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Disqus Website-based Commenting as an e-Research Method: Engaging doctoral and early-career academic learners in educational research

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This article presents an adaptation of established qualitative research methods for online focus groups by using the *Disqus* website-based commenting platform as a medium for discussion amongst doctoral and early-career academic learners. Facilities allowing internet users to comment on the content of web-pages are increasingly popular on news websites, social media, and elsewhere. This research deployed this technology as a means of hosting a group discussion in response to preliminary findings from a study into the teaching and learning of social research methods. This article explores the methodological and technical considerations associated with this method and presents an analysis of the data collection process. e-Research paradata generated by the website reveals how learners engaged with the discussion, whilst a thematic analysis of the comments themselves explores the nature of the qualitative data generated from responses. Website-based commenting appears to have potential as a means of facilitate learners' engagement in educational e-research, especially when faced with constraints of distance, time, or access. However, methodological challenges may also arise when recruiting participants and sustaining discussion using this method.

Introduction

The Internet has had a transformative impact on the way that knowledge is generated, shared, and consumed. The era of so-called Web 1.0 offered the ability to access an unprecedented corpus of information, together with the benefits of electronic communication, for millions of users. Web 2.0 then denoted a shift towards mass participation in content creation, social networking, and data sharing for billions of Internet users. This evolution has had a profound influence on education and social research, helping to overcome temporal and spatial barriers, extend participation, and foster novel means of knowledge production and exchange. As a result of two decades of methodological refinements, the Internet offers increasing opportunities for qualitative e-research to engage with learners and teachers, whether within virtual learning environments (Shaw 2013), online learning communities (de Laat et al. 2007), virtual reality (Dickey 2005), or by conducting individual (e.g. James 2007) or group (e.g. Lim and Tan 2001) interviews online. Yet, as Hine (2005) reminds us, cyberspace may also constitute a 'troubled territory' within which a combination of new and long-standing methodological obstacles must be navigated.

This article examines the challenges and opportunities arising from an adaptation of online focus group methods to engage doctoral and early-career researcher (ECR) learners utilising *website-based commenting* via an existing platform called *Disqus*. Also known as integrated online discussion forums (Birch and Weitkamp 2010), website-based commenting is an increasingly popular means for web-users to post anonymous or pseudonymous comments in response to news articles, blogs, social media, and other content. The ability to comment on web-based content has been argued to constitute a novel and democratic medium for online dialogue (Weber 2013). The method developed here aimed to capitalise upon the affordances of website-based commenting as a means of asynchronous group discussion. As with other approaches for online group interviews, this method reproduced features of face-to-face focus groups (such as a common theme, a facilitator role for the

researcher(s), and opportunities for participants to pose as well as respond to questions). Website-based commenting was envisaged as a way to enhance these features by integrating group discussion within web-pages that provided a substantive stimulus for discussion and response (in this case, summaries of emerging themes from earlier phases of the research).

The research itself explored how social research methods are taught on short courses provided for researchers and academics at doctoral level and beyond (Kilburn, Nind, and Wiles 2014a). Within the burgeoning literature on pedagogy for doctoral training, observers have noted that learners (and supervisors) are generally left to rely on advice books that 'ossify doctoral research and the dissertation to formulaic axioms that ultimately serve to bolster a *this-is-how-you-do-it* position' (Kamler and Thomson 2008, 513). In the UK, moves have been made to address this by identifying areas of demand for research training amongst doctoral and early-career researchers (Moley, Wiles, and Sturgis 2013). In general terms, however, doctoral learners themselves remain a comparatively under-studied group (Agee and Uzuner Smith 2011). Similarly, in the case of early-career researchers (ECRs) a limited body of research has typically focused either on issues of productivity (Williamson and Cable 2003) or career progression (Bazeley 2003). However, comparatively little research has engaged directly with the question of how social research are taught and learnt as part of the academic career (Kilburn, Nind, and Wiles 2014b). Our research sought to address this gap through a qualitative engagement with learners' experiences and perceptions of research methods teaching and learning. The online engagement with UK-based doctoral and early-career researchers discussed in this paper constituted a final phase in a sequential, multi-method research design, with the aim of engaging these participants in dialogue and feedback in response to themes that had already emerged from our research.

In order to situate this approach within the wider context of qualitative e-research, the first section of this article offers a brief overview of existing methods for online focus groups, followed by an introduction to website-based commenting as an alternative medium for

discussion. The second section of this paper offers a methodological account of the context in which this research design was formulated, the various methodological and technical considerations involved in the development and implementation of the research instrument. The third section of this article considers the outcomes of the research, firstly in terms of how learners engaged in the website-based commenting exercise and secondly in terms of the potential of the responses to yield qualitative data.

