

# Peer-mentoring in a pandemic: an evaluation of a series of new departmental peer-mentor schemes created to support student belonging and transition during COVID-19

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## Introduction

The rapid move to predominately online learning engendered by the COVID-19 crisis created an urgent need to rethink support mechanisms central to student engagement and transition, namely community-building and identity within the institution. One important support mechanism, practised and widely researched in a variety of pre-pandemic contexts (e.g. Hall and Jaugietis, 2011), is peer mentoring. This article describes the establishment of student peer mentor schemes in several departments of the Faculty of Social Sciences and Health at Durham University in academic year 2020-21 and assesses their nature and effectiveness. Whilst the shift to online delivery of teaching was anxiety provoking, it also catalysed ongoing engagement efforts. Staff were conscious that peer mentor schemes could be vital in supporting new students - particularly those from marginalised backgrounds - whilst also offering continuing students another connection to the university by volunteering as mentors.

This article has several significant dimensions. We explored and integrated perspectives of staff and students (acting as mentors and mentees). In so doing, we conducted this research with student participants who were integral to the development of departmental mentoring schemes. Relatedly, our research emphasis was on identifying elements of the schemes that may not have worked well, with the practical aim of devising improvements. In order to do this, we chose a sequential mixed methods approach, combining quantitative questionnaire data with qualitative focus group insights, something which has surprisingly been under-utilised in this research field. A set of guiding principles to support mentoring in other contexts, was then co-created with students from the focus group. Furthermore, this research relates to an unprecedentedly challenging context for staff and students alike in the higher education (HE) sector, engendered by the COVID-19 crisis and thus contributes to a newly developing area of research. We develop these points in the literature review that follows. The third section of this paper considers research context, the fourth covers research design and our findings are reported in the fifth section. In the spirit of action research, the sixth section offers our guiding principles, developed in light of our findings, for those wishing to develop departmental peer mentor schemes (McAteer, 2013; McNiff, 2013; Elliott, 1991).

## Literature Review

Peer mentoring is a firmly established approach to improving support, engagement and outcomes in various scenarios. Recently, peer mentoring has been successfully deployed to support at risk-groups in terms of, for example, mental health (Jackson et.al., 2019). In education, 'near peer mentoring', schemes where student mentors are one or more academic years senior to mentees (Akinla et.al. 2018), has seen university students support secondary level students in the study of STEM (Science, Technology, Engineering, and Mathematics) subjects (Garcia-Melgar and Meyers, 2020). Below we consider the major foci of recent published research on peer (or 'near peer') mentoring in the HE sector, particularly since the COVID-19 pandemic of early 2020.

A considerable amount of recent research considers the use of peer mentoring in training students for medical professions (Akinla et al. 2018). Peer mentoring is widely deployed in this sector, due to its impact and the cost effectiveness that has been established over a long time period. Morales et.al. (2020) discuss the generally positive impact of an extensive peer mentor training programme and Latham et.al. (2020) endorse peer mentoring as one means to offer greater student support and enhanced cultural sensitivity in an environment of increasing student diversity. Syameer et.al. (2020) highlighted that being a peer mentor allows trainee doctors to experience responsibility and team management that can improve their leadership, communication and related skills, while Kachaturoff et.al. (2020)'s integrative literature review of eight relevant projects concludes that peer mentoring decreases the short-term anxiety and longer-term stress levels of undergraduate nursing students. Lane's (2020) integrative literature review also focusses on recent research regarding the impact of peer mentoring on stress levels of first year students in the US, as well as retention outcomes, aiming to inform best practice.

Some recent literature has focussed on targeted peer mentoring schemes to support certain groups of minority or disadvantaged students including racially minoritised and international students, women and non-binary students. First-generation scholars (FGS), a term referring to students whose parents do not hold a university degree, are also significantly underrepresented in UK HE, especially in the most academically selective institutions (Boliver, 2015). FGS also face particular disadvantages at university, including lacking the cultural capital ordinarily wielded by students from more privileged backgrounds (White, 2020; Hindle et.al. 2021). The COVID-19 crisis was particularly challenging for FGS and students from working-class backgrounds as they were more likely to lack suitable equipment and broadband access for online learning, as well as adequate, quiet study spaces at home (Mates et.al, 2021). Similarly, while representation from Black, Asian and Minority Ethnic Communities (BAME) in HE is increasing, BAME students are still underrepresented in prestigious universities (Arday et al. 2022) and there is also evidence of an attainment gap between BAME and white students (Boliver, 2018). Furthermore, there is a need to differentiate between international and 'home' BAME students: the former are likely to have more privileged backgrounds than the latter, but may still experience other forms of discrimination, including language issues, and access to services and resources due to immigration status (c.f. Gangoli et al. 2020). There is emerging evidence on the

experiences of students minoritised due to their sexuality or gender (including gender identity) (Glazzard et al., 2020), however, there is little on how intersections between some or all of these identities can further disadvantage (particularly) new students.

There are several texts focussing on peer mentoring to support disadvantaged students. Elliott et al. (2020) found that women engineering and computer science students subject to an entrepreneurship education and peer mentoring program became more interested in pursuing entrepreneurship after graduating. Hird (2021) also focussed on peer mentoring and entrepreneurship. Similarly, Peer Assisted Study Sessions can support the transition of international students into HE (Chilvers, 2016), with peer mentoring having similarly beneficial effects for other 'at-risk' (Hall et al. 2020) or 'underrepresented' (Venegas-Muggli et al., 2021) groups of first years including autistic students (Thompson et al., 2020; Rowe, 2022). Hayman et al. (2022) found that peer mentoring was an effective way for first generation students to accrue cultural capital.

In terms of peer mentoring and COVID-19 specifically, the research is growing. Kazerooni et al. (2020) offer a short piece that suggests the effectiveness of using a near peer mentor scheme and a social media platform to offer mental health support, during the particularly stressful context of COVID-19. Goodrich (2021) offered a useful review of the online peer mentoring literature, in suggesting ways in which music teachers in particular, can use peer mentoring for online teaching. Other recent research explores the effectiveness of different peer mentors' online communicative styles (Culpeper and Kan, 2020) while Naidoo et al. (2021) suggest how the 'Buddy Programme' in the University of Pretoria could develop in an anticipated post-pandemic future. Naturally, there is also an extensive pre-COVID-19 literature on online peer mentoring. Fayram et al. (2018), for example, found that Open University language student mentees thought their mentors were integral to their development of self-confidence and motivation.

