BUMPING ONLINE DISCUSSION FORUMS IN A SOCIAL MEDIA AGE (“IYKWIM”)

Exploring the impact of career focused online discussion forums in supporting the career learning and development of Open University students

A HECSU funded research project

Leigh Fowkes | Careers & Employability Consultant | The Open University
Table 4: Complete set of themes identified
A learning ecology is a useful way to conceptualise careers forums
The conflict between creating a safe space versus managing privacy, safeguarding and negative psychological impact
The asynchronous nature of forums supports accessibility but provides challenges for guidance practice
Ethical principles still underpin the activity of guidance practitioners providing support in forums
Careers practitioners have clear ideas on how roles are demarcated in a forum space
Discussion

5.0 Limitations
6.0 Conclusions
6.1 Online discussion forums are useful in helping Open University students to explore and construct their career identities
6.2 Online discussion forums are useful for Open University students for career learning and career development purposes
6.3 Open University careers practitioners adopt strategic approaches in both the design and hosting of online discussion forums that exposes the value of guidance professionals
6.4 Students access careers support from a wide range of sources but online discussion forums provide a unique combination of benefits over other methods

7.0 Recommendations
7.1 Career services should investigate the feasibility of hosting career focused online discussion forums
7.2 To maximise the impact of ODFs they should be left open and accessible for sustained periods of time
7.3 Careers services (where offered) should promote the benefit of utilising ODFs
7.4 It is recommended careers services either considering or utilising ODFs account for how both the potential benefits and disadvantages can be managed

8.0 References
9.0 Appendices
Appendix 1 Consent and participant information sheet
Appendix 2 Research invitations. Forum landing pages and email invites
Appendix 3 Jisc Online student survey
Appendix 4 OU Careers & Employability Consultant interview questions
Appendix 5 Survey Freeform Responses
Acknowledgements

Firstly, I would like to thank HECSU and their Research Fund for not only showing faith in my bid but also allowing practitioners like myself the chance to undertake substantive research. I’m also very grateful to the OU students and my four colleagues who opted into this research and gave up their time. Without you this project would not have been possible and would have led to a very awkward conversation with HECSU! So too, to the Careers & Employability Services management team for valuing evidence informed practice and wanting to share our findings with the wider sector. The time you allowed me to do this was also vital. Alas, without the push and prod from my colleague Lynne Johnson I’m not sure I’d have stepped up to do this.

Although highly rewarding and challenging this project has at times felt a lonely endeavour but greatly aided by the support and interest shown by colleagues in the OU Careers & Employability Services. I would often be met with the question “how’s the research going?”, and despite my often-strained expression it was comforting to know you were thinking of me.

Now some special thanks to OU colleagues who I’ve taken extra time from in helping to bring this research to fruition. Eddie Tunnah for being a defacto supervisor in the earlier stages when I needed help the most. Rita Chaudhari for helping set up online consent forms and Euaun Tan for your crash course using Jisc surveys. Also, Tom Staunton of iCeGS who supported me in the research design and was always available to answer my random questions.

Finally, you’ll find me discussing career identity being a discursive process where we often learn more about ourselves and others from our reading and writing. I’d never seriously considered research prior to this project but in thinking about the journey and year of my life this project has taken to complete perhaps I have indeed moved into practitioner-researcher territory.

About the author

Leigh Fowkes is a Careers & Employability Consultant at the Open University where he has the privilege of supporting Open University students to achieve their career goals. According to his Twitter profile he has an interest in digital learning, social mobility and distance careers guidance and if the character count allowed, he’d probably add “online discussion forums in supporting the career development of higher education students” and “weirdly enjoys writing about himself in the third person”. Leigh would welcome questions and feedback about this research, and you can contact him in the following ways.

Email: Leigh.Fowkes@open.ac.uk

Twitter: @careers_chap
Context

The Open University Careers & Employability Services has designed, hosted and evaluated themed careers online discussion forums (ODFs) for a number of years. These ODFs are often themed towards specific occupational sectors aligned with fields of study so consequently are of interest to a narrower group of students. From a recent review of our internal quality assurance processes it was identified there was a need to establish greater understanding and clarity into the impact of ODFs in supporting the career learning and development of our distance learning students. Open University Careers & Employability Consultants through the discourse of their professional practice felt many areas of effective ODF participation were implicit rather than formally conceptualised as evidenced based approaches. This led to a motivation to better understand the impact of ODFs and to contribute to the wider evidence base for practice.

Executive Summary

This report presents a mixed methods research project exploring the impact and utility of online discussion forums (ODFs) hosted by the Careers & Employability Services in supporting the career journey of Open University students. ODFs form an integral part of the Careers & Employability Services many-to-many offer providing the opportunity for peer-to-peer career learning and development at a large scale. In 2017/18 we received 11,967 student visits to our forums. This number is likely to exceed 15,000 visits for 2018/19. The benefits to students and careers services are huge as a scalable many-to-many platform with the potential to build assets such as career identity and social capital amongst students. As the UK ranks near the bottom for income mobility across OECD nations (Cabinet Office, 2011) it is more vital than ever that we shape ways in which we encourage access to aspirational careers support.

Integrating digital technology means the limitations of campus-based careers support in terms of time, place and space are removed and the new dimensions of access, interaction and community can be harnessed to reach more students. The wider educational and social benefits of student participation in ODFs are well established however the literature review revealed there is a paucity of research in connecting student participation in ODFs for specific career learning and career development purposes. This is the gap this research occupies in drawing on influential career theory relating to career learning and career identity to explore student and staff perceptions of careers focussed ODFs.

To achieve this the research design collected qualitative and quantitative data from three sources.

1. 31 self-completed Jisc online student questionnaires.
2. Qualitative description (QD) of 110 online discussion forum posts across six forums.
3. Thematic Analysis of four OU Careers & Employability Consultant semi-structured interviews.

The questionnaire results demonstrated the wide-ranging benefits and impact of forum participation for student career identity and learning. Forum participation was helpful in terms of students developing their self-awareness, opportunity awareness through information gathering and for career decision making. To validate forum activity as a causal factor the survey data was cross tabulated for visits and the time spent in the forums. The findings confirmed a trend of increased
visits and duration resulting in greater self-reported benefits to identity formation and career learning. However, even in complex areas such as decision making the findings challenge the dominant assumption that students who don’t post are passive ‘lurkers’ rather than vicarious learners.

The analysis of 110 forum posts to measure social presence (SP), career identity (CI), cognitive presence (CP) and community support (CS) indicated ODFs are a space where critical community inquiry occurs and contributes to deeper approaches to learning for some students.

Thematic analysis of the four OU Careers & Employability Consultant interviews reinforced some of the existing literature towards ODFs insofar that utilisation can take advantage of activities such as social interaction, peer-to-peer learning and learner control over content. The interviews painted a picture of a highly complex and dynamic environment where an ecology metaphor was considered highly useful to describe and conceptualise the functionality and activities contained within ODF environments.

The research also confirmed that students used forums as part of their own personal learning environment (PLE) and consequently ODFs are just one of the many ways they access careers support. The decision to utilise ODFs is not always strategic but there was an appreciation and value placed in the community and interactive nature of forums.

The findings and conclusions led to four main recommendations.

Career services should investigate the feasibility of hosting career focused online discussion forums. This research provides evidence that ODFs provide a unique combination of benefits over other methods of careers support. Given the maturity of the underlying technology this is likely to present a missed opportunity if ODFs continue to be ignored by careers services that have yet to explore their potential.

The questionnaire findings confirmed that a trend of increased visits and duration resulted in greater self-reported benefits so to maximise the impact of ODFs they should be left open and accessible for sustained periods of time rather than shorter durations.

Careers services (where offered) should promote the unique benefits of utilising ODFs because within a crowded marketplace of institutional support and each student’s own set of personal networks there is a real danger they get lost in the ‘white noise’.

The in-depth interviews with careers practitioners demonstrated they used wide-ranging techniques and tactics but still found aspects of providing careers support in forums challenging. It is therefore recommended careers services either considering or utilising ODFs account for how both the benefits and disadvantages can be managed.

Before you commit to reading through this report a final personal thought on the value of career focused ODFs from the author.

“ODFs provide a medium to create and share the evolving stories we all have and continue to tell ourselves and others”.

"ODFs provide a medium to create and share the evolving stories we all have and continue to tell ourselves and others".
1.0 Introduction

1.1 What are online discussion forums? A brief history.

The underlying technology behind online discussion forums (ODFs) is a text-based computer mediated online environment that allows communication and interaction without the need to be present in the same place at the same time (Hew et al., 2010). Computer mediated communication can take place either synchronously in real time or asynchronously such as ODFs. Subject to considerations such as storage and moderation an important feature of ODFs is there is no loss of data as contributions to the discussion are submitted by users as either new threads or replies to other users within existing topics. These are displayed for all users to view. Technologically ODFs are therefore web applications managing user generated content (UGC) and differ from now popular chat applications which support often shorter synchronous messaging services.

An understanding of technological history is important because it helps us triangulate where we came from and how we came to be. In a review of 25 years of educational technology, Weller (2018) notes the origin of ODFs through the emergence of Bulletin Board Systems (BBS). BBS systems started to grow in usage in the 1980s gaining momentum in the early 1990s as computers became cheaper and dial up became more accessible. BBS could be likened to small online communities which allowed users to interact with each other through text-based message boards, read news and even play games.

In a nostalgic view of BBS systems and how the internet could now be observed, Driscoll (2016) uses the metaphor of ‘social media’s plumbing’ to describe our online activity. Nonetheless, BBS systems were really a glimpse into a web 2.0 world before it ever existed. Early distance education pioneers such as The Open University used a BBS system called CoSy which was chosen for its new electronic campus projecting its pedagogical credentials. As more users came online through the 1990s ODFs quickly gained traction in a variety of formal and informal contexts demonstrating their potential as a virtual learning environment (Tan, 2017). Piccoli et al. (2001) identifies the VLE as facilitating communication and discussion with other participants as part of a network. This radically expands the notion of traditional classroom learning defined by time, place and space to now include the new dimensions of technology, interaction and control. These new technologies present further choices on where we can now spend time online and seek support when we need it.

1.2 So why do students choose to participate in careers focused ODFs?

Despite their technological maturity ODFs are still regularly used by approximately 10% of online users in the UK and 20% in the US (Pendry and Salvatore, 2015). In part this may be because ODFs provide the means to communicate anonymously in an online world where privacy is a recurrent and contested topic. It has also been noted by researchers that ODFs allow time for participants to peruse, respond and reflect upon ideas rather than the immediacy that can be imposed in face-to-face discussions and synchronous technologies such as webchat and webinars (Gao et al, 2013). There is no shortage of online tools for individuals to use to communicate but the issue of choice needs to be tempered to what extent students in distance learning environments exercise their
choice through agency or by institutional imposition? For example, if institutions such as The Open University ‘serve’ careers support via Skype, telephone and ODFs then learner choice is derived from a decision that has already been made by the institution on the mediums to provide support.

Enriching this distinction further could be viewed as the separation between an individual’s access to their personal learning environment (PLE) and institutional VLEs. The tools in a PLE are not just limited to a web-based environment and do preserve the agency of the learner but recognises as Law (2009) suggests that career influence can occur as a result of the social groups we are part of.

This research acknowledges the value in exploring the toolsets learners use for careers support alongside ODFs provided at an institutional level by both The Open University Careers & Employability Services (such as 1:1 telephone, Skype, email, ODF) and through other potential sources of support such as social networking sites (SNS). The centrality of this research is therefore altered to the learner and where ODFs fit within a PLE rather than the singular focus on ODFs and how learners utilise this.

In taking this approach the author endeavors to explore career learning and development in the context of learner choice in combination with the different ways they access and interact with careers support in their offline and online lives.

1.3 Career learning and development using the internet

As this research will adopt exploratory quantitative and qualitative approaches to establish a more general hypothesis of the utility of ODFs for career learning and development it is firstly worth defining what is meant by these two terms. According to the Career Development Institute (CDI, 2017, p.1) “Career development is a unique and lifelong process for each individual of managing learning, work, and transitions in order to move forward and participate effectively in work and society”. Whilst career learning is a facet of career development “consisting of planned and progressive experiences throughout an individual’s life”. However, (Hooley 2012, p.3) expands the concept of career development further by also describing it as the process of, “actively intervening in careers”, in the context of what people need to know and how interventions are made.

Law (2010) recognises the process of career development is fraught with difficulty. Our actions, decisions and priorities are hard to predict in an increasingly unpredictable world. As a consequence, there is less value in having a plan and more value in viewing our career development and career learning as a continuous lifelong process. Career learning is viewed as a cycle of cognitive development through the four stages of:

2. Sifting: Sorting our information and feelings to make connections, using constructs and concepts to piece together a narrative.
3. Focusing: Formulating viewpoints which are created both individually and through social interaction.
4. Understanding: Means we have developed explanations and can reasonably predict the consequences of our actions.

Career learning and development are therefore inextricably linked in how each one of us enact a ‘career’ in our journey through work, life and learning. Our learning moves us all from tacit
knowledge, action and experiences through a process of career construction (Savickas, 2005) recognising our language serves as the tool of our story creation and meaning making.

Moreover, our career development and learning are interwoven within the complex social fabric of the internet. Hooley (2012, p.3) suggests this creates two critical questions: ‘what do people need to know to pursue their careers in the internet age?’ and ‘how can we use the internet to provide people with support for their careers?’.

Although this research does not attempt to deduce an answer to these two questions, it does seek to explore how an internet mediated communication tool such as ODFs can be potentially useful for our career.

1.4 Research aim and objectives

The aim of this research was to explore the impact and utility of online discussion forums (ODFs) hosted by the Careers & Employability Services in supporting the career learning and development of Open University students.

To achieve this the interactions of OU students were explored, analysed and reported within six ODFs. Also captured through student questionnaires and staff interviews were the attitudes, perceptions, opinions and behaviours of OU students and OU Careers & Employability Consultants. The mixed method design and involvement of both students seeking careers support and careers professionals providing this will help us better understand the impact of participation on student career identity, career learning and development. Crucially it will also explore what role and influence the careers professional has in this hosted online environment? This report will use the literature review to demonstrate and position the scope of this research and why it should prove to be of value to a range of stakeholders involved in the delivery of careers guidance services.

The research questions this report explores are:

1. To what extent are asynchronous text based online discussion forums useful in helping Open University students to explore and construct their career identities?

2. To what extent are asynchronous text based online discussion forums useful for Open University students for career learning and career development purposes?

3. How does the role and approach that Open University careers practitioners adopt in text based online discussion forums support and impact upon Open University students’ career learning and development?

4. Why are Open University students participating in asynchronous text based online discussion forums compared to other methods of support available to them for career learning and development purposes?
2.0 Literature review

2.1 The place of ODFs in web 2.0, higher education & careers work

The internet has undoubtedly been influential to individuals and to the concept of a network society (Castells, 2004). Educational institutions such as The Open University have also sought to exploit technology for learning. If the first iteration of the web characterised the nascent capabilities of the internet and limited exchange of text-based data through Bulletin Board Systems (BBS) then Web 2.0 offered users a more dynamic experience. In defining web 2.0 and social media tools Mowbray (2018) helps position the capabilities of online discussion forums (ODFs) and their place online.

Firstly, Web 2.0 allows the creation and exchange of user generated content (UGC) and a space where software developers and users could work collaboratively on content. UGC has been a major driving force of social media. However, there are some clear distinctions as well as overlap between different social media applications. Ouridi et al (2014) suggests a common ecology has emerged representing a typology of social media platforms that includes social networking sites (SNS), professional, networking sites, micro-blogging services, wikis, video–and picture–sharing sites, social news and bookmarking and finally forums.

Consequently, ODFs should not just be viewed as a quaint antiquity superseded by ubiquitous social networking platforms but as an established social media application that still has relevance and value. As a many-to-many platform ODFs sits alongside SNS in their ability to share user generated content, build relationships, have conversations and reveal elements of identity. Identity and social presence are elements where SNS distinguishes itself from ODFs as platforms that require users to build and develop profiles and make connections (including those connections being visible to others). As Web 2.0 has developed the boundaries of platform capability have become increasingly blurred.