Group Discussions in e-Research

Online discussions constitute an established qualitative e-research method, both in education and in social research more broadly. 'Website-based commenting' offers an alternative means of convening, stimulating, and moderating such discussions.

Online focus groups

Web-based focus groups are increasingly used as a method of collecting qualitative data for social research (Hooley, Marriott, and Wellens 2012). Online discussions are also used to support teaching and learning, especially within higher education (Hammond 2005). Previous research has engaged learners in online focus groups for the purposes of qualitative e-research, with the case of distance learners (Conrad 2009; Grays, Bosque, and Costello 2008), learner-practitioners (Kenny 2005), or more broadly, for research with teachers (Sinclair 2009). Internet-based group discussion has therefore been established as an effective medium 'for the creation and elaboration of online narratives' surrounding academic life (James 2007, 973). Parallels are often drawn with the key characteristics of face-to-face and online focus groups. Turney and Pocknee (2005) adapt Krueger's (1994) criteria to define online focus groups as; involving participants with a shared interest or involvement in the particular topic at hand, but who are otherwise be unfamiliar to each other; comprising enough people to reflect a diversity of views, but few enough to allow focused discussion, and; to be convened for the purposes of gathering qualitative data from discussion.

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There are a number of rationales for convening focus groups online. Perhaps foremost is the ability to overcome temporal and geographical constraints (Turney and Pocknee 2005), while offering a neutral space for discussion in which anonymity can more easily be ensured (Mann and Stewart 2000). In the case of asynchronous online focus groups, where discussion takes place over a period of days, months, or even years, participants may also be afforded more time to reflect on and formulate responses than would be the case in conventional focus groups (Lim and Tan 2001). In turn, conducting group discussions online poses certain challenges, including the absence of non-verbal cues (in the case of text-based discussions), the need for participants to possess a degree of 'digital literacy', and the risk of discussions becoming chaotic without careful moderation (Hooley, Marriott, and Wellens 2012).

The practical conduct of online focus groups raises a number of considerations. Firstly, as with face-to-face interviews, all participants must give full and informed consent in a recordable way (Hooley, Marriott, and Wellens 2012). Secondly, although methods for recruiting participants to online focus groups need not differ from face-to-face formats, internet-based contacts are often utilised for this task. For instance, email invitations or mailing lists may be used to recruit participants. Recruitment may also take advantage of existing online communities, for instance through respondent-driven sampling whereby invitations are snow-balled through social networks (Wejnert and Heckathorn 2008). Thirdly, as with face-to-face focus groups, the researcher will likely take an active role in facilitating and moderating online discussions (often over an extended period of time). While virtual distance may exacerbate the risk of incendiary or contentious input, experience suggests that the moderator's role may in fact be 'less interventionist and less directive' than with conventional focus groups (Turney and Pocknee 2005, 910).

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Website-based commenting

Commonly used formats for online group discussions include forums or message boards, which typically require users to create an account, or the exchange of email messages, for which respondents must disclose their email address. Both of these requirements may potentially deter participation. Forums or message boards also typically occupy an entire web-page, over which the researcher may have little or no control over the design. Website-based comment platforms – also referred to as integrated online discussion forums (Birch and Weitkamp 2010) – have emerged as an alternative means of incorporating discussion facilities into web-pages. Website-based commenting only occupies a specified area of a web-page (typically below the main content), with the content of the web-page itself – whether it be a news article, blog post, video, or a social media profile – acting as the stimulus for comment and discussion.

As Weber (2013, 2) points out, commenting is now 'one of the most common forms of citizen engagement online'. Commenting on news websites is perhaps the most prominent and widespread example, with articles regularly receiving thousands of comments over a few days or even hours. Commenting facilities are also increasingly common on academic websites. Research examining commenting on science blogs, for instance, found that comments often volunteered relevant information or addressed substantive points, although some input tended towards casual 'virtual water cooler' chat (Birch and Weitkamp 2010). Studies also suggest that commenting platforms can foster dialogue and discussion, rather than one-off inputs, although 'the potential for quality discourse emerge only when a substantial amount of users participate' (Weber 2013, 2). In the case of science blogs, commenting facilities were found to provide 'places to build knowledge and collaboratively work through ideas', suggesting further potential for substantive engagement (Birch and Weitkamp 2010, 900).

Commenting as an e-Research Method

For this research, website-based commenting was deployed as a qualitative e-research method in order to explore experiences and perceptions of research methods teaching and learning amongst doctoral and ECR learners.