From a critical perspective, some general features of the literature stand out. First, the published research tends to focus on the impact on either mentees (Kachaturoff et al., 2020) or mentors (Syameer et al., 2020; Maccabe & Fonseca, 2021; Krisi & Nagar, 2021) rather than considering the roles and experiences of all those involved in peer mentoring in order to assess collective effectiveness. Furthermore, the organising roles, experiences and reflections of staff in student peer mentor schemes are also generally implied rather than set out explicitly. Accordingly, methodologically the literature often divides between qualitative and quantitative approaches, though there is a small number of important mixed methods studies (Holt and Lopez, 2014; Thompson et al., 2020; Garcia-Melgar and Meyers, 2020).

Furthermore, much of the peer mentoring literature seems rather un-reflexive. This is likely a function of an extensive and long-developed body of research on peer mentoring that is overwhelmingly positive in its findings (Petrescu et al. 2021); the only issue of contention seems to be quite how effective peer mentoring is, or can, be if it is not already in place (Robinson & Yavuz, 2021; Amaro-Jiménez et al., 2021). The evident danger here is that new research conducted in this area takes this long-established positive impact as a starting point, meaning that difficult critical questions may not be asked. The possibility that peer mentoring could have neutral or even negative or counter-productive impacts needs to be explicitly recognised. Asking

critical questions of peer mentoring helps to ensure the robustness of any research findings, and avoids giving the impression that researchers knew what they were going to find before they began.

Again, however, there are some notable recent examples that do incorporate a critical angle. Hird (2020) offers a self-critical account of a five-year process of introducing and embedding a peer mentoring scheme in an undergraduate enterprise curriculum, discussing the mistakes made and lessons to be learned for similar schemes. Some participating staff were resistant, worrying about what, if anything the students were learning, wanted more control over the process and were unhappy to let students work out problems themselves. Student mentors and mentees were concerned at the age gaps between them (of between 3 and 5 years) and other problems included a lack of active engagement of mentees and mentors. Some of the latter displayed 'transactional behaviours', and wanted tutors to be more involved. The scheme's organisers realised that they needed to explain and 'sell' it better as well as to provide training for all concerned. Mentors were taught to develop ice-breaker activities with mentees, for example, and the scheme generally improved when former mentees themselves became mentors. Likewise, Souza et.al. (2020) show that some peer mentors in the Brazilian medical school scheme they researched were frustrated by the lack of engagement of some mentees, particularly in the second half of the academic year. Again, they offer concrete suggestions to improve the scheme, drawn from the problematic elements identified by the mentors, as do Hall et.al. (2020) in their research on a peer-mentoring program at St. John's University for at-risk students. Finally, Seery et.al (2021) argue for the need to recognise and carefully manage students' impacts on each other in mentoring relationships, though they also argue that mentoring offers possibilities for developing a fuller culture of partnership. Our research aligns with these latter approaches.

## **Research Context**

The COVID-19 pandemic saw the creation of five new peer mentor schemes across the Faculty of Social Sciences and Health at Durham University in the summer of 2020. Schemes were established in the Departments of Anthropology, Archaeology, and Sociology, the School of Government and International Affairs (SGIA), and in the MA Research Methods (MARM) which runs across several departments. These were all based on, and supported by, colleagues in the Combined Social Sciences degree programme who had been running their peer mentor scheme since 2018. Here we analyse and evaluate four schemes (Combined Social Sciences, Sociology, SGIA and MARM) run during the 2020/21 academic year.

Combined Social Sciences peer mentoring was established as a face-to-face scheme in 2018 with the key aim of building student engagement and a sense of community within that particular degree programme. The Combined programme has a cohort of around 135 students per year who take bespoke combinations of modules from up to four departments across the university and can therefore experience academic isolation and a lack of 'belonging'. The peer mentor scheme mitigates this as it matches first year mentees with a mentor who takes roughly the same combinations of subjects to create micro-communities within the broader programme. When other departments approached the Combined team for support with setting up their own

peer mentor schemes, we were able to draw on this expertise to create new peer mentor schemes quickly, adapting the functioning model to new departmental contexts and for online delivery.

All of our departmental peer mentor schemes have student engagement and facilitating successful student transition as key aims. Each scheme also has different sub-aims and organisational structure. The Combined and MARM schemes match mentors and mentees by subject/ programme studied, but the SGIA and Sociology schemes instead match students on particular characteristics such as first generation or widening participation backgrounds, or other demographic characteristics. The Combined scheme has a three-tier structure of senior mentors who each manage a team of around five mentors who each work with three to five mentees. The other schemes do not yet have senior mentors as part of their structures, but this may develop as senior mentors perform some of the management functions, helping to make the scheme properly peer-led.

The key principles of each of our Faculty mentor schemes were as follows:

- i. Each scheme has its own clearly identified aims and rationale.
- ii. Each scheme has a recruitment and selection process for mentors.
- iii. Each scheme trains mentors and separately trains mentees so everyone is clear about the scope and limits of the scheme.
- iv. Each scheme has a clear launch point (often induction week in September/October) and set conclusion date (usually either end of January or mid-March).
- v. Each scheme identifies a set pattern of meetings for mentors and mentees (usually weekly in October, fortnightly until Christmas, and monthly thereafter).
- vi. Each scheme includes regular support meetings for mentors and senior mentors (if applicable).
- vii. Each scheme runs regular evaluation from mentors and mentees.

We have created a Faculty Peer Mentor network which includes staff and student leads from each of the different programmes who meet regularly to share good practice and solve problems across the different schemes. As such, we can now support other departments in our Faculty quickly and easily if they wish to establish their own peer mentor scheme as we have a range of resources to share.

## **Research Design: Aims, Methodology, Data, Limitations**

### *Aims*

Within the context of the COVID-19 pandemic and necessary shifts to online student learning experiences, this study aimed to:-

- i. Record expectations and experiences of mentees, including under-represented students, and mentors across a range of academic programmes
- ii. Explore reflections of mentors focusing on implementation context across departments and programmes, and
- iii. Produce a set of guiding principles for inclusive university mentoring schemes.