Conole & Alevizou (2010) in their literature review of the use of Web 2.0 tools in higher education commissioned by the Higher Education Academy found increased interest and wide prevalence of Web 2.0 technologies to support learning both in the UK and overseas since the early 2000s. The extensive literature relating to ODFs coincides with the shift, growth and use by education providers to leverage online learning environments for pedagogical applications. Gao et al (2013) notes that asynchronous ODFs are now widely used in educational settings to support online and blended courses to facilitate formal learning. Whilst Tan (2017, p.1241) in their literature review of studies involving ODFs shows an evidence base for learner participation contributing to ‘improved academic performance, whilst the learner perception of the platform remains positive’.

In an educational context ODFs can be hosted within an institutional virtual learning environment (VLE) with participants derived from those enrolled on specific learning programmes. These designed closed communities sit in contrast to ODF usage for leisure purposes which are open and multipurpose. Many readers of this research may indeed be visitors to popular ODFs such as Reddit, The Student Room and MoneySavingExpert. Indeed, where there’s a topic there is an online space you can call home.

It is also worth noting that massive open online courses (MOOCs) which often rely on ODFs within their pedagogical design and approach have received continued interest in the higher education careers community. The use of MOOCs for career purposes is relatively new but the sector was put
on notice with the world’s first careers MOOC produced by The Careers Group, University of London in July 2014. This attracted global interest with 89,000 students engaging with the material. This demonstrates the versatility of learning design approaches and the accessibility of ODFs ranging from closed access institutional usage within a VLE to open massive peer-to-peer spaces.

Of interest is what sense of self and community identity emerges within ODFs and indeed how this may be useful for career learning and career development purposes? For instance, Thomas (2002) drawing on the work of Bourdieu (1977), employs the concept of ‘institutional habitus’ as a useful tool to gauge a sense of whether an individual feels like they ‘fit in’. This suggests an institutional habitus needs to be inclusive and accepting of diversity to aid retention within higher education and to also encourage peer-to-peer participation within the ODF environment. It also presents an area for further research between individual constructivist and social constructionist conceptions of how our identity is formed.

Hooley (2012) also argues the internet has changed not only the way individuals pursue their careers but also how this is leveraged by careers services and careers professionals? ODFs and social media no longer sit extraneously to “real life” but co-exist in an increasingly blended way in our online and offline lives.

2.2 Identity and role formation within ODFs

Our identity is what makes each of us unique in terms of our beliefs, values, motivations and life experiences. Lengelle and Meijers (2012, p.157) refer to career identity as a “dynamic multiplicity of personal (in contrast to social and cultural) positions or voices regarding work. This links closely with modern careers guidance practice requiring narrative approaches which reflect the complexity, unpredictability and neo-liberalism of the 21st century labour market. This can enable individuals to construct a meaningful self-narrative which can move from interpretation, story formation and meaning making to decision making and action based on their view of reality (Savickas, 2012). A key question is can interaction within an ODF environment support narrative approaches?

LaPointe (2010) argues strongly that identity is formed from co-constructed narratives as a result of our social interactions and is thereby apparent in our discourse. Identity can consequently emerge through discoursal construction in social contexts through the act of writing and reading. Subsequently, identity is not fixed but malleable over time (Burgess and Ivanič, 2010). Lengelle and Meijers (2014, p.54) also propose that writing can help individuals construct their career story directly linking this to a narrative approach that can help a client shape meaning and identity. This is because writing is ‘an inherently narrative and dialogical process, in the same way that narrative career counselling is’. However, these approaches are highly dependent upon skilled and experienced guidance practitioners who are capable of working with this approach. ODFs offer a wealth of opportunity to further explore and examine the life stories students communicate in their written form within a shared online environment.

How identity construction is mediated online is also a cause of interest for this research. The phenomenon of the online self and the presence of others is explained by Gunawardena and Zittle (1997, p.9) as social presence and is the “degree to which a person is perceived as a ‘real person’ in mediated communication”. Social presence therefore allows participants to project their identities online and feel the presence of others facilitating the potential creation of online communities.
the context of online distance learning or indeed hybrid models of delivery that include online learning, methods to mitigate social isolation and encourage social learning have renewed importance.

In addition, how graduates succeed not just academically but also in the labour market has been the subject of intense scrutiny and discourse within the UK higher education sector in recent years especially under the guise of enhancing graduate employability. In a departure from conventional skills based approaches to employability Tomlinson’s (2017) Graduate Capital Model argues interactive forms of capital (human, social, psychological, cultural, identity) are key resources for learners especially for career transitioning. Identity is recognised as a key constituent of our psychological capital which presents further validation of career identity and social capital as assets useful for career development and learning. It also provides the rationale to establish the efficacy of career focused ODFs and explore the value of interactions between the individual and different groups (peers, careers professionals, employers) upon career identity and career learning.

2.3 Individual and social concepts of learning in online communities

Laal and Laal (2012, p.491) define collaborative learning as an “educational approach to teaching and learning that involves groups of learners working together to solve a problem, complete a task, or create a product”. Whilst individual learning focuses on the experiences, thinking and acquisition of knowledge of one person.

What is clear from the existing research base is an interest in the affordances of technology for learning gain and the increased academic performance this can provide to students. However, when higher education learners are geographically dispersed when enrolled on online distance learning programmes then online environments such as ODFs can bring people together in creating designed online communities. However, Johnson (2001, p.45) acknowledges caution in the distinction between designed communities using networked technology versus a community of practice (Wenger 1998) which would include collaborative, participative learning with a group who share a particular concern, even passion. In this sense, not all online communities can be considered a community of practice.

Even so, Scherer Bassani (2011) argues that cooperative relationships are the foundation of a pedagogical model of online learning centered on creating a community. Whilst Hostetter’s (2013) study on the impact of community and social presence within ODFs as part of online learning programmes adds to a growing body of evidence that student participation can increase course performance and is a crucial element of online instruction.

But caution is necessary as Garrison and Cleveland-Innes (2005, p.145) allude that although online interaction is generally viewed as an essential ingredient for learning within asynchronous texted based environments their findings suggest “simple interaction, absent of structure and leadership, is not enough”. Whilst Castaño-Muñoz et al (2014, p.150) recognise that although the internet and technology are important mediators, “time spent studying online is only useful when it takes place as some form of interactive learning”.

There may also be assumption as technology is embraced that it serves to enhance learning. Kirkwood and Price (2014, p.24) warn against the ‘deterministic expectations’ often placed on
technology, indeed questioning whether technology does enhance learning despite assumptions being made on its evidence-based contributions. The notion that all social media platforms serve as a tool for building social capital through a network is also challenged by Staunton (2016) and serves as both a warning and indicator in how online spaces can differ. Of interest then to educators, learning designers and of course careers services is the answer to the question of how can we create online environments that better foster participation and collaboration in pedagogically purposeful ways?

Making use of existing models of interaction such as the Community of Inquiry Model (COI) shown in figure 1 demonstrates the contingent nature of learning through the creation of an educational community of inquiry underpinned by transaction (Garrison, Anderson & Archer, 2000). The model also provides a conceptual framework to delineate, identify and evaluate both careers practitioner and student contributions within an online space through measuring the extent of social, cognitive and teaching presence within online educational environments such as ODFs.

![Figure 1](image)

The value of self-concept and community learning is not new territory in the world of careers theory. Laws iconic (2009; 2010) theory of community interaction and career learning (sensing, sifting, focusing and understanding) and its value for contemporary careers work provides a critical perspective to explore the influence and social impact of ODFs on career learning and development.

This is because the interaction between the individual and the social groups we inhabit invariably influence the course of our life in terms of expectations, support, decisions and the opportunities this creates. The consequence of this cannot be ignored as despite the altruistic aims of government in wanting every individual to have an equal chance of reaching their potential in the UK (Cabinet Office, 2011) both educational achievement and intergenerational income mobility still varies significantly by our socio-economic background (Macmillan, Tyler and Vignoles 2013).

As Law (2009) suggested that some of the most influential factors in career choice relate to events which occur in the context of our ‘community interaction’ between the individual and the social groups of which we are members we can begin to see what is at stake. In a society where we are born unequal in what ways could perhaps the internet shape and impact the equity we strive for?
This is the gap this research aims to occupy in connecting existing research in the value of ODFs within educational contexts to the activities undertaken by students in enacting career learning and development. In doing so this research will explore the relationship between student and practitioner participation in ODFs to eminent career theories such as career learning theory & community interaction theory (Law, 2009; 2010), narrative approaches to guidance (LaPointe, 2010; & Savickas, 2005, 2012) and career identity construction (LaPointe, 2010; Lengelle & Meijers, 2012, 2014; & Burgess and Ivanic, 2010).
3.0 Methodology

3.1 Mode of inquiry

This research adopted a mixed method design. As a practitioner/researcher I have taken a pragmatic approach to focus and triangulate my research in trying to best answer the research questions. Whilst not wanting to get bogged down in paradigm wars it is important I share and acknowledge the choices and philosophical perspectives that underpin my research.

The focus of this study is the utility of online discussion forums for career purposes so whilst an interpretivist philosophy has been taken in how I have analysed the data I have been open to quantitative methods in my use of survey. As Armitage (2007) notes, there is value in recognising that research (especially by practitioners) may prioritise real life problems over methodological purity, if such an entity exists.

3.2 Reflexivity

In establishing the context and the methodology for this study I view the process of reflexivity as a crucial interface between objective research and the practitioner environment in which I operate. As Attia and Edge (2017) acknowledge, research is shaped by the development and attitude of the researcher which can be formed by prospective and retrospective reflexivity.

In undertaking qualitative research, I acknowledge this demands an ability to empathise, relate and interpret the human condition of others. As a practitioner and researcher involved with the design, hosting and participation of careers focused ODFs I accept that viewpoints have already been shaped through my previous interactions in the phenomenon to be investigated.

Although a non-interventionist observational stance was taken in terms of my participation in the selected forums which meant I only posted (Appendix 1) to promote my research I accept a value neutral position is not possible due to each of our methodological assumptions and orientations to the collected data.

Consequently, my longstanding use of ODFs within formal and informal contexts is concurrent with a view of the positive utility this medium can bring but as part of a reflexive process it is acknowledged objectivity and open-mindedness are crucial to the validity of this research.

3.3 Participants

As this research seeks to explore the views of OU students, participants were derived from a purposive clustered sample of the current OU student population (approximately 300,000 including eligible graduates) who have voluntarily participated in the six selected OU careers online discussion forums taking place in 2019 between March and May 2019. Although the potential sample is large, visitor numbers to Careers & Employability Services (CES) forums are far lower with an expected visitor number range to each online careers forum of between 200-900 students whilst the forum is
open. Recruitment of participants were OU students who have visited the following forums. The visitor numbers between the selected date ranges whilst each forum was open is also listed.

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Forum Description</th>
<th>Visitor Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>20th March - 29th March 2019</td>
<td>Social sciences careers forum</td>
<td>414 visitors in March</td>
</tr>
<tr>
<td>15 - 18th April 2019</td>
<td>IT and computing careers forum</td>
<td>813 visitors in April</td>
</tr>
<tr>
<td>24th April - 3rd May 2019</td>
<td>Psychology and counselling careers forum</td>
<td>342 visitors in April, 120 visitors in May</td>
</tr>
<tr>
<td>29 April - 3 May 2019</td>
<td>Career planning for access students forum</td>
<td>117 visitors in April, 61 visitors in May</td>
</tr>
<tr>
<td>14 - 16 May 2019</td>
<td>Career planning for students with disabilities or health conditions forum</td>
<td>179 visitors in May</td>
</tr>
<tr>
<td>17 May - 22 May 2019</td>
<td>Physics, astronomy and planetary science forum</td>
<td>235 visitors in May</td>
</tr>
</tbody>
</table>

For each selected forum a description outlining the research was placed on the landing webpage with a weblink to a separate page containing the participant information and electronic consent form (Appendix 1). A sticky post was also created in the forum which contained further information and a weblink to the participant information and electronic consent form. The sticky post was particularly useful as it allowed potential participants to ask questions directed to the lead researcher who would monitor the thread (Appendix 2). This approach to recruitment was replicated for all six selected forums.

Participants for this research were then recruited from the sample of students who had opted in and gave consent by completing the online consent form. Consent related to stage 1 and stage 2 of the research design which involved (if applicable) the content of any forum post/s created being analysed and potentially reproduced and also receiving an invite to complete the online Jisc questionnaire. A non-proportional minimum quota of 30 participants for the online Jisc questionnaire was sought with an expected maximum range of 100 based on the population size. It was hypothesised forum participants will be representative and proportional to the diversity of OU careers forum visitors.

Finally, a sample of four Careers & Employability Consultants with lead moderator responsibilities were identified and approached to take part in stage 3 of the research design which involved semi-structured interviews. A lead moderator was deemed to be most suitable as they would be heavily involved in the creation and moderation of the forum as well as providing guidance responses to students.

One Careers & Employability Consultant was interviewed from each of the following forums.

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Forum Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th February - 15th February 2019</td>
<td>Arts and Humanities Careers forum</td>
</tr>
<tr>
<td>20th March - 29th March 2019</td>
<td>Social Sciences Careers Forum</td>
</tr>
<tr>
<td>15 - 18th April 2019</td>
<td>IT and Computing Careers Forum</td>
</tr>
<tr>
<td>24th April - 3rd May 2019</td>
<td>Psychology and Counselling Careers Forum</td>
</tr>
</tbody>
</table>

To maintain an ethical distance from the research environments and participants in my role as a Careers & Employability Consultant I did not provide careers guidance in any of the selected forums.
3.4 Research Design

**Stage 1:** A self-completed structured online questionnaire *(Appendix 3).* Designed with mainly quantitative scaling questions to measure latent ordinal constructs but with additional open-ended questions to explore attitudes, perceptions, opinions and behaviours closely related to the research questions. A five-point unipolar Likert scale was chosen which fits within the generally considered optimal scale length in terms of reliability and validity. In particular, a unipolar scale offering no midpoint was preferred to mitigate satisficing survey behavior (Krosnick & Fabrigar, 1997). A questionnaire also allowed for a higher number of responses compared to other methods and could also be completed at a time to suit respondents. A very real consideration for the busy lives of distance learning students (Rowley, 2014).

Jisc Survey software was used to host and process the collected data. Participants were invited by email *(Appendix 2)* to complete the survey from the six selected OU careers online discussion forums described in stage 1. The structured nature of the questionnaire allowed for greater comparative analysis and quicker completion for respondents.

Descriptive analysis of the statistics was then used to describe the survey data which consists of text and visual summary descriptions of single variables such as frequency and central tendency. Free form survey answers were analysed through qualitative description.

**Stage 2:** Qualitative description of Open University student posts across six (below) Careers & Employment Services hosted online discussion forums (ODFs). In the analysis of forum messages any information that could personally identify the student or staff member were removed.

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Forum Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>20th March - 29th March 2019</td>
<td>Social sciences careers forum</td>
</tr>
<tr>
<td>15 - 18th April 2019</td>
<td>IT and computing careers forum</td>
</tr>
<tr>
<td>24th April - 3rd May 2019</td>
<td>Psychology and counselling careers forum</td>
</tr>
<tr>
<td>29 April - 3 May 2019</td>
<td>Career planning for access students forum</td>
</tr>
<tr>
<td>14 - 16 May 2019</td>
<td>Career planning for students with disabilities or health conditions forum</td>
</tr>
<tr>
<td>17 May - 22 May 2019</td>
<td>Physics, astronomy and planetary science forum</td>
</tr>
</tbody>
</table>

Qualitative description was chosen as online discussion forums (ODFs) provide a rich resource of primary data in the form of authentic written artefacts of constructed knowledge and meaning. In the design of this research thematic analysis was initially chosen as the preferred approach but a decision was made in wanting to present and stay closer to the raw data. There was also concern that because students needed to opt in, not all posts could be analysed and collected resulting in a largely fragmented dataset.