Research Design

The online group discussion formed part of a year-long study into research methods teaching and learning for those working in or towards academic careers, which sought to explore the pedagogical processes involved in, and challenges arising from, the teaching and learning of social science research methods in this context. The research design engaged with teachers and learners through a close-up component of classroom-based research and an expert panel method in which broader or strategic issues were explored.

The close-up component comprised focus group interviews in which teachers and learners took part in video-stimulated dialogue and reflection in response to key events recorded during a day's training (see Kilburn 2014; and Nind, Kilburn, and Wiles forthcoming). The expert panel component was adapted from Galliers and Huang (2012), with the aim of engaging various groups of participants who are geographically dispersed across higher education institutions. The first group were academics involved in social research methodology at a strategic level, who were individually interviewed. The second group comprised academics involved in the teaching of research methods, who took part in face-to-face focus groups. The third group, and the focus for the online discussion, comprised doctorial and ECR learners. A key characteristic of this expert panel design was the adoption of an iterative approach – not dissimilar to the 'Delphi' method (Murry and Hammons 1995) – whereby themes from the individual interviews with the first group of informants formed the basis of the topic guide for the face-to-face focus groups, the combined themes from both of which were in turn used as a stimulus for the online dialogue.

There were a number of practical rationales for using e-research to engage doctoral and ECR learners in our study. Firstly, these individuals are geographically dispersed in higher education institutions and research organisations across the UK. The institutions themselves may also have differing cultures for research training (Deem and Brehony 2000). Secondly, it was felt that e-research may offer a more accessible method for engaging with groups of adult learners whose availability may be limited. Finally, it was felt that PhD and ECR learners were likely to have levels of technological access and literacy that would enable them to take part in online research.

In keeping with the iterative nature of the expert panel approach, the stimulus for the online focus group comprised key themes – outlined below – that emerged from preliminary analyses of our existing interview data around four main topic-areas:

(1) Challenges for learning:

- A skills deficit amongst those entering research careers

- The inherent complexity of advanced research methods

- Changes to the nature of postgraduate and postdoctoral research careers

(2) Provision of teaching and training:

- The generalist short course model of methods training

- Embedding learning within specific disciplinary or substantive contexts

- The apprenticeship model of individual supervision

(3) Teaching approaches:

- Deciding upon the content of methods teaching and training

- Authenticity and applicability of the teaching materials

- Opportunities for sharing experiences

(4) Qualities of methods teachers and learners:

- The roles of methods teachers

- The roles of methods learners

- Co-learning between teachers and learners as researchers

A design for an online group discussion developed around brief summaries of the themes from each topic as a stimulus for discussion.

Ethical considerations contributed a final set of requirements for the research design. Approval was granted from the University's Ethics Committee on the basis that this component of the research achieved respondents' full and informed consent, afforded them the opportunity to opt out during data collection, and allowed them to maintain anonymity. As it was felt that an open-access discussion would maximise responses, ethics approval also took into account the fact that confidentiality would not be assured and the comments could be viewed by others during the period of data collection.

Developing an Online Discussion Platform

The research designed called for the discussion to be stimulated by the emerging themes from our research and it was necessary to design a bespoke set of web-pages to achieve this. These would be hosted on our own institutional website (www.ncrm.ac.uk), which is already a well-frequented resource for doctoral and ECR learners. As with many higher education websites, it also features a clear interface for navigation; is compatible with phones, tablets, and other devices; and runs on a secure platform, making it a well-suited host. Above all, however, integrating a discussion feature into own website allowed us freedom to design web-pages around the summaries of themes from our research.

Previous experience with setting-up and managing web-based discussion was formative in the design of this research instrument. The technicalities of integrating a discussion forum into institutional websites had proved challenging in the past, as had the difficulty of engaging participants. In technical terms, forums generally do not fit within the templates of websites meaning that full control over the look and feel of the web-page(s)

must be sacrificed. Forums can also be more vulnerable to security threats and spam (the posting of junk messages). *Disqus*, the system that was chosen as the tool for hosting the online discussion, is a facility for uploading or posting text-based comments that can be integrated into an existing web-page design. Comments are typed and edited using features built into the *Disqus* system and can be posted using a pseudonym. Once uploaded, comments appear in series. Users can either post new comments or choose to reply to existing posts (these replies are nested, meaning that they appear directly below the original comment). Commenting platforms such as *Disqus* therefore effectively turn part of a web-page into a fully-functional discussion forum, while retaining control over the design and content of the remainder of the page.