### *Methodology*

We deployed a sequential mixed method research design to investigate the effectiveness of our peer mentoring schemes during the pivot to online learning. This included an initial quantitative survey with mentees. Findings from this survey were then subsequently considered in-depth during a focus group with a sub-sample of mentors from the departments involved in the scheme. Finally, a linked set of guiding principles was co-produced by the researchers and focus group participants to support other stakeholders in setting up, or refining mentoring schemes. All mentees were starting their first year on a new academic programme, whether at undergraduate or Masters level. The project received ethical approval from SGIA's ethics committee (no. SGIA-2021-03-30T08\_11\_10-cnxf62).

The survey addressed our central themes of interest. Firstly, we wanted to investigate the role of peer mentoring in helping students adapt to university life during a time of online learning. Secondly, we wanted to understand whether students who have protected characteristics under the Equality Act of 2010 or with characteristics that may suggest lower attainment at university (DaDeppo, 2009) such as social problems (Hagel and Shaw, 2010), lower levels of engagement with staff (DaDeppo, 2009, Hicks and Wood, 2016; Beattie and Thiele, 2016) and significant technological or financial disadvantages (Montacute and Holt-White, 2020) participated in mentoring activities at the same rate as students without these characteristics. Importantly, we wondered if peer mentoring can be especially helpful to these students. Accordingly, we collected data on gender, gender identity, sexual orientation, first generation status, ethnicity, home country, religion and disability (both physical and mental health). All questions included an opt out and the survey itself was voluntary. We asked a series of questions to build an understanding of the success of peer mentoring for all mentees. Finally, we asked about the forms of support peer mentors provided, and what mentees wanted or expected from the peer mentoring schemes.

Survey data was collected 4 May to 4 June 2021 to coincide with the examination period and allow (undergraduate) mentees to reflect on the whole academic year. In total, the survey reached approximately 800 students, with a response rate of approximately 12.5% and a total *N* of 100. Table 1. shows the characteristics of participants, demonstrating larger samples from some groups. Nevertheless, while not representative across universities, the data provides a significant resource for understanding the role of peer mentoring during a turbulent time.

**Table 1: Background of Survey Participants**

Student Background Characteristics		
	%	N
Female	71.71	71
BAME	30.53	29
First Generation Scholar	37.6	37
International Student	28.13	27
Religious	38.37	33
Disabled	10.42	10
Learning difficulty	6.45	6

Our qualitative data was generated by a focus group that explored the reflections of student mentors, one from each of the four departmental schemes in the academic year 2020-21 and who mentored again 2021-22. Facilitated by a staff peer mentor lead, the focus group considered the following three broad areas:

- i. How well the peer mentors thought that their departmental scheme worked in achieving its aims.
- ii. The peer mentors' reflections on the questionnaire data obtained from mentors and mentees on the four schemes at the end of academic year, 2020-21.
- iii. Bearing in mind their answers to (i) and (ii), what guiding principles they would suggest other institutions consider when establishing their own peer mentor schemes.

The facilitator asked pre-prepared questions relating to these three areas, with additional follow-up questions contingent on participant responses. Run via Microsoft Teams, the focus group lasted ninety minutes. The focus group facilitator took notes, and analysed data using principles of thematic analysis, and then sent a summary to mentor participants for sense checking.

#### *Limitations and recommendations for further research*

First, we cannot make causal claims about the relationship between satisfaction and key predictors. Whilst we argue that we have the correct model specification, to be certain we would need either appropriate panel data or an experimental framework. Second, claims about successes of peer mentoring have to be understood in the context of the unique situation created by COVID-19, the impact of which is still uncertain. Overall, we had a relatively low overall participation rate in the survey – with a large variation in participation between departments - and this has implications for the types of tests we can run. We are running a longer-term, panel-based study that will address some of these shortcomings, seeking to raise participation rates. This data should offer a better understanding of the impact of COVID-19 on the peer mentoring scheme and help us to develop a longer-term empirically informed perspective. While departmental schemes operated in slightly different ways (e.g.

allocation criteria of mentees to mentors), the overall aims of the scheme were the same and we have analysed the data together. As the following section demonstrates, even with these limitations this study expands understandings of the importance of peer mentoring during COVID-19 and can contribute to shaping future research on the impacts of peer mentoring.

## **Findings and Discussion**

This section subdivides into two major parts, considering first the quantitative mentee survey and then the focus group findings, with relevant discussion integrated as appropriate.

### *Mentee Survey Findings*

This section first provides background descriptive information on the peer mentoring scheme, comparing perceptions of the role of mentor with expectations of mentoring. It then focusses on the effectiveness of peer mentoring during the pivot to online learning, considering the schemes' ability to help students adjust to HE without a typical face-to-face experience and social mixing that university usually provides. This is particularly significant for Durham University given the early shift to entirely online provision as a response to rising case numbers early in term. Next, we examine a set of ordinal logistic regression models that help explain peer mentoring's overall effectiveness, considering a range of indicators of success. Finally, we detail some effects of the peer mentoring schemes during COVID-19 including overall satisfaction, their ability to mediate the effects of online learning and whether or not they helped to level the playing field for disadvantaged mentees.

### *What mentees discussed with their mentors versus what they would like to discuss.*

Mentors clearly played a key role in helping mentees get to grips with some of the basic and potentially challenging aspects of their new university lives (see Table 2). Firstly, timetabling was a key issue. This evidence fits colleagues' sense that students perennially find timetabling confusing and need help navigating it in earlier weeks and demonstrate the important role for mentors here in helping mentees to find their feet. We also see that mentees were keen to discuss online learning, something that was new to them, but also fairly new to the mentors, who may have experienced it only from March 2020 onwards, when most teaching for the academic year 2019-20 was already completed. Unsurprisingly, college life and social problems feature prominently. It is well documented that social integration to university is a key predictor of success and final attainment, and peer mentoring can act as a mechanism to help students engage more with college life and deepen and broaden friendship circles (Phillips et al., 2020; Edwards et al., 2006; Edwards, 2008; Stuart et. al, 2011).

The data also demonstrate significant differences between actual discussions and what mentees would like to discuss. For example, we can see that mentees would have liked more discussion in relation to mental health support, careers advice, college life, navigating social problems and extracurricular activities.