A high value was placed in student posts ‘speaking for themselves’ and Bradshaw, Atkinson, & Doody (2017) note that qualitative description design still attempts to interpret findings without straying too far from their literal description and works well where the data is collected in its natural setting (in this case a forum). Qualitative description also sits within a naturalistic approach, in line with the view that reality is subjective and is socially constructed. Constructivism is not a new concept in the field of career guidance studies and provides both a contextual explanation of career and a method to guidance work with clients such as narrative approaches (Savickas, 2012).
presents a useful reminder of how I have made sense of what is happening in the ODFs and orientating my approach. Our careers are a social construction through community interaction increasingly mediated by technology.

As is common with qualitative description content analysis was employed utilising a coding framework that was modified from Garrison, Anderson & Archer’s (2000) Community of Inquiry Model (COI). This was to identify occurrences of seven variables within student forum posts relevant to research questions 1 and 2.

1. **Social Presence** (SP) The online self and the presence of others is explained by Gunawardena and Zittle (1997, p.9) as social presence and is the “degree to which a person is perceived as a ‘real person’ in mediated communication”. Social presence therefore allows participants to project their identities online.

2. **Career Identity** (CI) Expresses itself in how a person identifies themselves with a specific occupation or career in through their discourse (Lengelle and Meijers, 2012).

3. **Cognitive Presence** (CP) (relevant to career learning) Is the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse which is crucial for deep knowledge construction. The coding framework split cognitive presence into the four elements as devised by Garrison, Anderson & Archer (2000).

   - Triggering events - gaining perception of the content, restating and clarifying.
   - Exploration - exploring and inquiring how content and ideas applies to them expressed in stories and opinion.
   - Integration - using judgment and evaluation relating content and ideas. Building and developing arguments.
   - Resolution - creating concrete solutions and conclusions.

4. **Community Support** (CS) (relevant to social learning) The extent to which forum members offer help and assistance to each other either through encouragement or through access to resources.

**Stage 3:** A semi-structured interview schedule was devised ([Appendix 4](#)) to be undertaken with four OU Careers & Employability Consultants whom had moderated and participated in careers forums during the data collection phase (March to June 2019). This method was chosen as particularly suited to gathering focused, small-scale qualitative data and offered a balance between the flexibility of an open-ended interview and the focus of a structured survey (Alshenqeeti, 2014).

The prepared interview question schedule covered two distinct themes.

1. Theme 1. Perceptions of utility of OU ODFs for career
2. Theme 2. The Career Consultants role within ODFs

Theme one set of questions was considered useful as a comparison to the questions asked to OU students in stage 1 of the study in relation to the usefulness of ODFs and research questions one and two.

The theme two set of questions would explore the third research question in relation to understanding the role and approach that Open University careers practitioners adopted in the selected ODFs.
Interviews were hosted and recorded using Adobe Connect webinar software. Independent transcription then took place. The length and designation of each interview is as follows:


Thematic analysis of the transcribed interviews was then undertaken. Braun and Clarke (2006) allude to thematic analysis (TA) as being flexible and not tied to any specific theoretical framework but associated with a distinctive set of procedures. A deductive and theoretically led approach to data coding, analysis and theme development was undertaken as the research was heavily influenced by theory already discussed in the literature review centred around career learning, career identity, social learning and online communities.

During coding, this deductive and theoretically led approach resulted in labelling data relevant to the research questions, although semantic labels exist the latent meaning was also interpreted. In summary, the development of each theme involved interpretative work, and so is not just descriptive, but was already theorised which fits within a constructionist paradigm in how a certain reality has been created by the thematic analysis.

The procedure followed in this research was commensurate with the Braun and Clarke (2006) six step approach to thematic analysis, outlined below.

1. Familiarisation with the data: Each transcribed interview transcript was read twice before starting to code on the third read through.

2. Coding: Labels that identified important features of the data that were relevant to answering the research questions were coded across the entire dataset. The codes for each interview were then collated under each question and grouped together in an Excel spreadsheet for commencing step 3. Codes were refined during this stage, so they were consistent across the dataset.

3. Searching for themes: Codes were examined to identify significant broader patterns of meaning and potential themes. Initial names for potential themes were created and codes relevant to each potential theme were collated and grouped together.

4. Reviewing themes: Working backwards, potential themes were reviewed against the transcribed interviews, to make sure they were represented in the data and answered my research questions. Some themes were, refined, renamed, split, combined, or discarded.

5. Defining and naming themes: A detailed analysis of each theme to work out the scope and connections to the literature. Final theme names were determined.

6. Writing up: My analysis and data extracts, were then reported in my findings and discussion.
3.5 Research Design Summary – How are the research questions being answered?

<table>
<thead>
<tr>
<th>Qualitative description (QD) of online discussion forum posts</th>
<th>Self-completed Jisc Online Student Questionnaire</th>
<th>Thematic Analysis of OU Careers Consultant Semi-Structured Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Q2</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Q3</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Q4</td>
<td>✔</td>
<td></td>
</tr>
</tbody>
</table>

4.0 Findings & discussion

4.1 Stage 1: A self-completed structured online questionnaire.

The online questionnaire was designed to gather data and insight towards answering research questions 1, 2, 3 and 4. An email invitation (Appendix 2) was sent to the 59 students who opted into the research. The survey invitations were sent between March – May 2019 with the timing of invites consistent in being emailed a day after the closure for each of the selected six forums. Reminders were sent a week after the first invite. A final invite was sent to non-respondents with a £10 incentive for completion to boost the response rate. The questionnaire was closed on 2nd June 2019. The questionnaire (Appendix 3) was completed by 31 students for a completion rate of 52%. Discrete frequency distribution was used to create the tables.

Section 1. Demographics

The age range and gender of respondents was asked to explore if there are any meaningful demographical differences between responses.

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-24</td>
<td>1 (3.2%)</td>
</tr>
<tr>
<td>25-34</td>
<td>5 (16.1%)</td>
</tr>
<tr>
<td>35-44</td>
<td>9 (29%)</td>
</tr>
<tr>
<td>45-54</td>
<td>14 (45.2%)</td>
</tr>
<tr>
<td>55-64</td>
<td>2 (6.5%)</td>
</tr>
<tr>
<td>65-74</td>
<td>0</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>0</td>
</tr>
</tbody>
</table>

Single answer: Percentage of selections across all answer options (adding up to 100% across all options)

Gender: Female n=21 Male n=8 Prefer not to say n=2
Section 1 Discussion

The median age of new undergraduate students at the OU in 2017/18 was 28. Of interest is that respondents were typically within a higher age bracket that are featured in the general OU student population. For example, 45.2% of respondents were in the 45-54 age category but in the OU student population this figure is 13% at UG level and 23% at PG level in 2017/18. Beyond the scope of this study but of interest for future research is the relationship between the demographic appeal of ODFs versus mainstream social media platforms for career purposes. Existing social media demographic studies have focused on social networking applications such as LinkedIn, Facebook and Twitter rather than ODFs.

The gender split of the current Careers Service population of 297,106 (2018/19) is weighted 60% female to 40% male so although the survey population is outside of this distribution the relatively low sample size does not make this statistically significant.

Section 2. Student forum activity

The following four questions related to gaining insight into student forum activity and behaviour which can be difficult to capture even with the benefit of built in analytics. These typically count visits, threads and posts but not inconspicuous forum activity such as posting behaviour, repeat visits and time spent in the forums. Collection of this data allowed for cross tabulation analysis (Section 3 & 4 of the survey) such as comparison of the time spent in forums relative to the self-reported benefits.

**Question:** Approximately how many times did you visit the forum whilst it was open?

<table>
<thead>
<tr>
<th>Number of Visits</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2 (6.5%)</td>
</tr>
<tr>
<td>2-5</td>
<td>18 (58.1%)</td>
</tr>
<tr>
<td>6-9</td>
<td>5 (16.1%)</td>
</tr>
<tr>
<td>10+</td>
<td>6 (19.4%)</td>
</tr>
</tbody>
</table>

Single answer: Percentage of selections across all answer options (adding up to 100% across all options)

**Question:** In total, approximately how much time did you spend in the forum across your visits?

<table>
<thead>
<tr>
<th>Time Spent</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-3 hours</td>
<td>11 (35.5%)</td>
</tr>
<tr>
<td>2-5 hours</td>
<td>20 (64.5%)</td>
</tr>
<tr>
<td>6-9 hours</td>
<td>0</td>
</tr>
<tr>
<td>10+ hours</td>
<td>0</td>
</tr>
</tbody>
</table>

Single answer: Percentage of selections across all answer options (adding up to 100% across all options)
Question: Students were asked to read the following statements and select the answer which best described their forum activity.

<table>
<thead>
<tr>
<th>Response</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>I read posts but I did not write any posts myself</td>
<td>10</td>
<td>32.3%</td>
</tr>
<tr>
<td>I did not post my own questions but I read and posted replies to existing posts</td>
<td>5</td>
<td>16.1%</td>
</tr>
<tr>
<td>I only posted my own questions/s and only read the responses to that question/s</td>
<td>3</td>
<td>9.7%</td>
</tr>
<tr>
<td>I posted my own questions/s as well as reading and replying to other posts in the forum</td>
<td>13</td>
<td>41.9%</td>
</tr>
</tbody>
</table>

Single answer: Percentage of selections across all answer options (adding up to 100% across all options)

Question: Students were then asked an optional question to explain their level of forum activity in more detail within a freeform box.

Responses (n=26) can be found in Appendix 5a. Replies were selected that provided insight into forum activity and behaviour. Many students merely rephrased the statement they had selected.

However, a lack of time (n=4) was cited as a factor for their level of activity.

“Did not have sufficient time to fully take part”

“I did not have enough spare time to get involved”

“I was so busy with my course at the times that I wasn’t able to provide as much as I would have liked”

“I would have liked to participate more but was unable to due to caring responsibilities. I would have been more involved if the forum had been open longer. I did read the posts from others, but had little time to compose responses (due to dependent being ill)”

In addition, two students made the valid point that if there were already answers to the questions you were seeking this could impact on whether you posted your own question.

“Most of the questions I had in mind had already been asked and answered by the time I got to the forum. I found it convenient and helpful”

“I read questions I would have asked myself”

Whilst two other respondents bravely shared how they felt they would be perceived limited their posting activity.

“I read the posts, information, and questions from other participants, and I explored the websites and vacancies of the companies that some of the company representatives belonged to. I felt a bit too intimidated to post my own questions as I thought they would be seen as irrelevant or uninformed”

“I might have been able to respond to more, but was suffering slightly from a depressive episode and realised that my posts were sounding more negative than I’d have liked them to”
Section 2 Discussion

It was hypothesised that the amount of forum visits would influence the total amount of time students spent in the forums. Although 35.5% of students visited six or more times (19.4% were 10+) total visit time still did not exceed six hours. This suggests visits were fairly limited in average duration which could be attributed to two factors. Firstly, in Table 1: Forum and research participant activity shows 59% of students who opted into this research project did not post in any of the selected forums. For those 38% of students who did post, there was an average of 4.8 posts per student, although this varied considerably forum to forum. Secondly, student activity needs to be tempered with the limited time duration of the six studied ODFs which ranged from 3-10 days inclusive. Time and access are important factors within ODFs and this was reflected in the student comments. The asynchronous nature of forums can make time and place less critical as reading and posting can be achieved when and where suits the participant. However, in the ODFs operated by the Careers & Employability Services the forum duration limited access to when students could post (but still read). This could inhibit and influence student forum behaviours such as having time to read and post across multiple threads.

In addition, the freeform responses provided a reminder that students made conscious and strategic decisions not to post, for example, because their question had already been asked or for fear of how their posts would be received by other participants. How the forum activity levels impacted on career identity, learning and development was analysed in section 3 (understanding your career so far).

Section 3. Understanding your career so far

The first two questions in this section related to each participants career journey up to the present day. Respondents were advised the word ‘career’ is interpreted differently by individuals but for this questionnaire were told to consider their career journey to include aspects such as learning and work (paid/voluntary/self-employed).

**Question:** To what extent was participating in the forum helpful to you in understanding your own career identity? (so how you became who you are today and who you want to be in the future)

<table>
<thead>
<tr>
<th>Not helpful at all</th>
<th>Slightly helpful</th>
<th>Moderately helpful</th>
<th>Very helpful</th>
<th>Extremely helpful</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 (6.5%)</td>
<td>7 (22.6%)</td>
<td>10 (32.3%)</td>
<td>9 (29%)</td>
<td>3 (9.7%)</td>
</tr>
</tbody>
</table>

Single answer: Percentage of selections across all answer options (adding up to 100% across all options)

A primary reason in establishing student forum activity (Section 2) related directly to answering the first two research questions in ascertaining that if students visited more, stayed longer and actively participated (reading, posting, replying) then did they did they report greater benefits?
Survey data was cross tabulated for visits and time spent, in relation to self-reported impacted on identity formation.

Data cross tabulated for visits

<table>
<thead>
<tr>
<th>To what extent was participating in the forum helpful to you in understanding your own career identity? (so how you became who you are today and who you want to be in the future)</th>
<th>Approximately how many times did you visit the forum whilst it was open?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Not helpful at all</td>
<td>100.00%</td>
</tr>
<tr>
<td>Slightly helpful</td>
<td>0.00%</td>
</tr>
<tr>
<td>Moderately helpful</td>
<td>0.00%</td>
</tr>
<tr>
<td>Very helpful</td>
<td>0.00%</td>
</tr>
<tr>
<td>Extremely helpful</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

The greatest spread of responses occurred in the 2-5 visit range which also coincided with this category containing the largest number of responses (n=18). The results indicated that as the visits increased there was a trend for the helpfulness rating to increase. Although the small sample size makes this less conclusive, it does infer there is a minimum threshold of time between 2-5 hours before the impact on career identity becomes more influential.

Data cross tabulated for time spent in forums

<table>
<thead>
<tr>
<th>To what extent was participating in the forum helpful to you in understanding your own career identity? (so how you became who you are today and who you want to be in the future)</th>
<th>In total, approximately how much time did you spend in the forum across your visits?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-1 hour</td>
</tr>
<tr>
<td>Not helpful at all</td>
<td>18.18%</td>
</tr>
<tr>
<td>Slightly helpful</td>
<td>45.45%</td>
</tr>
<tr>
<td>Moderately helpful</td>
<td>27.27%</td>
</tr>
<tr>
<td>Very helpful</td>
<td>9.09%</td>
</tr>
<tr>
<td>Extremely helpful</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

This is further supported by the increase in self-reported usefulness for identity formation when the data was cross tabulated for time spent in the forums. For example, for students (n=11) who only spent 0-1 hour in the forum 63.63% reported this was either ‘not helpful’ or ‘slightly helpful’ and 9.09% that it was either ‘very helpful’ or ‘extremely helpful’. This compares starkly to students (n=20) who spent 2-5 hours in the forum where only 10% reported that it was ‘not helpful’ or ‘slightly helpful’ and 55% reporting the forum was either ‘very helpful’ or ‘extremely helpful’ for their career identity.
Finally, data was cross tabulated against the forum activity typology that was created to account for the different types of forum posting behaviours.

<table>
<thead>
<tr>
<th>To what extent was participating in the forum helpful to you in understanding your own career identity? (so how you became who you are today and who you want to be in the future)</th>
<th>Read the following statements and select the one which best describes your activity on our recent careers forum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I read posts but I did not write any posts myself</td>
<td>I read and posted replies to existing posts</td>
</tr>
<tr>
<td>Not helpful at all</td>
<td>10.00%</td>
</tr>
<tr>
<td>Slightly helpful</td>
<td>40.00%</td>
</tr>
<tr>
<td>Moderately helpful</td>
<td>20.00%</td>
</tr>
<tr>
<td>Very helpful</td>
<td>30.00%</td>
</tr>
<tr>
<td>Extremely helpful</td>
<td>0.00%</td>
</tr>
<tr>
<td>I only posted my own questions/s and only read the responses to that question/s</td>
<td>33.33%</td>
</tr>
<tr>
<td>I posted my own questions/s as well as reading and replying to other posts in the forum</td>
<td>7.69%</td>
</tr>
</tbody>
</table>

Percentage of selections across all answer options (adding up to 100% across all option columns)

These results were interesting because it could be logical to hypothesise higher self-reported ratings moving from passive (reading) to participative (posting) forum activity. However, the data was far less conclusive which is suggestive that both duration and visits are more influential for the necessary reflection and meaning making for career identity formation. It also uncovers the self-reported value in solely reading forum posts, although taking the combined ratings of ‘very helpful’ and ‘extremely helpful’ into consideration the highest percentage (46.15%) was achieved when students were highly active (reading, posting questions, replying across threads).

