L5-8) and is specifically justified by a causal explanation (L6/7) facilitating an endpoint: "world is on my table" (L7/8). This endpoint is reinforced to ensure clarity: "most of the time I work with electronic resources" (L10). The metaphor in L7/8 provides an image of the immense nature of the electronic resources Guzal can access. This metaphor utilises extreme case formulation, as do the phrases "a lot" (L13), "always" (L14), "email-Internet-addicted" (L13/14) and, to a certain extent, the phrase "most of the time" (L10), each instance adding emphasis. Similarly, use of double emphasis such as "Oh yes" (L5), "very proud"

(L5) and “so happy” (L6) also reinforces the strength of her meaning. Continuing to work up her construction (L13-15), her claim positions previous internet use: “I’m always in the internet” (L14), and this is given credence by offering eyewitness opinion: “email-Internet-addicted girl” (L13/14). Thus Guzal presents a strong, emphatic construction of her pre-existing and on-going capability to use e-resources. Action is promoted by terms such as “use” (L6), “open” (L7) and “work” (L10) – all of which reinforce Guzal’s engagement. It is also interesting to note the frequency with which nouns (i.e. names of things) are used to root her narrative: “library” (L5), “e-library” (L6), “room” (L6), “world” (L7), “table” (L8) and “internet” (L13). Guzal does not appear to discriminate between physical and virtual places.

Raveena

Raveena has easy access to a computer, its use presumably interrupting learning (see Figure 4) because she notes elsewhere that she “sit[s] in front of the computer all day”. Interestingly Raveena considers her initial response of “about four or five” hours work a day (L2) to be sufficient for the interviewer’s question (L1). However, highlighting it with “only” (L2), leads to complex positioning employing contrastive devices. First, her response invites a supplementary question, illustrating the interviewer’s attempt to probe (though asking this closed question may have generated a one word numerical response) (L3). Second, it establishes the subsequent pattern of further justification – perhaps indicating complicity in fully informing the interviewer; regardless her second response adds considerably to the richness of the data.

1	Interviewer:	How many hours do you work a day on average?
2	Respondent:	Only about four or five. I should be doing a lot more.
3	Interviewer:	How many hours do you think you should be doing?
4	Respondent:	A minimum of eight to ten. Right now I don't really have the time to waste but
5		as long as you are on the internet there are so many distractions and somebody
6		will come on line and want to talk and you get an email from somebody and you
7		just reply. I know I can do more work on my projects but I never compromise
8		my leisure or my sanity for that. I'm a last minute worker so me and the other
9		girl who is from my class = what she will do is to spend two months doing the
10		research and getting all her data together because she has trouble with English.

Figure 4: Excerpt from Raveena’s interview

Raveena positions herself five times (the first three also anticipating altered versions):

- 1 “I should be doing a lot more” (L2)
- 2 “I don't really have the time to waste” (L4)
- 3 “I know I can do more work on my projects” (L7)
- 4 “I’m a last minute worker” (L8)
- 5 “she has trouble with English” (L10)

Confessional-like statements deployed at both L2 (“should be”) and L4 (“don’t really”) contrast, respectively, with the previous and subsequent sentences. Later, recognising her ability to change (L7) she establishes this as unachievable – reinforcing credibility with an extreme case formulation “never compromise” (L7) – leisure and sanity thereby taking precedence. Similarly, “a lot” (L2) and “so many” (L5) represent additional extreme case formulations, adding emphasis. Her fourth positioning (L8) seeks to justify being “a last minute worker” by contrasting herself with another student who takes longer “because she has trouble with English” (L10). By implication, Raveena is competent in English and subsequently might reasonably achieve her work at the last minute and in fewer hours. Thus the instance of the “other girl” (L8-10) acts as a foil to Raveena’s practice. It is further noted that in working up this construction (L4-7) Raveena justifies herself by offering a causal explanation for how time is wasted (L5) by internet related-distractions (L5/6) such as talking online (L6) and replying to email (L6/7) – the word “but” being an indicator (L4&7). However, responsibility for these distractions is attributed to “somebody” else (L6) and her active involvement “just reply” (L7) is played down. It is as though Raveena is powerless – a victim of circumstance. Again, in this excerpt action is profiled: “doing” (L2), “on the internet” (L5), “talk” (L6), “reply” (L7), “work” (L7) and “doing” (L9). Similarly, “the internet” is profiled as a place to “come on line” (L6). Raveena’s construction builds support for her original response – she works four or five hours a day – perhaps developing her narrative to justify the adequacy of this. The strength of the construction is reinforced by the frequent use of “I”. Maybe a potential dilemma is established? Despite noticing it Raveena sees nothing problematic – perhaps she has yet to cross a threshold. This seems akin to unconscious incompetence – she has noticed the need to justify her working hours but not moved to conscious incompetence where she might accept responsibility for addressing the distractions.