**Table 2. What did mentees want to talk about and what they actually talked about**

Comparing Support Expected to Actual Discussions		
	% Discussed	% Would Like to Discuss
Timetabling	54	
Mental Health	8	21
Library Resources	25	
Careers	12	24
College Life	36	52
Social Problems	8	17
Extra-Curricular	15	39
Online Learning	49	
University Knowledge		90
Study Support		80

Peer Mentoring Survey, Durham University (2021)

### *Success of the Peer Mentor Schemes*

The data discussed thus far does not reveal how successful the schemes were. Table 3. offers preliminary evidence on the issues of how helpful the mentees found the scheme.

**Table 3. General Predictors of Mentoring Success**

Evaluating Success	
	% Agree
Recommend Mentoring for New Students	84.78
Mentor Next Year?	20.41
Made Friends on Course through mentoring	24.73
Feel Connected to Degree	49.47
Met Friends	19.35
Mentor Knowledgeable	58.51
Mentor Helpful	82.42
Mentor Approachable	80.22
Mentoring Primary Source of Info	37.5

Peer Mentoring Survey, Durham University (2021)

First, we can see that most mentees thought that peer mentoring was overall very successful, with 84.78% responding positively to the statement “I would recommend the mentoring program to new students”. This clearly demonstrates the value of peer mentoring. Additionally, approximately 82% agreed their mentor was helpful and a further 80.22% thought that their mentor was approachable, crucial for new students

settling into university life. That 37.5% of mentees agreed that their mentor was a primary source of information at university is particularly noteworthy, demonstrating the value mentees placed in their mentors. Other figures in Table 3. seem less impressive. However, that one in five mentees made friends through mentoring and 50% were better connected to their degree suggests that peer mentoring had a significant positive impact upon new students' experiences. Connection to degree programme is particularly important. Students in collegiate universities such as Durham can often feel better connected to their colleges and therefore develop weaker connections to their departments which may impact on NSS results in relation to Learning Community. Consequently, it appears that peer mentoring may be a really positive way of building better links and friendships between students and their academic departments within collegiate systems.

### *Peer Mentoring online*

Colleagues hoped that peer mentoring would be particularly beneficial to new students in the academic year 2020/21 as COVID-19 lockdowns, disruption and online learning were all anticipated. The character of online learning, naturally, will have offered some of its own challenges. While some research suggests that any mentoring can have a positive effect with no clear differences between online and face-to-face (Leidenfrost et al., 2014), shifting online as an emergency measure in a pandemic will still have presented a challenge to mentors (see Table 4 for mentee data on this). Not only did the mentors in three of the four departments in this study have to get to grips with mentoring for the first time, but they also had to mentor through the new medium of the online platforms of Zoom or Teams which were the options supported by the university.

While students prefer face-to-face to online engagement at university, only approximately 50% of mentees thought mentoring worked well online (see Table 4). Perhaps unsurprisingly, students prefer to have the opportunity to meet face-to-face with their peers as they do when being taught. While preferable to mentees, face-to-face meetings may be significantly more costly to mentors. Keeping peer mentoring online, while arguably suboptimal, nevertheless remains effective and worthwhile.

**Table 4. Peer Mentoring online**

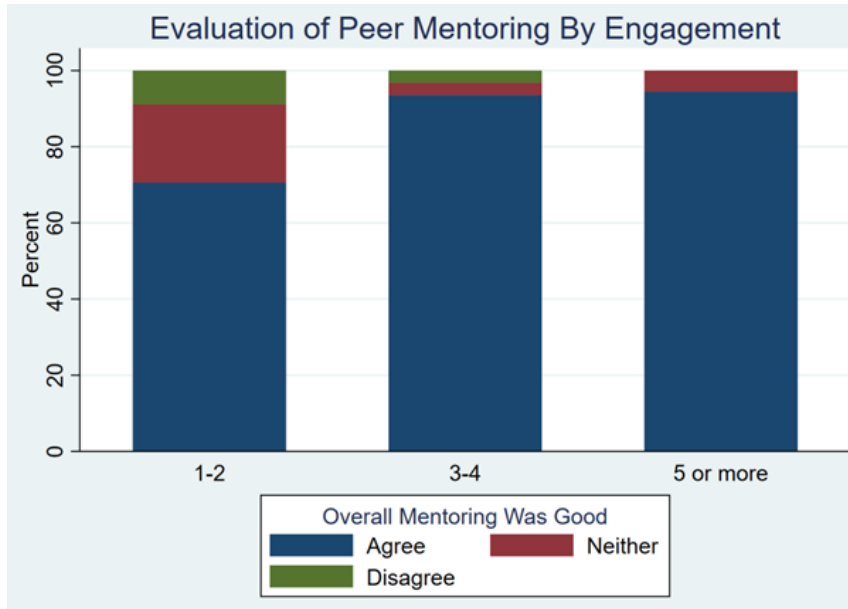
Mentoring during COVID-19	
	% Agree
Mentoring Worked Well Online	52.13
Mentoring primary network during COVID-19	20.83
Would Prefer F2F next year	75.82

Peer Mentoring Survey, Durham University (2021)

Figure 1. examines the relationship between the number of mentoring events a mentee attended and their evaluation of peer mentoring. Clearly, there is some relationship between these two variables where increased numbers of events correlate

with stronger evaluations of the scheme. It is, however, not possible to make a causal claim about whether negative and/ or positive evaluations affected attendance.