**Question**: Students were also asked an optional question to explain their rating to the previous question in more detail within a freeform box.

All responses (n=24) can be viewed in Appendix 5b. On analysis, 33% of student replies (n=7) demonstrated a change in self-awareness and thoughts about their future (transitioning). The comments also highlighted the often invisible impact of forum participation, particularly when students decided not to post.

Career identity was also evident and can be formed through discoursal construction from intertwined interactions and co-constructed narratives (LaPointe, 2010). This means thinking about one’s self and the position to your current situation and future. Students reflected these thoughts in the selected forums whilst also disclosing benefits relating to attitude (confidence) and feelings (inspired, not alone)

“I had options to explore, with suggestions that I was not aware of before I posted. The options did not always give definitive leads, more, ways to explore”

“The responses from moderators were also very encouraging and helpful in identifying skills which I may not otherwise have seen in myself through a lack of confidence”

“I think it will become "Extremely helpful" when I have time to really think about the answers I received, which is why I only put "Moderately helpful". I would say though, that it has already been "Extremely inspirational" - built my confidence that I won’t be too old to start a new career when I’m in my 60s :-)”
“It helped me to identify a link between the career I have now and the one I want to transition to. There are a lot more skills I have already developed which are in demand in physics-related jobs than I realised”.

“It made me decide I was doing the right career path and that I was doing the right qualifications”.

“Since my studies are not related to my current career I asked questions about transitioning. I got good feedback and also read feedback given to other participants. I got access to a lot of career advice and volunteering opportunities in fields I did not consider before”

“I realised that I was not alone in struggling to find suitable employment with my health conditions”

The remaining four questions of section 3 of the survey were inspired by Law and Watts (1977) DOTS framework (decision learning, opportunity awareness, transition learning, self-awareness) as individuals move from ‘finding out’ to ‘figuring out’. They were not intended to map and measure the entire cognitive learning journey so are proxies in consideration of DOTs and elements of career learning (Law, 2010). Again, survey data was cross tabulated for visits and duration in relation to the self-reported impacted on identity formation.

**Question:** Students were asked how helpful the forum had been in allowing them to become aware of their feelings (e.g. hope, fear, confidence, excitement, anxiety) towards their career?

<table>
<thead>
<tr>
<th>Not helpful at all</th>
<th>Slightly helpful</th>
<th>Moderately helpful</th>
<th>Very helpful</th>
<th>Extremely helpful</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 (12.9%)</td>
<td>9 (29%)</td>
<td>9 (29%)</td>
<td>5 (16.1%)</td>
<td>4 (12.9%)</td>
</tr>
</tbody>
</table>

Single answer: Percentage of selections across all answer options (adding up to 100% across all options)

Students (n=18) were generally positive (excluding ‘not helpful’ and ‘slightly helpful’ measures) in reporting that forum participation was helpful in terms of self-awareness development (58%).

**Data cross tabulated for visits**

<table>
<thead>
<tr>
<th>Become aware of your feelings (e.g. hope, fear, confidence, excitement, anxiety) towards your career?</th>
<th>Approximately how many times did you visit the forum whilst it was open?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Not helpful at all</td>
<td>100.00%</td>
</tr>
<tr>
<td>Slightly helpful</td>
<td>0.00%</td>
</tr>
<tr>
<td>Moderately helpful</td>
<td>0.00%</td>
</tr>
<tr>
<td>Very helpful</td>
<td>0.00%</td>
</tr>
<tr>
<td>Extremely helpful</td>
<td>0.00%</td>
</tr>
<tr>
<td>No answer</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

Percentage of selections across all answer options (adding up to 100% across all columns)
As the number of forum visits increased there was a trend for the helpfulness rating to increase. For example, of the students (n=4) who had selected the ‘not helpful at all’ category 50% had visited once and 50% had visited 2-5 times. Whereas of the students who had rated the forum as being ‘extremely helpful’ (n=4) 25% had visited 1-5 times and 75% had visited six times or more.

Data cross tabulated for time spent in forums

<table>
<thead>
<tr>
<th>Become aware of your feelings (e.g. hope, fear, confidence, excitement, anxiety) towards your career?</th>
<th>In total, approximately how much time did you spend in the forum across your visits?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-1 hour</td>
</tr>
<tr>
<td>Not helpful at all</td>
<td>27.27%</td>
</tr>
<tr>
<td>Slightly helpful</td>
<td>27.27%</td>
</tr>
<tr>
<td>Moderately helpful</td>
<td>27.27%</td>
</tr>
<tr>
<td>Very helpful</td>
<td>9.09%</td>
</tr>
<tr>
<td>Extremely helpful</td>
<td>9.09%</td>
</tr>
<tr>
<td>No answer</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

Percentage of selections across all answer options (adding up to 100% across all columns)

Analysing the time students spent in the forum of those (n=11) who only stayed 0-1 hour 54.54% reported this was either ‘not helpful at all’ or ‘slightly helpful’ and 18.18% that it was either ‘very helpful’ or ‘extremely helpful’. This compares to students (n=20) who spent 2-5 hours in the forum where 35% reported that it was ‘not helpful at all’ or ‘slightly helpful’ compared to 35% where it was deemed either ‘very helpful’ or ‘extremely helpful’.

**Question:** Students were asked how helpful to them had the forum been in allowing them to gather career related information about their future options?

<table>
<thead>
<tr>
<th>Not helpful at all</th>
<th>Slightly helpful</th>
<th>Moderately helpful</th>
<th>Very helpful</th>
<th>Extremely helpful</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 (9.7%)</td>
<td>5 (16.1%)</td>
<td>9 (29%)</td>
<td>8 (25.8%)</td>
<td>6 (19.4%)</td>
</tr>
</tbody>
</table>

Single answer: Percentage of selections across all answer options (adding up to 100% across all options)
Data cross tabulated for visits

<table>
<thead>
<tr>
<th>Gather career related information about your future options?</th>
<th>Approximately how many times did you visit the forum whilst it was open?</th>
<th>No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not helpful at all</td>
<td>100.00% 5.56% 0.00% 0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Slightly helpful</td>
<td>0.00% 27.78% 0.00% 0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Moderately helpful</td>
<td>0.00% 33.33% 40.00% 16.67%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Very helpful</td>
<td>0.00% 22.22% 0.00% 66.67%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Extremely helpful</td>
<td>0.00% 11.11% 60.00% 16.67%</td>
<td>0.00%</td>
</tr>
<tr>
<td>No answer</td>
<td>0.00% 0.00% 0.00% 0.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

Percentage of selections across all answer options (adding up to 100% across all columns)

Data cross tabulated for time spent in forums

<table>
<thead>
<tr>
<th>Gather career related information about your future options?</th>
<th>In total, approximately how much time did you spend in the forum across your visits?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-1 hour 2-5 hours 6-9 hours 10+ hours</td>
</tr>
<tr>
<td>Not helpful at all</td>
<td>18.18% 5.00% 0.00% 0.00%</td>
</tr>
<tr>
<td>Slightly helpful</td>
<td>27.27% 10.00% 0.00% 0.00%</td>
</tr>
<tr>
<td>Moderately helpful</td>
<td>36.36% 25.00% 0.00% 0.00%</td>
</tr>
<tr>
<td>Very helpful</td>
<td>18.18% 30.00% 0.00% 0.00%</td>
</tr>
<tr>
<td>Extremely helpful</td>
<td>0.00% 30.00% 0.00% 0.00%</td>
</tr>
<tr>
<td>No answer</td>
<td>0.00% 0.00% 0.00% 0.00%</td>
</tr>
</tbody>
</table>

Percentage of selections across all answer options (adding up to 100% across all columns)

Students (n=23) were very positive (excluding ‘not helpful at all’ and ‘slightly helpful’ ratings) in reporting that forum participation was helpful in terms gathering career related information (74.2%).

Again, and perhaps unsurprisingly the more time and visits students allocated to the forum increased the helpfulness rating. Of the students (n=3) who had selected ‘not helpful at all’, 66.67% had visited only once and 33.3% had visited 2-5 times. In contrast, of the students who had rated the forum as being ‘extremely helpful’ (n=6) 33.3% had visited 2-5 times and 66.67% had visited on six or more occasions.

Examining the time students spent in the forum of those students (n=11) who only stayed 0-1 hour 45.45% reported this was either ‘not helpful at all’ or ‘slightly helpful’ and 18.18% that it very helpful (none selected ‘extremely helpful’). More favourably, students (n=20) who spent 2-5 hours in the forum reported (15%) it was less likely to be ‘not helpful at all’ or ‘slightly helpful’ compared to 60% where it was deemed either ‘very helpful’ or ‘extremely helpful’ in gathering career related information.
**Question:** Students were asked how helpful to them has the forum been in allowing them to make decisions about their future?

<table>
<thead>
<tr>
<th>Not helpful at all</th>
<th>3 (9.7%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slightly helpful</td>
<td>6 (19.4%)</td>
</tr>
<tr>
<td>Moderately helpful</td>
<td>8 (25.8%)</td>
</tr>
<tr>
<td>Very helpful</td>
<td>10 (38.7%)</td>
</tr>
<tr>
<td>Extremely helpful</td>
<td>2 (6.5%)</td>
</tr>
</tbody>
</table>

Single answer: Percentage of selections across all answer options (adding up to 100% across all options)

**Data cross tabulated for visits**

<table>
<thead>
<tr>
<th>Make decisions about your future?</th>
<th>Approximately how many times did you visit the forum whilst it was open?</th>
<th>No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2-5</td>
</tr>
<tr>
<td>Not helpful at all</td>
<td>100.00%</td>
<td>5.56%</td>
</tr>
<tr>
<td>Slightly helpful</td>
<td>0.00%</td>
<td>27.78%</td>
</tr>
<tr>
<td>Moderately helpful</td>
<td>0.00%</td>
<td>33.33%</td>
</tr>
<tr>
<td>Very helpful</td>
<td>0.00%</td>
<td>27.78%</td>
</tr>
<tr>
<td>Extremely helpful</td>
<td>0.00%</td>
<td>5.56%</td>
</tr>
<tr>
<td>No answer</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

Percentage of selections across all answer options (adding up to 100% across all columns)

Overall, students (n=22) were very positive (excluding the ‘not helpful at all’ and ‘slightly helpful’ measures) in reporting that forum participation was useful in supporting the gathering of career related information (71%). Increases to the time and visits students allocated to the forum increased the helpfulness rating.

**Data cross tabulated for time spent in forums**

<table>
<thead>
<tr>
<th>Make decisions about your future?</th>
<th>In total, approximately how much time did you spend in the forum across your visits?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-1 hour</td>
</tr>
<tr>
<td>Not helpful at all</td>
<td>18.18%</td>
</tr>
<tr>
<td>Slightly helpful</td>
<td>36.36%</td>
</tr>
<tr>
<td>Moderately helpful</td>
<td>18.18%</td>
</tr>
<tr>
<td>Very helpful</td>
<td>27.27%</td>
</tr>
<tr>
<td>Extremely helpful</td>
<td>0.00%</td>
</tr>
<tr>
<td>No answer</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

Percentage of selections across all answer options (adding up to 100% across all columns)

Accounting for the time students spent in the forum of the students (n=11) who only stayed 0-1 hour, 54.54% reported this was either ‘not helpful at all’ or ‘slightly helpful’ and 27.27% that it ‘very
helpful’ (none elected ‘extremely helpful’). Again, increases in time impacted positively on the helpfulness rating. Students (n=20) who spent 2-5 hours in the forum reported less likelihood (15%) of selecting the ‘not helpful at all’ or ‘slightly helpful’ ratings and were more likely (55%) to find the forum as either ‘very helpful’ or ‘extremely helpful’ in supporting career decision making about their future.

**Question:** Students were then asked a required freeform box question to describe what impact (if any) participating in the forum had on their thoughts about their career (Appendix 5c). As the responses were so varied a simple bucketing technique was used to identity and sample responses across the positive, neutral and negative range. Any ‘none’ and ‘no impact’ responses were interpreted cautiously as negative as the intent of the forums was to impact positively on student career development.

<table>
<thead>
<tr>
<th>Positive (n=22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>“It helped to make my career choices clear and rule out some options”</td>
</tr>
<tr>
<td>“I realise that when I am able to return to work, with my degree (psychology) I will have many avenues to explore. Also, despite a 10 year gap, my skills as an OU student will benefit me”</td>
</tr>
</tbody>
</table>
| “Again, as above, I think that the answers to the above 3 questions will be "Extremely helpful" once I have had time to process. However the forum has had a surprisingly larger positive impact on my career thoughts than I expected! The opportunity to talk to actual scientists working in fields I am interested in, their enthusiasm and encouragement (although they were realistic about the challenges) made me feel as if, perhaps, I could one day be one of them (albeit an older version). It also made me realise that I was actually much more concerned (unnecessarily paranoid?) about my age (I will probably be 59 when I graduate) than I realised. To summarise - inspiring, encouraging, and has made me want to do much more careers research than I have so far”.

<table>
<thead>
<tr>
<th>Neutral (n=4)</th>
</tr>
</thead>
</table>
| “Honestly, it’s not impacted or altered my thoughts. I know exactly which career path I wanted to follow”.
| “I would need to look in more detail to the input of my peers. In the future closer to the completion of my course I feel as if I would use the forums more as a source of guidance, But for now I understand that it is available as a resource but I barely use it”.

<table>
<thead>
<tr>
<th>Negative (n=5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Not much impact”</td>
</tr>
<tr>
<td>“I’ve no thoughts because I’ve had no input total waste of time”</td>
</tr>
</tbody>
</table>
Section 3 Discussion

Students were generally positive - excluding the ‘not helpful at all’ and ‘slightly helpful’ measures - in reporting that forum participation was beneficial in terms of their self-awareness development (58%), opportunity awareness through information gathering (73.2%) and supportive in career decision making (71%). This provides an emerging evidence base that career focused online discussion forums have utility in helping students to learn more about themselves and their career identity (Lengelle and Meijers, 2012; 2014) and for finding out to ‘figuring out’ in undertaking DOTs related activity (Law and Watts, 1977). In addition, cross tabulation of the data against the number of forum visits and time spent in the forums demonstrated that increased visits and duration were influential in students self-reporting higher levels of positive impact on their self-awareness, information gathering and career decision making.

Section 4. Students interactions with other participants

The questions in this section related to any direct and indirect interaction with OU Careers & Employability Consultants and other OU students in the forum. The impact variables were kept consistent for comparison (see Table 1).