What is emotional about this talk?

In terms of what is emotional about this talk, Sophie's talk contains a vulnerability and struggle followed by personal achievement. There is an unfolding drama and her words dramatise emotion. Taking this further: emotion can be a 'public disturbance' – a 'commotion' – this resonates with her sense of struggle – a disturbance between her previous position and the one she is implicitly expected to achieve by her teachers. Recognition of this vulnerability reinforces the transition required. There is a sense of action as the words do their work. There is also this sense of movement and change with Tris – any struggle she feels is made low key by the more extreme instances she utilises. The extreme case formulations and double emphasis used by Guzal in particular, provide a boundless energy. Whilst in Raveena's case the same two devices act to establish her case.

So what! Is discursive psychology helpful to networked learning?

So, is discursive psychology a methodological approach which might be helpful to research networked learning? Successful use of technology for learning may require a transition from a previous position to a new one and this can represent a struggle for learners. These students illuminate varying positions regarding threshold moments: Guzal and Sophie seem to have achieved a new threshold, whilst Tris recognises the progress she is making and Raveena, perhaps, is not yet aware of a threshold. Moreover, it seems that the personal touch matters and ways of recognising individuals deserves a strong focus in networked learning contexts, to replicate what is identified as a desirable feature by some of this study's participants. Thus, there is a strong argument to place the learner at the centre and to design from learners' perspectives to be better able to lead them forward from where they are regarding use of technologies to where learning can take place. Anticipating the need for learners to make transitions and designing in support to assist such transitions during preparation of networked learning programmes is surely a tangible goal for educators? Equally, where recurrent challenges are identified the learner might be helped to make smoother progress to minimise unnecessary struggle which may distract their attention from learning about their subject. Perhaps a networked learning needs analysis might assist this focus?

Analysis of this study's dataset was found to be relevant to the research question and one advantage of the material arising spontaneously from questions unrelated to use of technology is that although the data are not technically "natural", they are as natural as possible for an interview context and the extracts selected were suitable for this study's purpose. The effort here was on trying to use a discursive psychology framework and I found this a time-consuming, analytical methodology. A primary research study would allow collection of data more closely related to the topic being studied, maybe reducing the proportion of time required to sift it, and consequently enabling more extensive and contemporaneous analysis. Were it possible to identify naturally occurring talk related to use of technology for learning this would be apt, e.g. discussion during study skills tutorials. The analysis process was complex but overall a surprising amount of meaning emerged from the data. Furthermore, the commonality of the devices used to create this meaning was unexpected.

Conclusion

This study was prompted by curiosity about how multiculturalism might affect an institution's virtual presence and whether students from alternative cultures had varying online learning needs. Methodology has predominated over the issue of multiculturalism to explore how such knowledge might be gained. The findings provide valuable insights into a methodological approach little used in networked learning research and illustrate the kind of knowledge a discursive psychology lens can reveal. This paper shows how participants constructed their identities and gave meaning to their talk. Furthermore, it exemplifies the dynamics of talk and the work undertaken via the expression of thoughts, and how these supplement the descriptive meaning of words. The data spoke effusively and the utterances were found to be much stronger than their description alone, giving a richer perspective on participants' practices. This understanding helps to bring meaning to Wittgenstein's concept of language as "the vehicle of thought" (2009, p. [329], 113).

Based upon analysis of this dataset, there is a gap between students' uses of technology for learning purposes and what would be required in a networked learning environment. This is important knowledge in itself. It is also vital to recognise that students seek to achieve perhaps multiple threshold moments. What is clear is that educational experiences could be enhanced by educators who recognise that students' needs vary, evolving over time. Maybe a responsive, personalised learning environment might assist student success? Indeed, preparedness for study in networked learning environments might reasonably be expected to vary among students and further study exploring multicultural online learning needs is suggested. Thus, the paper raises questions worthy of further study. What would a larger study reveal? Might there be differences between students from different cultures? Where and how should educators focus their attention during course design and implementation?

Use of this framework has the potential to inform the field of networked learning and an ability to utilise discursive psychology can provide an unusual resource for the educator, benefiting student learning. In a networked learning context dialogue and its meaning is crucial and an appreciation of how language transports thought is potentially advantageous. Indeed, a discursive psychology perspective might be used to gain valuable insights into a wide range of networked learning interactions. Further work to explore this topic is likely to be beneficial to the networked learning community. Given this paper's focus on talk from international students it is particularly relevant that those in global online learning contexts appreciate the extent of meaning suggested by this paper's findings. A lack of such awareness carries with it a risk of not sufficiently appreciating what learners are thinking and this gap will leave educators ill-prepared to provide optimal learner-centric support structures.

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