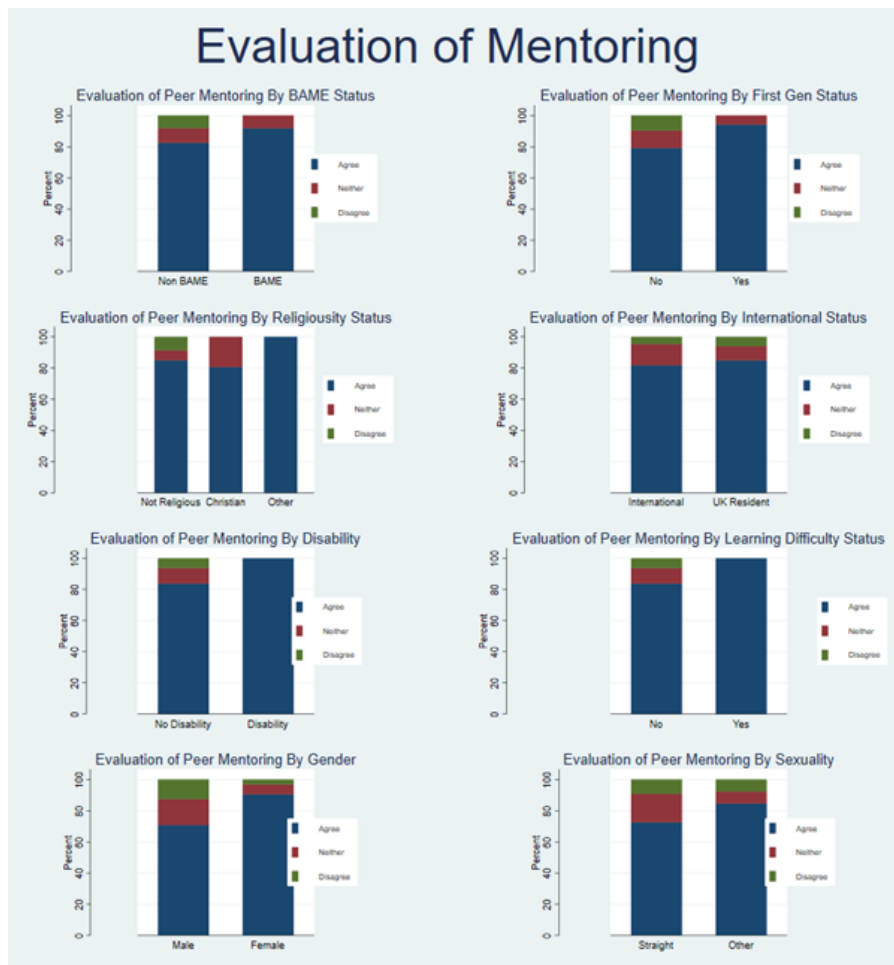
**Figure 1: Evaluation of Peer Mentoring by Engagement**



### *Evaluation of Peer Mentoring by Disadvantaged Groups*

In order to understand if students from under-represented groups found peer mentoring particularly helpful, Figure 2. provides overall peer mentoring evaluations by protected status groups.

**Figure 2: Evaluation of Peer Mentoring by Disadvantaged Groups**



Overall, the data suggest that disadvantaged and under-represented groups benefitted more from peer mentoring. Women, first generation scholars, BAME students, and mentees with both physical and learning difficulties all more positively evaluated peer mentoring than those without these protected characteristics.

*Overall mentee satisfaction with peer mentoring*

Our ordinal logistic regression models can determine the importance of various factors in predicting stronger satisfaction in relation to peer mentoring (see Table 5). The models illustrate that those who thought that their mentors were a primary source of information, that their mentors were approachable and knowledgeable were significantly more likely to positively evaluate the scheme. Results are less clear in relation to background demographics<sup>1</sup>, but even with a number of statistical controls, international<sup>2</sup> and FGS still have more positive assessments of peer mentoring compared to other groups of students.

<sup>1</sup> Several demographic factors are omitted from these models due to insufficient data points to produce results.

<sup>2</sup> We consider  $P > 0.10$  due to the lower sample size making it less likely to find effects at 0.05 or 0.001.

**Table 5. Predicting overall mentee satisfaction with peer mentoring**

	(1) Overall Satisfaction	(2) Overall Satisfaction
Met Enough	-0.969 (0.695)	-1.290 (1.266)
Part of Community	-0.149 (0.493)	0.0505 (0.676)
Primary Source of Info	1.122+ (0.603)	2.268* (0.974)
Mentor Approachable	1.533* (0.602)	3.435* (1.439)
Mentor Knowledgeable	1.664* (0.711)	2.300+ (1.196)
Mentoring Good Online	-0.504 (0.710)	-1.587 (1.260)
BAME		-1.592 (1.432)
Female		-0.0852 (1.487)
International		-2.412+ (1.420)
First Gen		-4.039* (1.720)
/		
cut1	6.771** (1.705)	8.040** (3.103)
cut2	8.529** (1.904)	10.99** (3.576)
<i>N</i>	79	74
pseudo <i>R</i> <sup>2</sup>	0.323	0.549

Standard errors in parentheses  
+  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$

The survey data reveals generally high levels of satisfaction with peer mentoring, and suggests that it has helped mentees to overcome some of the challenges related to starting university during a pandemic. While further data would help produce predictive models, the descriptive data offered here demonstrates positive views associated with a host of aims of peer mentoring and that it has had a positive effect on those involved.

## **Mentor Focus Group Findings**

We split our focus group findings along the lines of the three broad questions detailed in section 4. (above). The four student peer mentors are designated PM1- PM4. Section 5. covers the first two broad areas, while we dedicate a stand-alone section 6. to the third main area of exploration, Guiding Principles.

### *The extent to which mentors think that departmental schemes achieved their (collective) aims*

Discussions with the focus group suggested that aims had largely been achieved. PM1 stated that they had experienced a “massive sense of belonging” to their department as a result of participating in the mentor scheme, which was echoed by PM4 who felt that their departmental scheme “worked to build belonging and community”. PM3 went further still, stating that they “[didn’t] know how people would have coped without it” in the context of the pandemic lockdowns and associated challenges of meeting people and creating relationships with peers. PM2 reflected that “belonging is even better this year now we can be face-to-face” and the group discussed the extent to which various options for mentor/ mentee meetings worked well in different formats. The decision around whether mentor meetings had taken place face-to-face or online had to date been determined by COVID-19, but all mentors identified advantages and disadvantages to a mixture of interaction types (see Guiding Principle a). Mentors felt in general that online interactions were beneficial in dealing with quick queries, but that it was harder to get to know the mentor and other group members in this format, compared with face to face settings.

A key observation shared by all four mentors was the extent to which engagement in the scheme dropped off over the course of the term and over the year more broadly. Although a clear expectation had been articulated in all departmental mentor training for a set sequence of meetings in particular weeks of term, it seems that this was not being followed by either mentors or mentees in many cases. PM3 articulated the situation as “peer mentoring works great when people attend, but it’s hard to reach those who don’t”. These issues of attendance and engagement continue to be explored in future iterations of the schemes. In particular it will be useful to consider how engagement may be interpreted as ‘attendance’ by mentors – and mentees, or as separate or linked constructs in mentoring situations.