Question: Did an OU Careers & Employability Consultant respond directly to your post/s? (This was a routing question. For those students who answered “no” automatically skipped the next question)

Yes: 16 (51.6%)   No : 15 (48.4%)

Question: Students were then asked what impact did these interaction/s have on them? (students could tick all that apply)

- Gave me new ideas for my career: 8 (50%)
- Gave me new information for my career: 10 (62.5%)
- Allowed me to become aware of the feelings I have towards my career: 7 (43.8%)
- Allowed me to understand myself more: 4 (25%)
- Allowed me to make career decisions: 5 (31.3%)
- No impact: 1 (6.3%)
- Other: 2 (12.5%)

Multi answer: Percentage of 16 respondents who selected each answer option (e.g. 100% would represent that all this question’s respondents chose that option)

If selecting other students were asked to specify this. There were two responses to this question.
“Would have been great to have someone to give advice regarding post graduate study, as by answering this type of question on the forum I would have been able to engage more”

“Encouraged me to participate more actively in the forum”

Question: Students were asked what impact did interacting with Careers & Employability Consultant posts directed at other participants (not you) have on them? (Students could tick all that apply)

<table>
<thead>
<tr>
<th>Impact Description</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gave me new ideas for my career</td>
<td>5 (33.3%)</td>
</tr>
<tr>
<td>Gave me new information for my career</td>
<td>6 (40%)</td>
</tr>
<tr>
<td>Allowed me to become aware of the feelings I have towards my career</td>
<td>6 (40%)</td>
</tr>
<tr>
<td>Allowed me to understand myself more</td>
<td>2 (13.3%)</td>
</tr>
<tr>
<td>Allowed me to make career decisions</td>
<td>4 (26.7%)</td>
</tr>
<tr>
<td>No impact</td>
<td>3 (20%)</td>
</tr>
<tr>
<td>Not applicable. I did not Interact Careers &amp; Employability Consultant posts directed at other participants</td>
<td>4 (26.7%)</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
</tr>
</tbody>
</table>

Multi answer: Percentage of 15 respondents who selected each answer option (e.g. 100% would represent that all this question’s respondents chose that option)

Question: Students were asked what impact did interacting with other OU student posts have on them?

<table>
<thead>
<tr>
<th>Impact Description</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gave me new ideas for my career</td>
<td>7 (22.6%)</td>
</tr>
<tr>
<td>Gave me new information for my career</td>
<td>15 (48.4%)</td>
</tr>
<tr>
<td>Allowed me to become aware of the feelings I have towards my career</td>
<td>6 (19.4%)</td>
</tr>
<tr>
<td>Allowed me to understand myself more</td>
<td>8 (25.8%)</td>
</tr>
<tr>
<td>Allowed me to make career decisions</td>
<td>7 (22.6%)</td>
</tr>
<tr>
<td>No impact</td>
<td>6 (19.4%)</td>
</tr>
<tr>
<td>Not applicable. I did not read OU student posts directed at other participants</td>
<td>6 (19.4%)</td>
</tr>
<tr>
<td>Other</td>
<td>3 (9.7%)</td>
</tr>
</tbody>
</table>

Multi answer: Percentage of 31 respondents who selected each answer option (e.g. 100% would represent that all this question’s respondents chose that option)
If selecting ‘other’ students were asked to specify this. There were three responses which are shown below.

“Motivate and inspired me”
“Allowed me to empathise with other students and put forward my ideas for their progress”
“Reassured me that there are many others with similar concerns to mine”

Section 4 Discussion

Cross analysis of the section 4 question set was undertaken to compare the level of agreeableness (percentage of respondents who selected each answer option) reported by students across the six impact variables which again were proxies for the DOTs framework (Law and Watts, 1977).

Table 1. Comparison of impact on career by interaction type

<table>
<thead>
<tr>
<th>Impact of interactions</th>
<th>Practitioner (Direct response) N=16</th>
<th>Practitioner (Indirect to others) N=15</th>
<th>OU student Interaction N=31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gave me new ideas for my career</td>
<td>50%</td>
<td>33%</td>
<td>22.6%</td>
</tr>
<tr>
<td>Gave me new information for my career</td>
<td>62.5%</td>
<td>40%</td>
<td>48.4%</td>
</tr>
<tr>
<td>Allowed me to become aware of the feelings I have towards my career</td>
<td>43.8%</td>
<td>40%</td>
<td>19.4%</td>
</tr>
<tr>
<td>Allowed me to understand myself more</td>
<td>25%</td>
<td>13.3%</td>
<td>25.8%</td>
</tr>
<tr>
<td>Allowed me to make career decisions</td>
<td>31.3%</td>
<td>26.7%</td>
<td>22.6%</td>
</tr>
<tr>
<td>No impact</td>
<td>6.3%</td>
<td>20%</td>
<td>19.4%</td>
</tr>
</tbody>
</table>

Multi answer: Percentage of respondents who selected each answer option (e.g. 100% would represent that all this question’s respondents chose that option for each column)

Direct careers practitioner responses to students elicited the highest percentage across each of the five categories and the lowest ‘no impact’ percentage. A possible causal factor is the expertise and training of guidance practitioners. Within OU online careers forums guidance practitioners replicated many of the same approaches seen in other methods of guidance delivery (email, telephone and face to face) such as opening up dialogue, exploring and clarifying issues, identifying possible solutions and signposting to appropriate resources.

A likely factor in the lower ratings for posts directed at other participants is the lack of personalisation and applicability of content to all student contexts (these were factors highlighted by several students in section 5 of the survey in their feedback). What is also evident is the valuable contribution peer-to-peer support can make in online forums, although this question would have included direct and indirect interactions. The three freeform responses also provided examples of how often students are uniquely placed to support each other in their ability to empathise in often shared circumstances and situations.
Section 5. How students access careers support

The final four questions in this survey related to the methods OU students have used to access careers support. They were then asked to reflect and comment in freeform fields on how they felt their experience in the recent OU career forum compared to the other methods of careers support available to them.

**Question:** What methods have you used to access careers support since you started your programme of study? (students could tick all that apply)

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>OU Careers Consultation by telephone</td>
<td>5 (16.1%)</td>
</tr>
<tr>
<td>OU Careers Consultation by Skype</td>
<td>0</td>
</tr>
<tr>
<td>OU Careers Consultation by email</td>
<td>4 (12.9%)</td>
</tr>
<tr>
<td>OU Careers forum</td>
<td>17 (54.8%)</td>
</tr>
<tr>
<td>OU Careers Facebook Chat</td>
<td>3 (9.7%)</td>
</tr>
<tr>
<td>OU LinkedIn Group (TOUCAN)</td>
<td>1 (3.2%)</td>
</tr>
<tr>
<td>OU Tutor</td>
<td>7 (22.6%)</td>
</tr>
<tr>
<td>Other OU students</td>
<td>6 (19.4%)</td>
</tr>
<tr>
<td>OU module forum</td>
<td>7 (22.6%)</td>
</tr>
<tr>
<td>Friends</td>
<td>9 (29%)</td>
</tr>
<tr>
<td>Family</td>
<td>12 (38.7%)</td>
</tr>
<tr>
<td>Work colleagues</td>
<td>4 (12.9%)</td>
</tr>
<tr>
<td>Other</td>
<td>9 (29%)</td>
</tr>
</tbody>
</table>

Multi answer: Percentage of 31 respondents who selected each answer option (e.g. 100% would represent that all this question’s respondents chose that option)

If selecting other they were asked to specify this. Students referenced seven additional methods of support with two methods that were already contained in the list.


The results are noticeable in both the variety of support accessed and the prevalence those options are selected. Six of the categories (OU tutor, other OU students, OU module forum, friends, family, work colleagues) are highly unlikely to offer qualified careers support but nevertheless these methods form an integral part of each student’s support network. We are also reminded of Law’s (2010) community interaction theory in recognising the people who have influence on our careers are invariably not always careers professionals. Consequently, we learn and are influenced in more than one setting from the people within our networks. As OU forums are one of many potential methods students may seek support from, it was important to then ask why the choice was made to access forums.
**Question:** Students were then asked to explain this in more detail within a freeform box what influenced their decision to access our careers forum compared to the options they had used? These responses (n=31) can be found in Appendix 5d.

From an analysis three main themes were identified.

Students (n=10) mentioned they accessed the forum for help with a **specified career need.** The answers did not solicit detail on why students specifically opted for using ODFs compared to the other methods of support available. However, four responses did allude to the social nature of forums with intent to interact with others.

> “I wanted to get information from people with careers in certain fields already”
> “Wanted to get some authoritative advice from professional psychologists and counsellors”
> “Knowing careers consultants involved - it is possible I might have missed this opportunity otherwise, but I am surprised (and see other participants who also were) at how useful and exciting it was to talk to the hosts and guests”
> “I haven’t so far made use of much of the careers service at the OU, except to start to use some of the static info that’s available on the website. I like to attend the online careers events offered by the OU as much as I can, to get information and potentially network and ask questions of employers. I accessed the careers forum because I wanted to ask specific question, but I felt too intimidated to ask once the forum was open (though only because I didn’t think my questions were particularly good or relevant - no one made me feel intimidated)”

**Marketing activity** (n=8) also directly influenced students to attend.

> “Advertising the opportunity to contact someone within the careers forum was great and influenced my decision to use it”
> “This was emailed to me, so I knew it was an option”
> “The adverts from the careers group advertised on facebook. I use them as reminders prompts”
> “I am in year 5 (level 3) of my degree, and though I will not be returning to work for a little while I am considering further study (MSc). I would like to gain knowledge of ‘what is out there’ before deciding of a path of post-grad study. This ‘popped’ up in my news feed and I thought it would be useful to attend”

There was mention (n=4) of just **being curious** as several students had never tried an OU careers forum before.

> “Curiosity about what info would be available”
> “I had never used one of the career forums before and so was interested to try it”
> “It was advertised and as a new student I decided to see what it was about”
> “Try something new”
**Question**: Students were asked in a freeform box what they felt were the benefits (if any) in accessing careers support in an OU careers forum compared to the other methods available to them? These 31 responses can be found in Appendix 5e.

There were a wide range of motivations and perceived benefits mentioned by students. The **interactive nature** of forums (n=4) was highlighted.

> “I prefer the OU careers forum. It has well informed staff and the interaction between them and students is fantastic. The moderators are quick to reply and point to additional resources”
> “It gives me an opportunity to network with employers and ask questions, and it gives me a chance to get an idea of where other students are going with their own qualifications and/or employment researching. It gives me new ideas on careers and jobs”
> “The ability to talk to both peers and professionals at the same time”
> “It is another way of asking careers related questions”

However, they (n=3) also described the **benefits of reading other posts** in the forum. This type of feedback is otherwise invisible but demonstrates the value of forums where students choose to participate more passively.

> “Got to read different peoples point of view on opportunities that might be available”
> “I can see questions from other people that I may not have thought to ask myself and it was convenient that I could look back through the forum even if I wasn't available 'live' at the time”
> “I find it reassuring to read posts from other students with similar concerns to mine, and to hear from professionals in academia and industry who have been through the process already”

The **knowledge and experience** of people available in the forum was also valued (n=4).

> “They are knowledgeable”
> “Information from people who know”
> “The viewpoint of people already working in those fields”
> “You have academic people who have experiences in with different requests and can offer valuable correct information about what steps to take next”

There was an appreciation and value placed in the **community aspect of forums** often bringing together like-minded people (n=4). Students although from diverse backgrounds often share the same concerns and circumstances.

> “The variety of guest speakers with their own threads was useful and meant that a lot of different valuable experiences could be gathered together on the same forum. A lot of the concerns were similar too so a question posted by one user was likely to be helpful for others”
> “I feel that with the careers forum, everyone is oriented towards the same goal and like minded. I can take from peoples experiences and apply it to my own life currently to assist and help me should I need guidance”
“As a student of the OU I appreciate that other members of the OU have a better understanding of my position”

“U know what you are going through combining studying with family life”

The two lengthiest comments received in this question encapsulate the wider potential of forums and again recognised the benefits from the interactions and contributions from others.

“OU careers service generally - much better understanding that OU students aren’t straight from school but have all sorts of lives already. Forums specifically: I could post questions in a free moment (break at work, for example), and then read answers in the evenings at my leisure after work. Did not need to spend, for example, a whole hour attending a careers webinar. Also the sheer range of different experiences, stories and suggestions from all the hosts/guest employers, which you couldn’t get at a one-off webinar, for example. Other students sometimes asked questions I would have asked, so saved me time that way too”

“The breadth of ideas was interesting and showed me that I had viewed my options in a much narrower way before the forum. It made me more confident of following my own path and not just doing the usual direction that most people follow. As a mature student who already has a career it gave me ideas where I would not necessarily dump all my past experience and have to start at the bottom again. Now I have options to traverse from one career to another. Thank you OU”

Finally, three students expressed there were no benefits to OU careers forums but did not further expand on why they thought this.

**Final survey question:** Students were asked in a freeform box what they felt were the disadvantages (if any) in accessing careers support in an OU careers forum compared to the other methods available to them? These 31 responses can be found in Appendix 5f.

The most prevalent answer even though prompted to consider weaknesses was stating there were no disadvantages (n=10)

“Had a positive experience so no disadvantages on my side”

“No disadvantage. Interesting to read about different peoples career interests”

Some students (n=3) felt the forums to be a less personalised experience. This may not be an entirely unexpected response, given the size of some forums in terms of student visitors and the need to cater for a diverse student population.

“They cannot be personalized”

“There is less room for individual attention, since the intent is to cater to all forum users”

“It is less personal and direct. Should I have a query that I post, it could be misinterpreted and lost in translation”

There were comments (n=4) that finding information and following the posting activity in forums can at times be difficult. To put this into context and select two examples of forums used in this research, the Social Sciences Careers Forum (which ran from 20th March - 29th March 2019) resulted in 46 threads and 148 posts. The Careers in Computing and IT forum (hosted for just four days between 15th - 18th April 2019) led to 25 threads and 367 posts.
“I suppose it’s easier to talk one-to-one - (however the discipline of having to phrase questions carefully). It is difficult and confusing sometimes to find posts that you found before to locate the answers - quite labyrinthine. However, I came out of the experience less skeptical and more aware of the benefits!”

“Lack of knowledge where to find the information or forums where the required knowledge can be located”

“Some questions might be of a sensitive or personal nature and the forum not an appropriate means of communication. The number of forums / posts etc could be distracting since it is of a start / stop nature which is more time-consuming to follow”

“Sometimes a bit difficult to follow all the information”

Access to our forums in terms of the amount of time they were left open for students to post to (although read only access for 12 months) and the availability of guests such as employers was mentioned as not always fitting the needs and lifestyle of students (n=3)

“The length they are available. As a carer, I could have time to fully immerse myself in a forum or, as in this case, i was very limited. This left me quite disappointed about my lack of involvement”

“You have to be available for the certain time slots obviously but this is not too difficult”

“It could have done with more time, rather than having only a morning or afternoon session per ‘guest’. I liked the fact that IBM stuck around all week for their forum thread as that seemed to solicit more questions and answers”

Consideration to the potential negative psychological impact was also raised (n=2)

“In a way, there’s a bit of soul-searching required on the student’s behalf. While I’m fine with that I think others may not be”

“The student forum got a bit stressful in my opinion. As it sometimes made me worry I was behind”

Discussion

The survey results demonstrate the wide-ranging benefits of forum participation, for example Appendix 5e and Table 1. Comparison of impact on career by interaction type. Importantly, career learning, development and identity isn’t undertaken in discrete isolated pockets but as Brown (2000) alludes our ideas and thoughts are interwoven between the local face-to-face groups and global virtual ones that we inhabit. Consequently, even if ODFs cannot reasonably claim to be solely responsible for these benefits it offers proof of the value of providing a designed virtual space and time to bring experiences and thoughts together.

The impact of how students behave in ODFs should also reframe how we perceive the benefits of different types of forum participation. For example, in Table 1. Comparison of impact on career by interaction, although comparably less favourable to direct practitioner responses there we’re still widely reported benefits to reading practitioner posts directed at other students. Indeed, section 2 of the survey highlighted 32.3% (n=10) of students did not post in the forum so could be considered in forum parlance to be “lurkers”. However, even in complex areas such as decision making about
the future, cross tabulating the data with the type of forum activity in the table below reveals we perhaps need to reframe the lurker as the vicarious learner.

<table>
<thead>
<tr>
<th>Make decisions about your future?</th>
<th>Read the following statements and select the one which best describes your activity on our recent careers forum.</th>
<th>No answer</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I read posts but I did not write any posts myself</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Not helpful at all</td>
<td>I did not post my own questions but I read and posted replies to existing posts</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Slightly helpful</td>
<td>I only posted my own questions/s and only read the responses to that question/s</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Moderately helpful</td>
<td>I posted my own questions/s as well as reading and replying to other posts in the forum</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Very helpful</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Extremely helpful</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No answer</td>
<td></td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>31</td>
<td>0</td>
</tr>
</tbody>
</table>

Raw values across all answer options
4.2 Stage 2. Qualitative description (QD) of online discussion forum posts

Students (n=59) across six forums opted in to having their forum posts analysed\(^1\). Two students posted in two forums which is why the opt in total (n=61) is slightly higher compared to the number of questionnaires (n=59) which were distributed in stage 1. There was a high attrition rate starting from visitor numbers, to students opting into the research (n=61) to then writing at least one post (n=23). See Table 2.