The task of developing the web pages that are suited to the needs of a discussion such as this was not trivial. The first stage involved the creation of the web-pages themselves. A front page was required, via which all visitors would be pass prior to accessing the discussion pages and on which the ethics information was provided, together with an option to give consent and proceed. Consenting respondents were then directed to a contents page allowing them to navigate between the four discussion topics (Figure 1). The discussion pages themselves each featured a brief (300 word) summary of the key themes that emerged around the given topic. These summaries also included links to other online resources relating to methods teaching and learning that were potentially of interest to respondents (such as academic blog posts, videoed lectures/presentations, or open-access papers). It was felt that providing these additional resources may help further foster participants' interest and engagement. The *Disqus* component of each discussion page then appeared directly below these summaries.

Figure 1. Tiled design for a main contents page, linking to the four discussion topics.

In technical terms, *Disqus* can be integrated into web-pages through a series of steps. These are likely to require some web-development skills, as *Disqus* works using code in the *JavaScript* programming language. In order for the discussion to appear across multiple web pages, a web scripting language can be used to automatically insert variables into the *JavaScript*. Each page using <u>*Disqus*</u> requires 4 unique variables:

(1) A category identification code that is generated on the *Disqus* website;

(2) A text identifier for the id (also generated by *Disqus*);

(3) The web link for the page where each *Disqus* thread is; and,

(4) An appropriate web-page title.

These variables need to be embedded in a single page containing the javascript. Once the javascript has been included beneath these variables, this is where the *Disqus* features will appear on the web-page.

Deployment

Following a pilot exercise in which colleagues were invited to experiment with and comment on functionality of the *Disqus* system, the discussion web-pages went live for a period of six weeks. An ad-hoc sampling strategy was adopted for the recruitment of participants from an unknown population of doctoral and ECR learners (insofar as a comprehensive sampling frame could not be assembled). On the other hand, this population was comparatively accessible via institutional or social networks. It was therefore decided that email invitations would be circulated to potential participants by way of institutional gatekeepers (such as departmental/programme administrators), mailing lists (including NCRM's email bulletin to around 4,800 addressees), information on NCRM's website (which receives around 3,000 visits per month), and posts on Twitter feeds (such as #PhDChat and #ECRChat, as well as NCRM's Twitter page, with over 3,500 followers). These invitations included a brief description of the research and of what participation would involve, a link to the consent 'portal' of the website, and a request to pass the invitation on to others who might be interested. As such, the sampling approach therefore combined elements of convenience sampling with the sorts of respondent-driven sampling that seek to facilitate snowballing within participants' own social networks (Wejnert and Heckathorn 2008).

Recruitment was staggered over the six week data collection period, with invitations circulated firstly via email contacts and institutional networks, before being disseminated across public communications channels. We were encouraged by learners' willingness to disseminate details of the research via their own networks, including by authoring blog posts

on institutional websites (in two instances) and by sharing information via mailing lists (in two further instances). We also received ten re-tweets on Twitter accounts relating to PhD and ECR issues (one with over 8,000 followers). This affirmed the potential to use social and institutional networks for disseminating information on e-research, although the process of generating responses was without its pitfalls as the following section illustrates.

Engagement and Data Collection

The discussion pages generated 26 responses from 18 respondents over a six-week period. However, these headline figures only tell part of a more complex story of how learners engaged with the discussion. The first part of this section looks beyond the responses themselves, to analyse characteristics of users' engagement with the web-pages. The second part of the analysis engages with the responses to the discussion themes as a source of qualitative data and offers a closer reading of types of comments contributed by respondents.

Engaging Learners

The inclusion of learners as genuine participants in – rather than subjects of – educational research addresses pressing methodological and moral issues (see the recent special issue of this journal; Seale, Nind, and Parsons 2014). A small step towards greater participation includes providing opportunities for stakeholders in the topic at hand to engage in feedback and dialogue in response to the outcomes of educational research. Our research design took this as its cue in using summaries of emerging themes from the earlier phases of the research as a stimulus for an online discussion. While the primary intention was to collect data, a secondary aim was that participants – including those who viewed the website and discussion content, but may not have responded – also had an opportunity to engage with these emerging themes at a formative stage in the research process.

Learners' engagement with the online discussion can be explored through paradata –

or data pertaining to the operationalisation of the research instrument itself – in the form of statistics on how visitors interacted with each of the web-pages. The gathering of so-called traffic statistics is a commonplace feature of websites (such as that used by our institution) and, in this context of e-research, this provides a valuable source of paradata. These data include measures of the number of views (or *hits*) received by the web-page over time, the average length of time spent on each page, and the point at which most people exited the website (provided as the *exit rate* for each page). Table 1 shows how the number of unique views (i.e. individual visitors) received by the discussion pages was substantially higher than the 26 responses may suggest. Nearly six-hundred views were received by the consent/information page to which all prospective respondents were initially directed, and which equated to over two-hundred visitors consenting to proceed to the contents of the discussion itself. On one hand, this somewhat reinforces the stark picture of the modest number of responses (with 26 responses from 575 prospective visitors, this response rate could be as low as 3 per cent). However, this does not fully capture how these learners – whether respondents or non-respondents – engaged with the website.