Three issues developed from this particular discussion:

- i. how the schemes could target (potential) mentees differently by considering whether they should be compulsory, opt-in or opt out.

- ii. how to support mentors in what PM3 called “the not knowingness” of why particular mentees don’t engage.
- iii. how to alter the recruitment and selection process for peer mentors in each scheme to ensure that mentors are committed and effective.

In academic year 2020-21, all departmental peer mentor schemes were compulsory at the point of entry: every first-year student in each department (or every student on the MA Research Methods) was allocated a peer mentor. This was the most expedient arrangement for new schemes, and was felt to be advantageous in the context of COVID-19 where departments were keen to maximise all potential avenues of student support. PM2 advocated a compulsory approach, explaining that “people would have opted out, but then were glad they had one [peer mentor]”. Combined Social Sciences did trial an opt-out scheme in 2019, but only three out of 120 students opted out. The scheme was again compulsory thereafter. Opt-in schemes might result in better engagement, but do have additional challenges such as the timing of establishing which students wish to opt in and the messaging to ensure that opting in does not carry a stigma relating to mentoring to address a deficit in preparedness for university study (see Guiding Principle b).

All schemes had protocols for what mentors should do if their mentees fail to engage. A key aspect of mentor and mentee training involves explaining to all participants that there is no confidentiality agreement between mentees and mentors, and that mentors will involve staff or welfare services if they think necessary. The focus group identified that the mentors were all aware who they could contact for support if they were concerned about a mentee, but also that they were not always sure at what point it was appropriate to do this. PM3 explained that they were often “conscious of the ones that aren’t in the room” when holding mentor group meetings with mentees missing. All mentors were cognisant that mentees missing meetings is usually attributable either to them settling well and not needing support or, on the contrary, to them struggling so much they do not want to tell anyone. PM1 suggested that the solution to this might lie in mentor training. They suggested that overt welfare training be included in the peer mentor training. Other mentors suggested that involving current mentors more in training the next cohort might be helpful in exploring this issue and suggesting peer led solutions (see Guiding Principle c).

PM2 linked a lack of engagement to a sense that some mentors in their departmental scheme were primarily self-interested, and uncommitted “CV tickers”. PM1 agreed. They had been surprised to discover how easy it was to become a peer mentor. It was a role they were proud to do, and believed that a more selective recruitment process would not deter sufficient numbers of students from applying to be mentors. PM4 suggested that a mechanism akin to that used by Durham to select its (paid) student ambassadors might be more appropriate in identifying mentors who would really contribute meaningfully to the scheme for altruistic reasons. PM1 believed that the “CV tickers” would still work hard to be selected; while PM3 cautioned that it would be important not to deter students from marginalised groups by making a process difficult or opaque. Identifying how to recruit the most appropriate set of mentors in terms of range, dedication and motivation is a challenge for our schemes to address (see Guiding Principle d).

### *Mentors' reflections on our quantitative analysis*

The mentors identified an unexpected dominance of practical or administrative conversations taking place between mentors and mentees on issues such as timetabling, in contrast to a greater focus on welfare matters that they had expected. They offered a two-fold explanation for this: first, that Durham has a notoriously complicated timetabling website which students struggle to navigate. Second, that Durham colleges offered high quality welfare provision. In addition, PM1 and PM3 who represented interdisciplinary programmes thought that the value placed by the questionnaire outcomes on socialisation and friendships did not represent their views of the value of their departmental mentoring schemes as providers of social networks. The mentors concluded that the ways in which peer mentor schemes offered support and value were strongly determined by individual contexts. This is an important consideration for other departments or institutions looking to establish their own schemes (see Guiding Principle e).

The mentors welcomed the questionnaire's exploration of whether or not those who have background characteristics that may suggest lower attainment at university or who have protected characteristics under the Equality Act of 2010 have differing levels of engagement with peer mentoring or whether peer mentoring helps level the playing field by overcoming some of the problems they face when arriving at university. PM3 felt that many of their most engaged mentees had been international students and highlighted that:

*...though it's possible to predict their needs, I can always be surprised at what they raise in meetings. Making assumptions about individuals with protected characteristics is never a good idea.*

Many of our departmental mentor schemes aim to match mentors and mentees based on particular characteristics, and the mentors thought this was a positive feature of the schemes. PM3 observed that:

*...the problems specific to protected groups - and, just as importantly, non-protected groups who can also be at a disadvantage - might not occur to mentors who do not have lived experience of being from such groups (see Guiding Principle f).*

PM1 highlighted that mentees from groups with protected characteristics potentially:

*...face both open and discreet discrimination... [so] the disproportionate benefit of the scheme may be due to the sense of belonging and community it fosters.*

In exploring other principles which would be important in establishing new peer mentor schemes, PM1 advocated for a clear focus on the launch of the scheme for each new cohort. They contrasted engagement in academic year 2020-21, when their scheme launched with a very academic mentor group task, with engagement in 2021-22 when the launch task had a more social focus and was completed by a greater number of people. The consensus was that the launch task needed to align closely with the aims of the peer mentor scheme and that a social task was more appropriate in a scheme



where belonging and community building were the key aims. PM2 discussed the value of asking mentees to identify clear goals for the term/ year in initial mentor meetings as this created a clear focus for subsequent meetings and gave a sense of personal development and achievement (see Guiding Principle g). The mentors thought that launch tasks designed by mentors themselves were most effective in promoting engagement and that the more aspects of the whole scheme which could be student-led, the more effectively it would run (c.f. Guiding Principle c).

## **Guiding Principles**

Based on the findings from this study, notably the focus group interpretations of the survey data and the experiences of the mentors themselves, a set of guiding principles was co-produced by the authors and the focus group participants. These guiding principles are presented here in section 6. These points are intended as a guide to support colleagues in setting up, or refining, mentoring schemes in different institutions. Whilst prescriptive in places, the principles are deliberately constructed so as to allow for innovation in the departmental, or institutional setting; in other words, to allow for mentoring schemes to be adapted to a particular context.