Table 2: Forum and research participant activity

<table>
<thead>
<tr>
<th>Forum</th>
<th>Visitor numbers (unique)</th>
<th>Opted in to research</th>
<th>Did not post (despite opting in)</th>
<th>Unique posters (from opt in)</th>
<th>Number of posts (from opt in)</th>
<th>Post per student average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social sciences careers forum</td>
<td>414</td>
<td>13</td>
<td>9</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>IT and computing careers forum</td>
<td>813</td>
<td>19</td>
<td>15</td>
<td>4</td>
<td>25</td>
<td>6.3</td>
</tr>
<tr>
<td>Psychology and counselling careers forum</td>
<td>462</td>
<td>11</td>
<td>3</td>
<td>6</td>
<td>7</td>
<td>1.2</td>
</tr>
<tr>
<td>Career planning for access students forum</td>
<td>178</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Career planning for students with disabilities or health conditions forum</td>
<td>179</td>
<td>7</td>
<td>2</td>
<td>5</td>
<td>33</td>
<td>6.6</td>
</tr>
<tr>
<td>Physics, astronomy and planetary science forum</td>
<td>235</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>39</td>
<td>13</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2281</strong></td>
<td><strong>61</strong></td>
<td><strong>36 (59% from opted in)</strong></td>
<td><strong>23 (38%)</strong></td>
<td><strong>110</strong></td>
<td><strong>4.8 PPS average</strong></td>
</tr>
</tbody>
</table>

The coding framework was applied to the forum posts (n=110) and the numbers of occurrences were counted against the seven variables: Social Presence (SP), Career Identity (CI), Cognitive Presence (CP) - split into the four phases of triggering (T), exploration (E), integration (I) resolution (R) and Community Support (CS). An occurrence was only counted once per post and each post could contain more than one of the coded variables. The results of this analysis are contained in Table 3.

---

\(^1\) One student’s posts were discounted as they had also been invited to contribute as an expert guest.
Table 3: Post content against the coding framework

<table>
<thead>
<tr>
<th>Forum</th>
<th>Post count</th>
<th>SP (100%)</th>
<th>CI (50%)</th>
<th>T (25%)</th>
<th>E (20%)</th>
<th>I (4%)</th>
<th>R (8%)</th>
<th>CS (0%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social sciences careers forum</td>
<td>4</td>
<td>4 (100%)</td>
<td>2 (50%)</td>
<td>1 (25%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IT and computing careers forum</td>
<td>25</td>
<td>17 (68%)</td>
<td>8 (32%)</td>
<td>3 (12%)</td>
<td>5 (20%)</td>
<td>1 (4%)</td>
<td>0</td>
<td>2 (8%)</td>
</tr>
<tr>
<td>Psychology and counselling careers forum</td>
<td>7</td>
<td>7 (100%)</td>
<td>7 (100%)</td>
<td>3 (42.8%)</td>
<td>1 (14.2%)</td>
<td>1 (14.2%)</td>
<td>0</td>
<td>1 (14.2%)</td>
</tr>
<tr>
<td>Career planning for access students forum</td>
<td>2</td>
<td>1 (50%)</td>
<td>2 (100%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Career planning for students with disabilities or health conditions forum</td>
<td>33</td>
<td>27 (81.8%)</td>
<td>3 (9%)</td>
<td>2 (6%)</td>
<td>3 (9%)</td>
<td>6 (18.1%)</td>
<td>0</td>
<td>1 (33.3%)</td>
</tr>
<tr>
<td>Physics, astronomy and planetary science forum</td>
<td>39</td>
<td>31 (79.5%)</td>
<td>10 (25.6%)</td>
<td>7 (17.9%)</td>
<td>2 (5.1%)</td>
<td>0</td>
<td>0</td>
<td>1 (2.6%)</td>
</tr>
<tr>
<td>Totals</td>
<td>110</td>
<td>87 (79.1%)</td>
<td>32 (29.1%)</td>
<td>16 (14.5%)</td>
<td>11 (10%)</td>
<td>8 (7.3%)</td>
<td>0 (0%)</td>
<td>15 (13.6%)</td>
</tr>
</tbody>
</table>

*Percentage of posts with each variable is also given next to frequency of occurrence (e.g. 100% would represent that all posts contained this variable)

Each variable was then analysed in more detail which includes exemplars of student posts containing the coded elements.

Social Presence (SP)

Of the analysed forum posts (n=110) across the six forums 79.1% (n=87) were coded as containing social presence where participants projected themselves through their writing as ‘real people’ (Gunawardena and Zittle, 1997). There were several facets to social presence that were identified. In many cases OU students would share their feelings and disclose more detail about the barriers they faced.

“In I’ve just visited the ‘Resources’ page and wow, it’s packed. I did find a very useful webinar and linked podcast which I will very likely revisit. There are many more which I’m sure will have relevant advice for me. The only slight downside for me was the lack of Earth Science related advice webinars. I did find one related to Environmental Sciences which I will take a look at. If you have any advice here, this would be useful. Other than this, I’m really impressed, relieved and grateful there are tools to help someone who lacks confidence and has lifelong health challenges”.

Students would also reveal social presence by introducing themselves in terms of their background and personal interests. Marengo et al (2017) notes the emoji is used by as much as 92% of the online population to replace words in conveying emotion and attitude as well as contributing to meaning of online messages.

“I am XXXXX, I am interested in work with Data Science (AI, ML) and Cryptocurrencies. I am also keen to work with start ups, innovation, concept development and crowdsourcing. I am at STEM pathway but I am also interested in Arts and Cinema, for instance, I find the Idea of the tv series about bitcoin (21 Million TV series) interesting. Know your public, sell your product 😊”
What was also apparent is often students were not just posing questions but relaying the very human element of their meaning through idiom and colloquial language. Even in small passages of text it was possible to gain a sense of the hopes and meaning attributed to an individual’s career journey.

“and I’m still not sure if I’m too old to pursue this passion... a PhD in my 60s? That’s the dream. But hey, you only get the one chance so perhaps better late than never!”

Posts not coded as containing social presence were often short confirmative affirmations to acknowledge a reply:

“I am observing XXXXX thread (that you gave the link for) on the forum now”.

Or were direct replies with a professional tone;

“But, to answer your question, the employers who are doing academic studies are almost always space agencies”.

Whilst this study did not undertake any linguistical content analysis of language it was inferred social presence was largely contained in posts which discussed feelings, meaning and context setting.

Pragmatic competence (the ability to interpret intended meaning) is likely of value to guidance practitioners who may well be interested in helping clients understand and interpret their values, motivations and experiences. Pragmatics is especially important in consideration of the absence of nonverbal cues within ODFs.

**Career Identity (CI)**

29.1% of posts (n=32) were coded when participants expressed and identified themselves with a specific occupation or career through their discourse (Lengelle and Meijers, 2012). One example from a student demonstrates what Lengelle and Meijers (2014) refer to as a ‘reliving and rerendering’ of a story much like a conversation that is co-constructed between a careers practitioner and their client.

“Hi I’m XXXX after years of working in customer service roles I had to step away due to health reasons. I was unsure what direction I wanted to go in but knew I wanted to help people and wanted to work with children. I started looking into what I could do to make his happen. I decided I wanted to become a teaching assistant or teacher within primary education. I soon decided on Y032 access module as being the best option as not studied in a while and never at this level. It was the best decision I made and I have excelled way past my expectations and gained in confidence and study skills. I now know what direction I want to go in and have already enrolled on my next module for October”.

There was also evidence of meaning created through reflective writing in the example from one student who posted fifteen times in the physics, astronomy and planetary science forum (the intervening posts were made up of questions to industry experts, careers practitioners and OU students across multiple threads). Below is their first post, which describes their predicted career intentions and then their final post which demonstrates movement to a ‘second story’ and evidence of a ‘transformational space’ (Lengelle and Meijers, 2012) as to what has now changed for them. Particularly important is the acknowledgement of the influence of others (co-construction) and how their use of metaphor ‘it’s opened my eyes’ recognises their perception on future possibilities has
expanded. The notion of time is also critical as interaction and cognitive process with user generated material in an asynchronous environment is often over a sustained duration involving repeat visits.

Hi everyone!

“I’m XXXX, I’ve recently enrolled to begin the BSc in Mathematics and Physics with the OU this October. I have studied physics at university before, but didn’t complete the degree. I am currently a Site Reliability Engineer at a local business in the web industry, looking to move into a scientific career, probably in theoretical physics research (though I’m far from certain at this stage). From this forum, I hope to learn more about what I’ll be trading in my current career for, and get a better idea of what options will be open to me”.

“This is the first OU forum I’ve participated in (since my first module doesn’t start until October) and it’s been much more helpful than I expected. I’m definitely going to be coming back and referencing a lot of the answers here as I progress through my studies, not only to my questions but to the great questions other people asked as well. A lot of it won’t be relevant to me for years yet, but it’s opened my eyes to some options I didn’t know I had.

It was also especially helpful to learn about what skills aside from physics knowledge employers want to see, as these are things I can work on in my current career while studying with the OU. Big thanks to everyone who shared their experiences in this area! And thanks to you as well XXXX, you’ve been around in just about every thread with extra advice and encouragement. It’s been a pleasure to participate!”

Cognitive Presence (CP)

21.8% of posts (n=24) demonstrated some form of construction and confirmation of meaning through reflection and discourse across the four elements of cognitive presence (Garrison, Anderson & Archer, 2000). As the posts could demonstrate more than one element of cognitive presence (as critical thinking is both a process and outcome) the number of occurrences (n=35) was also counted (Table 3).

What emerged is that there were far more triggering events in posts (14.5%) compared to exploration (10%), integration (7.3%) and resolution (0%). This is unsurprising when we consider triggering events like the following two examples were often in the form of questions, issues, dilemma, or problems that students visiting our forums came to get help with.

“I had a look at the ATW webinar and unfortunately it appears I’m not eligible as I’m not currently working”.

“What’s it like for on-the-job training opportunities for entry level tech positions in the Scottish I.T. job market?”

The second category of cognitive presence is typified by what Garrison, Anderson, & Archer (2000, p.98) call the, “search for information, knowledge and alternatives that might help to make sense of the situation or problem”. This category is described as that of searching for clarification and
attempting to orient one’s attention. A post from a student in the Computing and IT forum encapsulated this phase.

“That’s a great summary, thanks XXXX. Emerging Technology sounds like a great department to work in and your role resonates with me greatly. I enjoy the coding aspect of it but I also really enjoy talking to clients, working with stakeholders and figuring out solutions together. Can you tell us more about Kubernetes?

The reason I’m asking all these questions is that I’ve been prototyping an app with a colleague who was introduced to me from a friend in the Netherlands. He wanted to develop some sort of system using music as a care aid for people with dementia - basically 5 various activities in which the favourite music of the patient is used to help entice response.

I don’t know too much about the back end of cloud systems. Would the IBM Cloud be similar to AWS? Can various services be "connected" together, i.e. do you think a music streaming service where playlists could be created for example could then be linked to a front-end application?”

The third phase, integration, is characterised by students constructing meaning from the ideas generated in the exploratory phase and beginning to create potential solutions. Understandably this can be more difficult to detect in online communications as the process of critical thinking needs to be inferred from text. Nevertheless, in the following example from the Psychology Careers Forum this student moves from reflection to discourse, proffering their own solutions and meaning to their situation whilst still seeking a full resolution.

“Thank you for your reply. With regard to educational psychology, this doesn’t interest me as the approach that the area I live in is that they do not interact with the children. Educational psychologists observe the children and feed back to parents and teachers but do not have any relationship with the child. This is not what I want to do, this approach was implemented a few years ago but with many ideas that are put into practice this may change back in next few years.

I have been involved in a few different research studies over the years with different foster children as a participant and this area does interest me but I don’t know about it being a career. I would love to gain some experience in all the different fields then decide but this isn’t practical. I am booked onto a Play therapy introduction course in August as I did think about a therapist. I was hoping to contact my local CAMHS and see if I would be able to shadow or anything to get a better idea of the type of work they do there. Do you think this a reasonable idea?

Another idea I had was to contact the researcher I met through previous studies and ask if I could gain some experience that way. I am also hoping to start volunteering with Home Start after my exams”.

If you think these ideas are too far fetched let me know I just thought I would throw everything out there for any feedback I could get”.

Finally, there was no evidence of resolution formed of statements that incorporating concrete solutions and conclusions.

**Community Support (CS)**

It was encouraging to see 13.6% of posts (n=15) offering help and assistance through encouragement and sharing of resources. This ranged from concise but well-meaning replies:
“Good luck with the interview and the application XXXX”

To more detailed and assistive offers of support when another student was seeking to develop their work experience.

“There are a few clubs and societies within the O U Students Association which may also have ongoing projects which you could get involved with and who knows what does and opportunities they may open up to you.

If you’re not sure of how to get involved with the association, let me know and I’ll try and see what I can find that may interest you. If you use Facebook, feel free to add me as a friend and we can try and help out to get you involved with things within the O U and Students Association. I know it’s not a direct career move, but hopefully it will be useful to you”.

Discussion

There was evidence of identity construction throughout the six selected ODFs where 29.1% of posts (n=32) were coded as containing career identity discourse. I am mindful of the pre-eminent figure in the field of career guidance careers work, Tony Watts (cited in Hooley & Barham, 2015) who declared his main reason for writing; “I do not know what I think until I have written it. In conversation one can get away with loose, exploratory thinking, but in writing it down one has to weigh up the arguments and the evidence and decide what it all means and where one stands”.

Writing is therefore not just about conveying content but is also the representation of our inner thoughts containing our values, motivations, feelings, interpretations and judgements. It is foreseeable that what makes us human can permeate through technology as social presence. This says as much about our ability to write reflectively as it does in how we can interpret other’s latent meaning. An emoji may not paint a thousand words but it can crucially reflect our feelings at a given time.

Cognitive presence in forum posts was assessed to ascertain the level and progress of critical community inquiry. The supposition is that high order learning occurs as students’ progress through the logical but idealised elements of cognitive presence. The process of evaluating forum posts did offer some valuable insights. It was anticipated that the increase on cognitive demand for students to meet the threshold for each of the four cognitive presence variables would result in a downward trend from triggering events to resolution. This was evident in the findings (Table 3: Post content against the coding framework). Across the sample ODFs it was usually the case students initial post contained questions (triggering events and exploration) and then subsequent posts started to co-construct the replies they received in the form of integration. There may be several factors why no posts contained resolution. The complex and subjective nature of our careers and life does not usually lend itself to positivist traditions. The goal of guidance is often to explore within many contingencies (such as time) in reaching more concrete conclusions manifesting in decision making. The limited duration of the forums is also a possible explanation as the complex processes of the mind can and do take time.

Thematic analysis of the semi-structured interviews with OU Careers & Employability Consultants will explore how practitioners were mindful of creating a safe space for students to share their
thoughts as well as encouraging participation in their forum posts. This is important as narrative approaches to guidance can support individuals to help shape meaning and identity (Lengelle and Meijers, 2014). This recognises the value and often co-constructed nature of forum posts within ODFs can be created as a result of replies and feedback to other students and careers practitioners.

In the selected forums this was borne out in the 4.8 post per student average. The difference between the highest (n=13) and lowest (n=1) post per student average across the forums (range=12) is also noteworthy and typical of posting behaviour across a variety of forums. In the threads where students struck up conversations with each other this had the effect of significantly increasing the numerical range of posts between the forums. The community support (student to student) evident in forum posts was also wide ranging but again was linked to the extent students replied to each other. The range (difference between lowest and highest values) of 35 in post count and low number of unique posters in each forum impacts the validity of this measure. In the forum where community support was at its highest (33% in the Career planning for students with disabilities or health conditions forum) this was the result of three students that were particularly active and supportive in their replies to other students.
4.3 Stage 3. Thematic analysis of semi-structured interviews with OU Careers & Employability Consultants.