Table 1. Summary paradata measures provided by website traffic statistics.

		Unique Pageviews (count)	Exit rate* (% of views)	Time spent on page (avg.)
Consent page		575	56%	1m44s
Contents page		212	24%	40s
Discussion pages	1	138	28%	3m47s
	2	96	13%	1m23s
	3	91	17%	1m49s
	4	94	27%	2m02s

* as estimated by Google Analytics

As Table 1 shows, the four discussion topics themselves received between 91 and 138 visits. Figure 2 provides a visual representation of the breakdown of the total unique page views received by each page, emphasising the sizeable difference in views to the consent page and those by the discussion pages. It also appears that the first discussion topic received a slightly higher number of views, with less variation between the remaining three topics. Moreover, the relatively low exit rate for each of the discussion pages suggested that visitors may have also viewed more than one page before finally leaving the site (the exit rate being the proportion of visitors who leave the website entirely after viewing a given web-page).

Figure 2. Unique views to the web-pages.
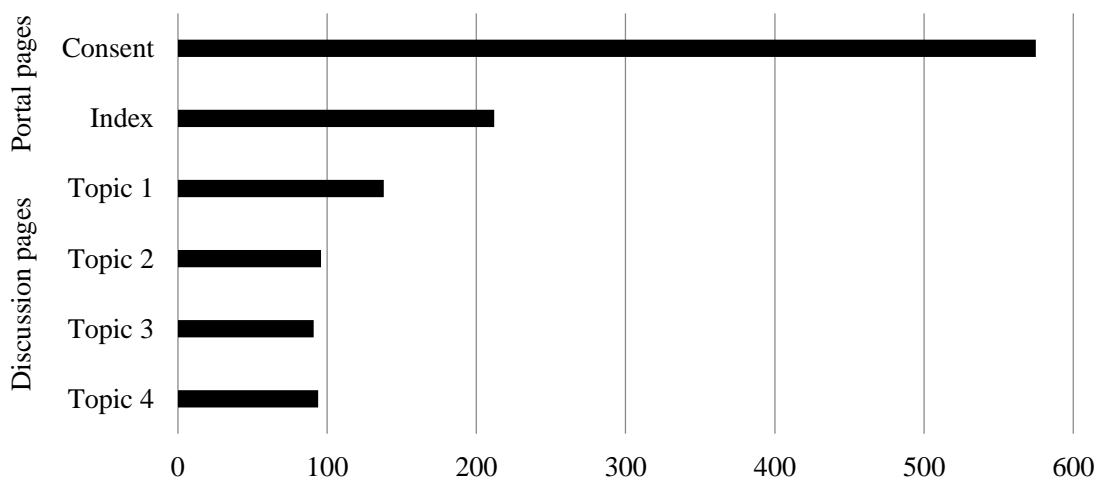
The average length of time spent on each web-page is illustrated in Figure 3 and provides a more encouraging measure of visitors' engagement with the discussion pages. The longest time was spent on the first topic (3 minutes 47 seconds), which also generated the most comments (as discussed in the following section), with less time spent on the remaining three topics. It is impossible to say whether the variation in the length of time spent on the discussion pages reflects different levels of topic interest, the cumulative effect of the number of replies for certain topics, or simply the ordering of the four topics themselves. However, the average duration spent on each page suggest that people were at least remaining long

enough to read the summaries of the emerging themes from our research, browse the

comments, and in some cases, formulate and contribute responses.