- a. The aim/ rationale for a peer mentor scheme should inform the type of interactions whereby mentoring takes place: e.g. face-to-face group meetings; face-to-face individual meetings; online group meetings; online individual meetings; online chat/email communications. Clear ground rules need to be established regarding what combination of these is allowable/desirable in each scheme.
- b. The aim/rationale for a peer mentor scheme should inform whether the target cohort of potential mentees will be allocated a mentor on a compulsory, opt-in or opt-out basis.
- c. Peer mentor schemes should move towards being peer-led in all aspects: there should be peer training and resource production from one mentor cohort to the next, as well as self-organised peer mentor meetings themselves.
- d. The selection process and criteria for peer mentors need careful consideration as does the difficulty involved in meeting the threshold for selection to ensure that mentors feel sufficiently invested in their role.
- e. Peer mentor schemes are most effective when they fit into the existing support structures of the institution and occupy genuine gaps in support.
- f. Efforts should be made to recruit and support mentors who have protected characteristics and other non-protected unconventional backgrounds.
- g. Peer mentor schemes are most effective with a clear and engaging launch event/ task to begin the mentor/ mentee group relationship.

## **Conclusion**

Our mixed methods, coproduced exploration of the expectations and experiences of student mentees and peer mentors across a range of academic programmes at a

collegiate university has demonstrated the undoubted benefits of such schemes to mentors and mentees alike, perhaps especially in the challenging times of online learning and COVID-19. We have made the case for the proliferation of such schemes across the sector and especially for the advantages accruing from targeting specific underrepresented or disadvantaged groups of students. We hope that our co-produced set of guiding principles will contribute to informing the establishment of very many inclusive and successful university student peer mentoring schemes.

## References

Akinla, O., Hagan, P., & Atiomo, W. (2018). A systematic review of the literature describing the outcomes of near-peer mentoring programs for first year medical students. *BMC Medical Education*, 18(98), 1–10. doi.org/10.1186/s12909-018-1195-1

Amaro-Jiménez, C., Nandakumar, V., Hungerford-Kresser, H., Patterson, O., Martinez-Cosio, M., and Luken-Sutton, J. (2021) When It “Feels Like a Giant Living Room”: Implementing Peer Education at an Urban, Research-1 Hispanic Serving Institution. *Journal of Hispanic Higher Education* DOI: 0.1177/15381927211052654

Arday, J., Branchu, C., and Boliver, V. (2022). What Do We Know About Black and Minority Ethnic (BAME) Participation in UK Higher Education? *Social Policy and Society*, 21(1), 12–25. Cambridge University Press. DOI: <https://doi.org/10.1017/S1474746421000579>

Beattie, I.R & Thiele, M. (2016). Connecting in Class? College Class Size and Inequality in Academic Social Capital. *Journal of Higher Education*, 87(3), 332–362. doi:0.1080/00221546.2016.11777405

Boliver, V. (2015). Lies, damned lies, and statistics on widening access to Russell Group universities. *Radical statistics*, 113, 29–38.

Boliver, V. (2018). Ethnic Inequalities in Admission to Highly Selective Universities. In J. Arday, J. & H. Safia–Mirza (Eds.), *Dismantling Race in Higher Education: Racism, Whiteness and Decolonising the Academy* (pp. 67–85). Palgrave MacMillan.

Chilvers, L. (2016). Communities of practice for international students: An exploration of the role of Peer Assisted Study Sessions in supporting transition and learning in higher education. *Journal of Learning Development in Higher Education, Special Edition: Academic Peer Learning, Part Two*. doi.org/10.47408/jldhe.v0i0.366

Culpeper, J. & Kan, Q. (2020). Communicative Styles, Rapport, and Student Engagement: An Online Peer Mentoring Scheme. *Applied Linguistics*, 41(5), 756–786. doi.org/10.1093/applin/amz035

DaDeppo, L. M. W. (2009). Integration Factors Related to the Academic Success and Intent to Persist of College Students with Learning Disabilities. *Learning Disabilities Research & Practice*, 24(3), 122–131.

Douglas, L., Jackson, D., Woods, C. & Usher, K. (2019). Peer-to-peer mentoring for and by at-risk young people. *Mental Health Practice*. Advance online publication. doi:10.7748/mhp.2019.e1401

Edwards, J. R. (2008). 4 person-environment fit in organizations: An assessment of theoretical progress. *Academy of Management Annals*, 2, 167–230.

Edwards, J. R., Cable, D. M., Williamson, I. O., Lambert, L. S. & Shipp, A. J. (2006) The phenomenology of fit: Linking the person and environment to the subjective experience of person-environment fit. *Journal of Applied Psychology*, 91, 802–827.

Elliott, J. (1991). *Action research for educational change*. Open University Press.

Elliott, C., Mavriplis, C. & Anis, H. (2020). An entrepreneurship education and peer mentoring program for women in STEM: mentors' experiences and perceptions of entrepreneurial self-efficacy and intent. *International Entrepreneurship and Management Journal*, 16, 43–67.

Fayram, J., Boswood, N., Qian, K., Motzo, A., & Proudfoot, A. (2018). Investigating the benefits of online peer mentoring for student confidence and motivation. *International Journal of Mentoring and Coaching in Education*, 7(4), 312–328.

Gangoli, G., Bates, L. & Hester, M. (2020) What does justice mean to black and minority ethnic (BME) victims/survivors of gender-based violence? *Journal of Ethnic and Migration Studies*, 46(15), 3119–3135.

Garcia-Melgar, A. & Meyers, N. (2020) STEM Near Peer Mentoring for Secondary School Students: a Case Study of University Mentors' Experiences with Online Mentoring. *Journal for STEM Education Research*, 3, 19–42.  
[doi.org/10.1007/s41979-019-00024-9](https://doi.org/10.1007/s41979-019-00024-9)

Glazzard J, Jindal-Snape D and Stones S (2020) Transitions Into, and Through, Higher Education: The Lived Experiences of Students Who Identify as LGBTQ+. *Frontiers in Education*, 5:81. doi: 10.3389/educ.2020.00081

Goodrich, A. (2021) Online peer mentoring and remote learning', *Music Education Research*. Advance online publication. doi.org/10.1080/14613808.2021.1898575

Hagel, P. & Shaw, R. N., (2010). How Important is Study Mode in Student University Choice? *Higher Education Quarterly*, 64(2), 161–182

Hall, B., Serafin, J. & Lundgren, D. (2020). The Benefits of Academically Oriented Peer Mentoring for At-Risk Student Populations. *Teaching and Learning Inquiry*, 8(2), 184–99. [doi.org/10.20343/teachlearninqu.8.2.12](https://doi.org/10.20343/teachlearninqu.8.2.12)

Hall, R., & Jaugietis, Z. (2011). Developing peer mentoring through evaluation. *Innovative Higher Education*, 36(1), 41–52.