Five themes were identified (see Table 4) from the analysis of the four recorded and transcribed interviews with Careers & Employability Consultants: (a) A learning ecology is a useful way to conceptualise careers forums, (b) the conflict between creating a safe space versus managing privacy, safeguarding and negative psychological impact, (c) the asynchronous nature of forums supports accessibility but provides challenges for guidance practice, (d) ethical principles still underpin the activity of guidance practitioners providing support in forums, (e) careers practitioners have clear ideas on how roles are demarcated in a forum space.

To aid readability the categories of each theme are presented followed by the number of units relating to that category in brackets [ ].

Table 4: Complete set of themes identified

<table>
<thead>
<tr>
<th>A learning ecology is a useful way to conceptualise careers forums</th>
<th>The conflict between creating a safe space versus managing privacy, safeguarding and negative psychological impact</th>
<th>The asynchronous nature of forums supports accessibility but provides challenges for guidance practice</th>
<th>Ethical principles still underpin the activity of guidance practitioners providing support in forums</th>
<th>Careers practitioners have clear ideas on how roles are demarcated in a forum space</th>
<th>Miscellaneous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information resource Community interaction Facilitate interaction A space for sharing Learning environment Learn about self Increase opportunity awareness Provide careers information &amp; knowledge Develop support network Practitioners start conversations Create &amp; maintain a safe space Privacy concerns Practitioners feel responsible for forum health Positive psychological impact Negative psychological effects Safeguarding disclosures Accessibility Lurking posting behaviour Challenges of asynchronous text based IAG versus 1:1 synchronous guidance Response expectations created by asynchronous versus synchronous Applying ethical guidance principles Posting strategy Understanding students career needs Create &amp; maintain a safe space Facilitate interaction Practitioners feel responsible for forum health Guests contribute specialist LMI and industry expertise Differing roles Practitioners curate content Guests &amp; employers used to attract students Practitioners start conversations Showcase the service to stakeholders Encourage action Data driven approach Size &amp; demand is unpredictable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Themes associated with a large number of codes are shown in **bold**. Themes that received fewer mentions are shown in plain type.

---

2 Themes associated with a large number of codes are shown in **bold**. Themes that received fewer mentions are shown in plain type.
A learning ecology is a useful way to conceptualise careers forums

An ecology metaphor was considered highly suited to demonstrate the connectivity and relationship of the categories in this theme, especially in the way practitioners described and conceptualised the functionality and activities contained within our online discussions forums (ODFs).

Brown (2000) uses the ecology metaphor to describe an environment for learning and defines an ecology as having the characteristics of a system that is open, complex, adaptive, dynamic, interdependent, diverse, fragile and partially self-organising. Brown also describes a learning ecology benefiting from the cross pollination of ideas and knowledge being carried back and forth between the local and virtual communities that a student will be part of. This in effect would create a community mind whereby the group rather than a single user becomes the expert.

This introduction helps set the scene for what can appear in isolation to be a disparate group of categories. The community interaction between participants was featured prominently as a benefit for students in accessing careers support in our forums compared to other methods. Practitioner A suggested; “I think it also gives people ways to interact directly with a range of professionals, so not just the careers consultants, but say, with alumna, with employers, with academics or associate lecturers with the OU Students Association” and; but what you can do is create an environment where there are lots of other examples of students that are implementing things or are posting or are being influenced by what they’re hearing”. A direct impact of these interactions between participants was that a forum could help students develop a support network.

Practitioner B acknowledged the value of reciprocity in terms of it being a space for sharing; “But really to have that exchange I think between students is key, sharing their thoughts and experiences”. Notwithstanding, the basis of interactions within forums results in the generation of user generated content appearing on screen. Practitioners identified a key strength of ODFs was as an information resource which could be repurposed and offer utility as a resource artefact due to the read only accessibility after a forum was closed. They could also be repurposed into such assets as a frequently asked question guide for students. Practitioner D described how they used forums as an information resource to develop their industry knowledge; “Because there are limited roles in these sectors and they’re very competitive as well. So that reinforced our professional knowledge and we got current industry awareness as well. That was really good”. But still felt they needed to provide careers information & knowledge as part of their role.

Interviewees emphasised facilitating interaction and starting conversations as a feature of their role in forums linking interaction as a key benefit of ODFs as a learning environment. Practitioner A noted; “So, that variety of voices, I think, provides a really rich learning environment for students”. That learning also extended to learning about self with Practitioner C noting forums as a space for students to; “Re-frame their thoughts of what success looks like as a whole in their career”, which is also relevant to the exploration and construction of student career identity. Predictably, given the dominance of the matching based influence such as DOTS that still exists in careers work, practitioner C also cited their hope that interaction in our forums would increase the opportunity awareness of students in terms of: “increased awareness of different career pathways, career options, job opportunities”.
The conflict between creating a safe space versus managing privacy, safeguarding and negative psychological impact

A second theme depicts the difficult predicament that practitioners perceive in their role in creating and maintaining a safe space [17] whilst carefully balancing their privacy concerns [8] and managing safeguarding disclosures [4]. This online balancing act saw practitioners believing ODFs could have a positive psychological impact [7] for students but admitting the potential for negative psychological effects [5].

Kendal et al (2017) acknowledges online discussion forums (ODFs) have long been recognised as an environment where individuals can discuss key emotional topics in an atmosphere of trusted mutual support and may be considered by participants as a safe space to share. This appears to be particularly common in health themed forums involving physical and mental health disclosures. Practitioner A encapsulated these complexities in two of their responses when asked what role they think they should play in our forums; “I also think that our role is to marshal, and what I mean by that is to create a safe environment for everyone so it’s free from negativity. If necessary, you might need to take conversations offline and deal directly with individuals but also look out for any cries for help so that people feel that they’re heard and listened to”.

“I think in essence it’s good to create that safe space within reason but I think we have to be clear on what the parameters of that are I suppose”.

Practitioners conveyed an overarching sense of feeling responsible for forum health [8] which differentiated them from other participants in the forums. This is no surprise given the OU has a list of expected behaviors students are expected to uphold which is referred to on each forum landing page and they are asked to read. The University also has a computing code of conduct which details standards of behaviour and communicating online. Although there are explicit expectations OU careers practitioners ensure online communications adhere to these standards, practitioner C viewed an important part of their role was to moderate the online content;

“The role of the career guidance consultant effectively is to moderate the event, offer guidance and maintain the overall health of the forum, to make sure that it runs well, it’s a safe environment for the students, and hopefully, everybody gets something from it”.

The asynchronous nature of forums supports accessibility but provides challenges for guidance practice

Practitioners described several benefits within the category of accessibility [10] due to the asynchronous nature of ODFs. The ability to revisit content without time constraints, offering students time to reflect if they needed to and forums being able to transcend geographical boundaries were discussed by practitioner B; “But bearing in mind, people can look at the forum on the evening or the weekends and stuff. I think it’s that kind of balance. I think the advantage of not instant responding, let alone creating that kind of expectation is again, hopefully trying to allow that time for the interaction between the students to happen”. However, despite these benefits the challenges of asynchronous text based IAG versus 1:1 synchronous guidance [7] was also identified; “But it’s not as long and it’s not as in depth and personal as a one-to-one guidance might be because it’s not the appropriate situation for that anyway”.

49
Practitioner B alluded to the asynchronous nature of forums makes guidance conversations difficult; “I don’t know if you’re going to get that communication backwards and forwards that you would naturally have within a one to one during a 40-minute or an hour interview. That you can clarify things I suppose a bit more easily and directly and within a shorter timeframe within one-to-one guidance than you can in a forum because you don’t know if the person is ever going to come back?”

They also made the point that it is harder to utilise a full range of guidance techniques compared to 1:1 (telephone, Skype) work because of issues in sustaining conversations and privacy.

“I suppose guidance for me is you’re looking quite in detail at that individual’s circumstance, their qualifications, their background, their experience, talking about skills, their thoughts and aspirations……. again, I think there’s debate on this, isn’t there? How much can you ask those kind of questions?”

This in part can be explained as one of the criticisms put forward by practitioner A in what could be termed as lurking posting behaviour [9]; “I think we see a large proportion of students who read posts, read messages, but don’t necessarily post”. In forum parlance a lurker is a member of an online community who lurks in the shadows. They do not post rather, they view the activity of others in a passive way. This of course is a legitimate forum behavior, especially in view of the potential for negative psychological effects [5] previously mentioned in the second theme.

The response expectations created by asynchronous versus synchronous [4] guidance was also mentioned as a difficulty in providing careers guidance. Practitioners perceived a pressure of expectation to respond to questions quickly which may in part be created because OU careers forums invite guests with limited time availability.

Ethical principles still underpin the activity of guidance practitioners providing support in forums

There were frequent examples of practitioners applying ethical guidance principles [21] within our careers forums as described by the Career Development Institute (2019) code of ethics. Remaining impartial was prominent in this theme but also as Practitioner A disclosed so was being honest and transparent; “I think the impartiality is so important because who am I to have any judgment around what constitutes a good career move over another. For example, if somebody is earning a lot of money as an accountant and through their study of creative writing, they decide that actually they’re going to write a book and they get a publishing deal and £10,000 a year and make that career change because they want a better work-life balance or they find it more fulfilling. I can’t say, well, that’s the wrong thing to do, but what I can do is point out what the impact of that decision would be. I think impartiality is absolutely core to everything that we do particularly within a forum environment where you’re encouraging discussion and debate and it’s there, written down for everybody to be able to see and access”.

Ethical concerns were also present where practitioners felt their role differed from the other participants in our forums such as OU students and guest contributors, as summarised by practitioner B “I think a good example is with the guest moderators, fantastic sharing their insights and naturally that’s from their perspective and their own experience. So our role as careers consultants and moderators is to make sure that advice and information and guidance to an extent is
impartial and full. They might have said something, an employer or whoever might have made a certain point and that’s great. Obviously, just to add to that you might also want to consider, here are some resources to think about. Again, because obviously one of the key aspects of our work is it is impartial so that’s one of the key aspects of our roles”.

Other important guidance principles such as encouragement and identifying the client’s latent needs were evidenced by Practitioner D. This is especially important in an online environment that lacks non-verbal social cues; “I think it’s really important as a careers consultant to tune into that concern, anxiety or query that the student has and try and acknowledge that it may have taken quite a lot for them to write that. Or at the same time, they’re very determined and they’re really motivated and you want to celebrate that as well”.

Practitioners were also able to implement an ethical approach by having a clear posting strategy [11]. For example, Practitioner B personalised and built social presence into their responses to students; “Those are the things I think I would say if that person is in front of me, right in front of me in real life, if you like. I think as I say, include some of what they said in their query within your response I suppose is the best way I can probably describe it. Acknowledge that they said they live in Scotland or they have a health issue or whatever it is. That you’ve not just gone off and like, okay you want be a social worker here’s how to be social worker. You’ve included that personal element for them and acknowledged and expanded on or whatever it is that they’ve said within their query”. But also in balancing impartiality without censoring opinion, especially if they disagreed with someone; “Sometimes, one of the guests may say something that you wouldn’t necessarily agree with and all you can really do with that is actually add to what the guest put”.

Later in the interview they elaborated further; “it’s putting your response together so it flows and it sounds friendly, approachable, acknowledging, inclusive, whatever and answering their query but appealing to others all those things. It can take nearly sometimes up to an hour to do a response and put it on for me”.

Practitioner D also considered how their post may benefit other students so wrote posts with a larger audience in mind; “I’ll be the one to hopefully, provide a response that benefits more than one user. When I do my responses, I acknowledge the individual’s query, the student’s query or comments. And I will try and then just make it not so individual that only that one student would want to read it. It could actually help others. So I then, you might be aware, so I still keep it tailored that I’m responding to them. But I’ll then try and raise that general level of awareness so that it relates to anybody else who wants to see that thread as well”.

Whilst practitioner C took time in understanding students career needs [4] such as awareness of the student curriculum and occupational interests to help decide upon guest contributors and threads.

Careers practitioners have clear ideas on how roles are demarcated in a forum space

The final theme depicts how careers practitioners had a very clear sense of their own role in careers forums. As was clear in the second theme, there was evidence that practitioners perceived their role as creating and maintaining a safe space [17] and feeling responsible for forum health [8] which differentiated them from other participants in the forums. Whilst in the first theme I introduced how practitioners viewed facilitating interaction [9] and starting conversations [2] as a feature of
Practitioner A and then B described how they saw their role as curating the content [4] of the forum. When explaining how they managed the forum environment practitioner A commented; “being maybe strategic then in the resources that are created or shared with students”. Whilst practitioner B described how they may repurpose forum content as being useful for faculty student facing websites; “we might look at using some resources, developing some resources from the forum perhaps for the subject site”.

Within OU careers forums it is common practice to invite guest contributors such as employers or academics with relevant discipline expertise. Practitioners described how guests provided specialist labour market information (LMI) and industry expertise [5] and how these guests & employers were used to attract students [2] as part of the forum promotion activities. This was captured by practitioner D; “and then going back to the guests. They’re not there to be career guidance experts. They’re there to be experts within a subject area or a technical area to augment the forum. They’re there as a promotion to bring students in, but also at the same time, they’re there to actually answer questions that are technical-related, which career practitioners can be very, very knowledgeable about some areas”. Whilst a quote from a practitioner A captured the sense of boundary expectations in how they should operate; “You’d be expecting a guest moderator to speak from their area of expertise only really”.

The student role [3] was also highlighted by practitioner A, especially in how it could offer a positive psychological impact and still have equity to other participants when sharing their experiences; “I think alumni provides that inspiration for students coming through because they can then see an example of someone who’s successfully enhanced their careers on the back of their study. So I think students or alumni have a special role in that respect. I think, just building on what I’ve already said really in terms of what the role that students play, they are all at different stages of their careers too so they have knowledge experience and expertise to share from their own careers as well. So they are just as important to voice as the guest moderators or as the careers consultant moderators”.

Another comment by practitioner D shows the variation in student contributions; “students, I say their role really is as an attendee. Having said that, this can actually morph in to being another guest as well. Guests, they’re almost in forum as being an expert. Some students may be able to write some great insights as well”.

Another way the student contribution is demarcated from the practitioner was mentioned by practitioner C in the context of how in their own posting strategy they would try and write posts and replies that had mass appeal; “whereas that could be very different because when a student contributes, they’re only contributing for themselves”.
Discussion

Careers practitioner views towards the benefits of career focused forums reinforced some of the existing literature towards ODFs in that utilising them can take advantage of activities such as social interaction, peer-to-peer learning and greater learner control of the material (Tan 2017). When interviewed, although practitioners identified some of the important benefits of forum participation and the required components of a learning ecology (Brown, 2000) they were not aligned to any specific pedagogical model or approach. Nevertheless, it was heartening to listen to the wealth of knowledge that practitioners shared about their usage and experience of ODFs to support students.

Consequently, this does suggest further work is required to enable practitioners to access a theoretical base to better understand their own and student contributions within ODFs, much the same as theory is useful for other modes of guidance intervention. Although the internet and technology are important mediators the relationship between social (sharing, community interaction), instrumental (repository for information & knowledge) and psychological (safe space versus safeguarding) domains suggests a complex space that needs careful consideration and management.

The interviews identified crucial areas of expertise in creating and hosting forums but there was still a strong and pervasive sense of practitioner’s person-centred approach to practice. This underpinned the support they provided in ODFs but also clearly differentiated them from other members such as students and employers. Practitioners were keen to present a warm and approachable ‘voice’ through their social presence in posts (Gunawardena and Zittle, 1997) whilst remaining impartial. But there was still a sense that the challenges of asynchronous text-based guidance versus 1:1 synchronous guidance, particularly around a lack of response to practitioner posts. This raises understandable concerns, for example; are students getting anything out of this if they’re not posting? What’s really going on with this student in their post? Why hasn’t the student responded to my post, were they unhappy with it? What do I do if a student discloses personal stuff and is this the right place to respond?