Figure 3. Average time spent per-visit on each of the web-pages.
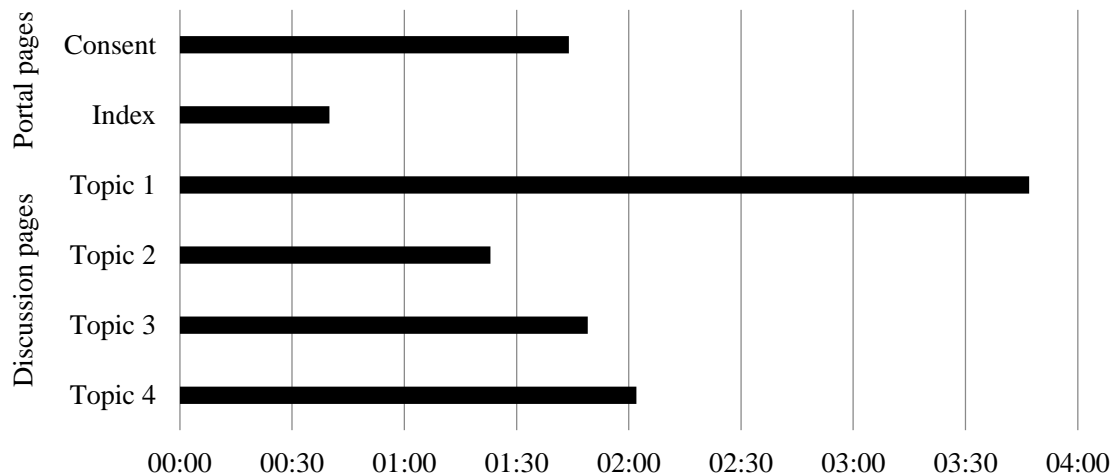
These paradata also provide us with an insight into the distribution of visits to the

discussion pages over the six week period of data collection (see Figure 4). Both visits and

contributions increased substantially from the first into the second week and then peaked in

week three before tailing off, reflecting others' observation that online focus groups elicited

the most engagement at the beginning of the discussion (Lim and Tan 2001). This

distribution of traffic to the discussion pages appears to correspond to the staggered

dissemination of invitations to prospective participants. Interestingly, although visits to the

web-pages increased with the circulation of email invitations and information via institutional

communication channels, the proportion of those visitors actually proceeding beyond the

consent page remained relatively constant.

Figure 4. Frequency of visits to the website over the six week data collection period.
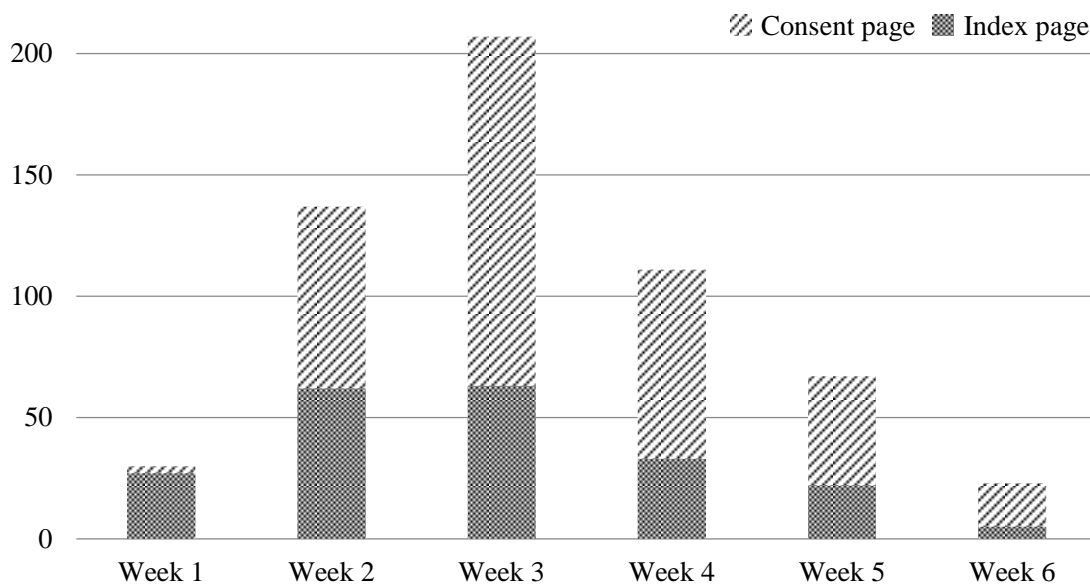
On the one hand, the insights from these paradata appear to affirm the significant challenges involved in engaging learners or other groups in e-research. The small number of responses attests to the difficulties of recruiting respondents through an open invitation, despite the potential level of topic interest, the reach of the online networks used to disseminate information about the research, and the relative ease of using the *Disqus* system. Perhaps most striking is the fact that these responses reflected the product of over five hundred visits to the website in total. However, when considering that a secondary aim of this exercise was to engage learners with emerging themes from the research, the patterns revealed by the paradata are somewhat more encouraging. With over 150 visitors proceeding to one or more of the discussion pages, and spending an average of over two minutes viewing the pages, this suggests that the findings of our research reached a number of learners at a stage in the study when this would not otherwise have occurred.