These questions are reflective of the practitioner interviews but also borne from the authors experience of providing careers support in forums. The practitioner interviews were valuable for what they both did and did not answer. Firstly, text-based computer mediated communication provides a technologically opaque veneer to the cognitive worlds we inhabit. Open to what we choose to share and our critical literacy to interpret what is shared, presenting inevitable challenges but also opportunity to learn. Secondly, forums afford a degree of user control over content and the extent of immediacy (Gunawardena & Zittle, 1997) presented. We must therefore accept some of the limitations to guidance practice this medium can grant for careers services and guidance professionals which can be mitigated by viewing the medium as complementary rather than exclusive.
5.0 Limitations

The main limitation in this research relates to the sample size of 59 students as the opt in rate was lower than expected based on the visitor numbers to our online forums. The attrition rate from students opting in to then actually posting was also lower than expected. The relatively small number of posts (n=110) from students who posted and opted into the research (n=23) combined with the unequal distribution of the purposive sample across the six selected forums limits the generalisability and increases sampling error if there was reliance on the content analysis results in isolation (see Table 3: Post content against the coding framework). However, Marshall (1996) notes qualitative research samples tend to be ‘small’ and so bias is also inevitable. Data saturation was therefore not reached although the combined sample analysed across the six selected forums is commensurate in terms of size (posts and unique posters) to one OU careers forum.

How interrelated OU students are in terms of their perceptions and behaviours in online spaces compared to other groups of campus-based students must also be considered. Notwithstanding the general shift, growth and use of online learning environments for pedagogical applications OU students it could be argued have a predilection for online learning.

Although the triangulation of data through a mixed methods approach employed through the research design mitigated the reliance on one dataset, nevertheless there is caution to the research questions being proven without further exploratory research.
6.0 Conclusions

This research has explored the impact and utility of online discussion forums (ODFs) hosted by the OU Careers & Employability Services in supporting the career identity, learning and development of Open University students. Four research questions were explored and answered in light of the limitations.

6.1 Online discussion forums are useful in helping Open University students to explore and construct their career identities

The research design sought to answer how useful ODFs were in helping Open University students to explore and construct their career identities? In the questionnaire 94% of students (n=31) reported that the careers forum they participated in had some level of impact in helping them understand their career identity with 39% (n=12) of students declaring it as ‘very helpful’ or ‘extremely helpful’.

Direct and indirect interaction with OU Careers & Employability Consultants and other OU students in the forum also contributed to some students understanding themselves more which supports LaPointe’s (2010) argument that identity can emerge through discoursal construction in social contexts through the act of writing and reading. This is further substantiated by the increase in self-reported usefulness for identity formation when the questionnaire data was cross tabulated for time spent in the forums.

For example, for students (n=11) who only spent 0-1 hour in the forum 64% reported this was either ‘not helpful’ or ‘slightly helpful’ and 9% that it was either ‘very helpful’ or ‘extremely helpful’. This compared starkly to students (n=20) who spent 2-5 hours in the forum where only 10% reported that it was ‘not helpful’ or ‘slightly helpful’ and 55% reporting the forum was either ‘very helpful’ or ‘extremely helpful’ for their career identity.

Social presence was also highly prevalent where 79% (n=87) of the analysed student forum posts (n=110) across the six forums contained this element. Although career identity is more complex and multi-faceted than social presence alone it can as Lengelle and Meijers (2012) define represent a particular voice or position regarding work. These voices were apparent in the posts that contained career identity when students described entry into a particular profession or disclosures to their background, personal interests and current study. As 76% of OU students work full or part-time during their studies the dialogical positions on current and future work are likely widespread. Despite this only 38% of students who opted into the research created at least one post which highlights the weakness of ODF environments if students are to benefit from discoursal construction for their career. Previous research by Baxter & Haycock (2014) suggests one reason for this is students have concerns about the way in which their social presence is portrayed in online environments.

Finally, the practitioner interviews also described how ODFs are a space for learning, sharing and interaction. This leads to a question unanswered by this research. How much of career identity formation can be attributed to discursive construction versus social learning?
6.2 Online discussion forums are useful for Open University students for career learning and career development purposes

The research sought to answer to what extent ODFs were useful to Open University students for career learning and career development purposes? Students were generally positive - excluding the 'not helpful at all' measure - in reporting that forum participation was beneficial in terms of developing their self-awareness (87%), opportunity awareness through information gathering (90.3%) and supportive for career decision making (90.3%) as proxies for career learning (Law 2010).

Again, to validate forum activity as a causal factor the survey data was cross tabulated for visits and the time spent in the forum across each variable. As the number of forum visits increased there was a trend for the helpfulness rating to increase. For example, 75% of students who rated the forum as 'extremely helpful' for their self-awareness development had visited six times or more and of those who spent longer in the forum (2-5 hours) 35% reported it as being 'very helpful' or 'extremely helpful' compared to just 18.8% of students who spent up to an hour in the forum.

For information gathering, where students (n=3) had selected 'not helpful at all' 66.67% had visited only once and 33.3% had visited 2-5 times. In contrast, of the students who had rated the forum as being 'extremely helpful' (n=6) 33.3% had visited 2-5 times and 66.67% had visited on six or more occasions. Of the time students spent in the forum of those (n=11) who only stayed 0-1 hour 18% found that it was 'very helpful' (none selected 'extremely helpful') compared to the students (n=20) who spent 2-5 hours in the forum where 60% deemed it was either 'very helpful' or 'extremely helpful'.

Finally, for career decision making, of the students (n=3) who had selected 'not helpful at all' 66.67% had visited only once and 33.3% had visited 2-5 times. In contrast, of the students who had rated the forum as being 'extremely helpful' (n=2) one student had visited 2-5 times and the other had visited 6-9 times. Of the time students spent in the forum of those (n=11) who only stayed 0-1 hour 27.27% found it ‘very helpful’ (none selected 'extremely helpful') compared to students (n=20) who spent 2-5 hours in the forum where 55% deemed it either 'very helpful' or 'extremely helpful'.

Direct and indirect interaction with OU Careers & Employability Consultants and other OU students in the forum also contributed to the career learning of students as seen in Table 1. Comparison of impact on career by interaction type. This demonstrates the value of different interaction types can be accumulative but also distinguishable. Students who posted opened the possibility of receiving personalised responses by other participants with positive impacts on their career learning. However, the results also proved for those who 'lurk' forum content can still have valuable impact which is consistent with the findings of Hrastinski (2009) in that participation in ODFs is not limited to just posting as reading can encompass engagement through thought, feelings and reflection.

The analysis of student forum posts in Table 3: Post content against the coding framework to measure Cognitive Presence (CP) demonstrated, at least in part, that the selected ODFs contributed to deeper approaches to learning for some students (Garrison & Cleveland-Innes, 2005). Whilst the extensive experience of careers practitioners in Table 4: Complete set of themes identified suggests forums have all the required components of a learning ecology (Brown, 2000) which it is hoped provides a useful way to conceptualise and promote the value of career focused ODFs. The questionnaire freeform responses in Appendix 5 also collectively offer a rich and meaningful dataset serving as vignettes to the impact of forum experiences towards career development.
6.3 Open University careers practitioners adopt strategic approaches in both the design and hosting of online discussion forums that exposes the value of guidance professionals

The personal experiences of OU Careers & Employability Consultants was considered vital in answering how the role and approach they adopted within ODFs impacted upon Open University students’ career learning and development. Through the four in-depth semi-structured interviews and subsequent thematic analysis with OU Careers & Employability Consultants there was evidence and a clear identified theme of practitioners applying ethical guidance principles through their interactions with students. However, practitioners rightly argued that asynchronous text-based computer mediated environments such as ODFs presented some challenges to guidance practice compared to other methods which necessitated modifying their approach e.g. the difficulty to assess latent need in forum posts and maintaining a safe space that manages privacy and students lurking rather than posting. This also explains the decisional tightrope that arises in online forums of encouraging participation whilst accepting this can elicit content of concern for a student’s mental health. The result is often managing disclosures that can go beyond the ethical boundaries of careers guidance.

Tactical approaches were therefore adopted. Conversations cannot start if replies are not received so practitioners were highly focused on facilitating interaction by asking questions and inviting contributions. There was evidence of posting strategies to incorporate social presence and include in their responses content they believed would help answer the questions but also be of value to the wider forum. The motivation for this may stem from practitioners feeling responsible for the general health of the forum beyond just ‘rule following’ to becoming a ‘good online citizen’.

Practitioners were also clear to the value of the forum as an information resource and again there was a strategic approach behind content creation focused towards developing students’ opportunity awareness. Content curation was embedded in their starter thread posting strategy as practitioners would handpick web resources they perceived as relevant and high value with information organised into threads. This would also extend to signposting content by hyperlink to threads and other posts created by members in the forum space to avoid repetition. This approach can also mitigate the hierarchical structure of threads requiring learners to identify and synthesize ideas spread across many posts and threads (Gao, Zhang and Franklin, 2013).

Appreciating their own value also extended to how careers practitioners had clear ideas on how roles are demarcated in a forum space. Employers and experts were invited to forums to contribute specialist labour market, industry and role insights to both help answer questions and attract students. This extended to OU alumni and recognises that both past and present students are likely to have knowledge and experience of value. This also takes advantage of the OU student demographics in that they are on average older and are more likely to be in employment. A response from one student when asked what they felt were the benefits (if any) in accessing careers support in an OU careers forum compared to the other methods available to them offered this praise; “OU careers service generally - much better understanding that OU students aren’t straight from school but have all sorts of lives already”

Practitioners were also keen to leverage what they knew about OU students in terms of their curriculum and occupational interests to inform the initial content posted in the forum and which
guests to invite. Finally, it was rewarding to capture many of the complexities and decisions that practitioners made in how they managed and operated in forums to provide careers support. Their empirical knowledge validated the need for this research so we can better understand the contribution practitioners make to students such as the evidence captured in Table 1. Comparison of impact on career by interaction type.

6.4 Students access careers support from a wide range of sources but online discussion forums provide a unique combination of benefits over other methods.

With a multitude of options available to access careers support this research sought to answer why OU students participated in ODFs for career learning and development purposes compared to other methods of support available to them? The questionnaire data established OU students utilised eighteen different methods to access careers support. This consolidates the view that OU students’ personal learning environments (PLE) are not just limited to web-based applications but also extend to include a wide range of network and contacts. Cumulatively the methods students used to access support were more likely arise from outside of the OU Careers & Employability Service.

Forums are also inherently social, and this was proven when students were asked to explain their decision to access our careers forum compared to the other options they had used (Appendix 5d). The findings found there was an appreciation and value placed in the community and interactive nature of ODFs, often bringing together like-minded people sharing the same concerns and circumstances.

Career focused ODFs often capture the socio-emotional responses of participants through social presence and community support under the shared topic of ‘career’. This suggests, a degree of ‘institutional habitus’ and ‘fitting in’ (Thomas, 2002) in how the forums were perceived although of interest is whether this was a potential causal factor for some students posting whilst others did not? Therefore, we should not assume that not posting demonstrates a lack of fit or efficacy as students also described the benefits of reading other posts in the forum. Indeed, the results from section 2 of the questionnaire highlighted that even the students (n=10) who did not post still derived benefits towards cognitively complex areas such as careers decision making. There could be several reasons for this. Students benefited from large volumes of user generated content - including posts curated by careers professionals, employers and industry experts - to help get answers but also had time to peruse and reflect without immediacy (Gao et al, 2013) to process meaning and implication.

ODFs can therefore offer benefits to both students and careers services that may rely more heavily on 1:1 (face to face, telephone, email) synchronous group methods (lecture, web conferencing) of support. Forums remove the barriers of time, place and immediacy whilst also supporting discursive construction and interaction with a wide range of people.
7.0 Recommendations

7.1 Career services should investigate the feasibility of hosting career focused online discussion forums.

This research has identified and evidenced that ODFs provide a unique combination of benefits over other methods of careers support. The ‘campus’ should not be confined to a narrow concept of bricks and mortar but should also incorporate and value the digital personal learning environment (PLE) of students and the way the internet has changed how we all pursue our career.

The literature review uncovered a paucity of research in connecting student participation in ODFs for specific career learning and career development purposes. Although only anecdotal, recent informal discussions with careers professionals employed at other higher education institutions in the UK suggested ODFs were not generally utilised by careers services. However, through attendance and delivery of a workshop at the AGCAS Annual Conference 2019, there was interest from several careers services keen to explore ODFs as a potential method of careers support.

Given the maturity of the underlying technology this is likely to present a missed opportunity if ODFs continue to be ignored by careers services that have yet to explore their potential.

7.2 To maximise the impact of ODFs they should be left open and accessible for sustained periods of time.

Cross tabulation of the data against the number of forum visits and time spent in the forums demonstrated that increased visits and duration were influential in students self-reporting higher levels of positive impact towards their self-awareness, information gathering and career decision making. Further research is needed to clarify if a saturation point exists on the duration and number of visits whereby students continue to receive benefit, although this is likely contextual to the student.

Access to our forums in terms of the amount of time they were left open for students to post to (although read only access for 12 months) and the availability of guests such as employers was mentioned by some students (n=3) as not always fitting their needs or lifestyle. The asynchronous nature of forums offers several key affordances such as time and place becoming less important which is diminished when forum duration is reduced, although it is noted this could have resource implications for employer and careers professional involvement. Decisions on forum duration should also be mindful of the benefits of peer-to-peer interaction and the act of writing rather than being perceived as environments for just expert question and answer. Student contributions in career focused ODFs may also provide evidence for institutional approaches to Personal Development Planning (PDP) due to their shared emphasis on reflective practice evidenced through writing.

---

AGCAS is the expert membership organisation for higher education student career development and graduate employment professionals.
7.3 Careers services (where offered) should promote the benefit of utilising ODFs

Marketing activity was shown to be influential to students (n=8) in choosing to decide to attend our career focused ODFs as well as curiosity from some students (n=4) who had never attended before. Forums sit within a crowded marketplace of institutional support and each student’s own set of personal networks so the question of, “what’s in it for me?” must be answered. If the key affordances of ODFs are now further evidenced through this research, we should be more confident in communicating those potential benefits to the students we serve.

Consequently, it is imperative for careers services to promote the distinguishing features of their provision such as access to qualified practitioners, curated resources, expert knowledge and impartial advice. We cannot and should not assume those benefits are widely known to students during the process of their decision making when accessing different methods of careers support.

7.4 It is recommended careers services either considering or utilising ODFs account for how both the potential benefits and disadvantages can be managed

ODFs are complex, dynamic virtual environments that benefit from strategic design and management as evidenced through the four in-depth interviews with OU Careers & Employability Consultants experienced in creating and hosting career focused ODFs. Two of the five themes from interviews in particular evidenced the demands on practice such as creating a safe space, maintaining privacy, handling disclosures whilst feeling responsible for the health of the forum and wanting to facilitate interaction.

Practitioners demonstrated wide ranging techniques in their posting strategies adapted for ODFs but this takes training, time and practice so should be pre-launch considerations for careers services seeking to design and host ODFs. Training for narrative approaches to guidance, agreed forum protocols and embedding industry/employer voices are just some of the ways ODF provision can be enhanced for the benefit of all stakeholders.
8.0 References


9.0 Appendices

See attachments for the documents listed below.

Appendix 1 Consent and participant information sheet
- Participant Information sheet HECSU project
- Consent-form HECSU project

Appendix 2 Research invitations. Forum landing pages and email invites
- Forum landing pages
- Email invitation and email reminder to survey

Appendix 3 Jisc Online Student survey
- OU HECSU Research Project Survey

Appendix 4 OU Careers & Employability Consultant interview questions
- HECSU CEC interview questions

Appendix 5 Survey Freeform Responses
- Appendix 5a Survey responses forum activity
- Appendix 5b Identity freeform responses
- Appendix 5c Impact of participation freeform responses
- Appendix 5d Why access OU forum
- Appendix 5e Student responses forum benefits
- Appendix 5f Student responses forum disadvantages