Qualitative Data

The discussion generated a 4,500 word corpus of qualitative data, providing insights into the provision of methods training and reflections on the teaching and learning processes

involved. The average length of the individual responses themselves was around 170 words –
slightly more than 128 word average from Lim and Tan's (2001) online focus groups with
teachers – with some comments extending to over 500 words. Comments reflected a wide
range of perspectives from learners, although three broad types of responses were discernible.
Firstly, a number of responses either affirmed or challenged the themes from our research,
typically in quite brief terms. In turn, other responses elaborated upon aspects of teaching and
learning in more detail, sometimes identifying areas we had perhaps overlooked, with some
even volunteering hyperlinks or references to further sources of information. Thirdly, some
respondents shared personal reflections on their own experiences as learners, practitioners, or
teachers of research.

Many responses took the form of comments offered in reply to particular aspects of
the emerging themes that were presented as a stimulus for discussion. These contributions
were typically one-off posts, rather than engagements in dialogue with other participants, and
often constituted relatively brief expressions of learners' opinions. Some responses sought to
affirm particular points which resonated with learners' own experiences; for instance, this
comment in response to the difficulty of pitching training at the appropriate level:

> I agree with the challenges associated with planning advanced methods training. I found
> three quarters of the research training modules I attended as a learner far too basic for
> me…

Other responses challenged aspects of our findings, such as this comment questioning the
primacy of expertise as a desirable quality for teaching methods at doctoral level:

> While expertise in research methods should be a given for someone teaching research
> methods, contrary to the finding above, I feel that teaching ability and style is of
> tremendous importance…

These replies perhaps had the most in common with comments typically left in response to

content such as news articles, in that they typically offered a limited amount of elaboration in agreement or disagreement with the points raised (Weber 2013). As a result, these did not reflect the depth of responses reportedly generated by other online focus group formats (Stewart and Williams 2005). As educational researchers, these inputs from learners nevertheless proved formatting in helping to affirm, qualify, or challenge these initial findings.

A second typical of responses took the form of (often critical) elaborations the emerging themes from our research. For instance, this comment invited us to consider time-pressures on doctoral students as a challenges for teaching and learning of research that did not feature in the summary of our existing research findings;

> Part of the problem is also that the PhD process is increasingly compressed. The pressure to complete within three to four years means that there's often very little time for taught courses on methods…

These responses also appeared more likely to generate further discussion, as was the case with the above point. For instance, another participant subsequently replied; 'I note 'Pete's' comments about compressed timescales and suppose this is the nub of the problem'. Others raised more critical questions regarding areas they felt were not addressed in the summaries of research themes we presented. For instance, this comment challenged other discussants in terms of aspects of research methods that were *not* being spoken-about;

> For me these questions rest on other issues that need to be discussed too. So, how much are we talking about particular methods/techniques and how much about methodology more broadly?

Finally, in a more practical vein, other comments of this type even volunteered additional sources of information. For instance, this participant included a reference to Reid and Petocz (2002) when discussing teachers' conceptions of statistics, in order to substantiate their

argument that;

> The idea that [statistics] are simply tools is allowed to persist far too far into research
> methods courses and it is this epistemic simplification which limits their application.

This type of response appear to reflect others' observation that online group discussions may allow participants more time to formulate contributions that are less spontaneous and more considered (Hooley, Marriott, and Wellens 2012). As such, the detail, specificity, and criticality of some comments served as welcome reminders to us that the themes we had presented did necessarily reflect the full range of issues or concerns felt by learners.

A third type of response involved the sharing of participants' own experiences of research methods teaching and learning. Despite the fact that we were not explicitly seeking to elicit details of individual's learning contexts, many participants nevertheless positioned themselves as such, for instance; 'I am a part-time PhD student and a lecturer at a post-1992 University…', or 'when I started my PhD I had been out of academia for ten years…'. Other participants choose to share personal experiences, for instance;

> One of the things I struggled with the most was methodology. When I started my
> fieldwork it was a 'learn as you go' experience. Maybe that's the nature of it. But it would
> have been really helpful if there was more training in the first year.

While some responses even offered points of self-reflection;

> However what I have been unhappy with myself about is that in the beginning of my
> PhD I felt compelled to gather quantitative data to do data analysis. I had an underlying
> compulsion that ONLY quantitative data analysis provides valid and objective research
> for a PhD…

Compare to the majority of the responses received, the reflexive nature of these comments felt more akin to the discussions that developed from our face-to-face focus groups with learners (Kilburn, Nind, and Wiles 2014a). However, others have argued that the anonymity

and physical distanciation of online environments may encourage participants to reveal personal information (Turney and Pocknee 2005; Stewart and Williams 2005). Although our research design did not expressly call for personal reflections, these added useful context nevertheless. Moreover, this also suggests website-based commenting may prove effective for online interviews concerning more personal or sensitive topics.

In substantive terms, the *Disqus*-based online discussion yielded valuable data in response to the emerging themes. Importantly, learners' responses did not merely re-affirm, elaborate-upon, or amplify the existing findings. Rather, they encouraged us to look elsewhere, consider additional challenges associated with the academic early-career, appreciate opportunities and affordances of methods learning in certain contexts, or to draw upon a broader range of examples or sources. In methodological terms, these qualitative data also yielded interesting insights into website-based commenting as an e-research method. Most notably, while the exercise was designed to elicit discussion and dialogue, the majority of the 26 contributions were one-off comments (with eight offering replies to others). This reflected acknowledged limitations of retaining or sustaining participation within online discussions (Lim and Tan 2001). On the one hand, this contrasted with face-to-face focus groups, in which both researchers and other participants can probe for elaboration or facilitate further discussion on certain points. On the other hand, the sequential nature of the *Disqus* discussion, complemented by the fact that the researchers replied to each comment, gave the data a discursive character that belied the one-off nature of many contributions. The data generated from this exercise was thus felt to have a degree of commonality with those generated from our face-to-face focus group interviews. This was the case both in terms of the structure of the data (with a balance between participants' and researchers' voices, for instance) and of its tone (responses written in a first-person, conversational style, for instance). This meant that the data gathered using *Disqus* was amenable to the same analytic and interpretive approaches to those used for spoken data. In our case, this meant that these

responses were analysed and coded alongside our face-to-face interview data using *NVivo*, with the aim that these data would be presented together within substantive research outputs.

Conclusion

The Internet has afforded new opportunities both in the realms of education and social research. Learners increasingly participate in virtual learning environments, feedback instruments, and online communities or networks; while participants in social research are increasingly via online survey, focus groups, or interview methods. These instruments typically utilise existing Internet technologies, such as email or discussion forums. Technological developments in online communication, such the *Disqus* platform for website-based commenting, may therefore offer new methodological opportunities for e-research. This paper has explored one such adaptation of online focus group methods, involving the integration of *Disqus* into a series of discussion web-pages in order to engage learners in themes emerging from earlier phases of our research.

This approach raised a number of practical and methodological considerations. The design of the discussion web-pages required a substantial investment of time and web-development expertise. However, the *Disqus* platform allowed us to retain control over the content and appearance of the web-pages, while incorporating features that enabled participants to contribute anonymously and with relative ease that were particularly valuable for an open-access online discussion. Yet despite the accessible nature of the research instrument and the wide-ranging institutional networks used to disseminate invitations to participate, the number of responses remained lower than expected. Ease of participation and levels of recruitment did not, therefore, come hand-in-hand. That said, visitors' engagement with the discussion itself yielded more encouraging insights. The website paradata showed that a reasonable proportion (at least one-in-four) of those who clicked on the invitation link proceeded to view the discussion topics themselves. Moreover, these data also indicated that

visitors spent several minutes reading – and in some cases responding to – the themes presented from our research. This suggests potential for website-based commenting to engage learners in consultation, feedback, and dialogue in response to the findings of educational research, providing opportunities for formative input at a point in the research process where this would not otherwise be possible. The use of website-based commenting may thus extend the boundaries of e-research methods beyond data collection, with scope for deploying an instrument such as *Disqus* the help facilitate the sorts of public engagement sought by research funders and other bodies (see www.publicengagement.ac.uk).

The question remains, however, as to the prospects for website-based commenting as a means of collecting qualitative data. The fact that many of the responses were offered as one-off contributions, sometimes of a comparatively cursory nature, contrasts somewhat with the nature of face-to-face focus groups. On the other hand, the online format facilitated an engagement with a greater number of respondents than could be accommodated in a conventional focus group. Moreover, a number of contributions offered a greater level of depth, detail, or consideration than might be expected from a face-to-face discussion. The use of themes from our existing research findings as stimuli for responses also elicited comments that were closely-tailored to the research questions, with little need for moderation. As a result, the data generated from these responses worked to amplify, complexify, or challenge our interpretations of teaching and learning. Open access and asynchronous online discussions thus bring considerable potential to overcome constraints of time, distance, or access when engaging under-researched populations such as postgraduate or postdoctoral learners of research method. Given the considerable challenges of entering and establishing a career in social research, opportunities for dialogue between learners and education researchers in this context are rare and, as such, the affordances offered by qualitative e-research should be capitalised upon and nurtured.

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