Hayman, R., Wharton, K., Bruce-Martin, C. & Allin, L. (2022) Benefits and motives for peer mentoring in higher education: an exploration through the lens of cultural capital, *Mentoring & Tutoring: Partnership in Learning*, DOI: 10.1080/13611267.2022.2057098

Hicks, T. & Wood, J. L. (2016). A meta-synthesis of academic and social characteristic studies: First-generation college students in STEM disciplines at HBCUs. *Journal for Multicultural Education*, 10(2), 107–123. doi.org/10.1108/JME-01-2016-0018

Hindle, C., Boliver, V., Maclarnon, A., McEwan, C., Simpson, B. & Brown, H. (2021). Experiences of first-generation scholars at a highly selective UK university. *Learning and Teaching*, 14(2), 1–31.

Hird, A. P. (2021) Redefining the learning space: Developing peer mentoring in the enterprise curriculum. *Industry and Higher Education*, 35(4), 531–535. doi.org/10.1177/0950422220981269

Holt, L. J. & Lopez, M. J. (2014). Characteristics and correlates of supportive peer mentoring: A mixed methods study. *Mentoring and Tutoring: Partnership in Learning*, 22(5), 415–432.

Kachaturoff, M., Caboral-Stevens, M., Gee, M. & Lan, V. M. (2020). Effects of peer-mentoring on stress and anxiety levels of undergraduate nursing students: An integrative review. *Journal of Professional Nursing*, 36(4), 223–228. doi.org/10.1016/j.profnurs.2019.12.007

Kazerooni, A. A. R., Amini, M., Tabari, P. & Moosavi, M. (2020). Peer mentoring for medical students during the COVID-19 pandemic via a social media platform. *Medical Education*, 54(8): 762–763.

Krisi, M. & Nagar, R. (2021) The Effect of Peer Mentoring on Mentors Themselves: A Case Study of College Students. *International Journal of Disability, Development and Education*. DOI: 10.1080/1034912X.2021.1910934

Lane, S. R. (2020). Addressing the Stressful First Year in College: Could Peer Mentoring Be a Critical Strategy? *Journal of College Student Retention: Research, Theory and Practice*, 22(3), 481–496. doi.org/10.1177/1521025118773319

Latham, C. L., Ringl, K. & Hogan, M. (2020). Transforming Students' Educational Experience Through Cultural Mindedness, Peer Mentoring, and Student Input. *Journal of Nursing Education*, 59(4), 194–202.

Leidenfrost, B., Strassnig, B., Schütz, M., Carbon, C. C., & Schabmann, A. (2014). The Impact of Peer Mentoring on Mentee Academic Performance: Is Any Mentoring Style Better than No Mentoring at All? *International Journal of Teaching and Learning in Higher Education*, 26(1), 102–111.

Maccabe, R. & Fonseca, T. D. (2021) 'Lightbulb' moments in higher education: peer-to-peer support in engineering education, Mentoring & Tutoring. *Partnership in Learning*, 29(4), 453-470. DOI: 10.1080/13611267.2021.1952393

Mates, L., Millican, A. & Hanson, E. (2021). Coping with COVID; Understanding and Mitigating Disadvantages Experienced by First Generation Scholars Studying Online. *British Journal of Educational Studies*. Advance online publication. [doi/full/10.1080/00071005.2021.1966382](https://doi.org/10.1080/00071005.2021.1966382)

McAteer, M. (2013). *Action research in education*. SAGE.

McNiff, J. (2013) *Action research: principles and practice*. 3<sup>rd</sup> edn. Routledge.

Montacute, R. and Holt-White, E. (2020) *Covid-19 and Social Mobility Impact Brief #2*. University Access and Student Finance RESEARCH BRIEF. Available at: <https://www.suttontrust.com/wp-content/uploads/2020/05/Covid-19-and-Social-Mobility-Impact-Brief-2.pdf> (Last accessed: 3 April 2022).

Morales, D. X., Wagler, A. E. & Monarrez, A. (2020) BUILD Peer Mentor Training Model: Developing a Structured Peer-to-Peer Mentoring Training for Biomedical Undergraduate Researchers. *Understanding Interventions Journal*, 11(1), 1–16 <https://www.understandinginterventionsjournal.org/article/12480> (Last accessed: 3 April 2022).

Naidoo, A., Byles, H. & Kwenaita, S. (2021) Student Support and Transition Through a Buddy Programme to Foster Social Integration, *Journal of Student Affairs in Africa*, 9(2) doi.org/10.24085/jsaa.v9i2.3698

Petrescu, D. S., Yazdani, A., Vander Schee, C. R., Bailey, C. A., Covens, F., & Harpp, D. N. (2021). An undergraduate peer mentoring program at a Canadian university: Impact on student learning as perceived by instructors, peer mentors, and students. *International Journal for Students As Partners*, 5(2), 98–110. doi.org/10.15173/ijsap.v5i2.4553

Phillips, L. T., Stephens, N. M., Townsend, S. S. M., & Goudeau, S. (2020). Access is not enough: Cultural mismatch persists to limit first-generation students' opportunities for achievement throughout college. *Journal of Personality and Social Psychology*, 119(5), 1112–1131. [doi.org/10.1037/pspi0000234](https://doi.org/10.1037/pspi0000234)

Robinson, D., & Yavuz, O. (2021). Improving Psychological and Emotional Well-Being of the First-Year College Students. *FIRE: Futuristic Implementations of Research in Education*, 2(2), 57–76. Retrieved from <http://firejournal.org/index.php/fire/article/view/45> (Last accessed: 3 April 2022).

Rowe, T. M. L. (2022) Mentoring University Students with ASD on Campus: A Supplemental Program Model, *Journal of College Reading and Learning*, DOI: [10.1080/10790195.2022.2033647](https://doi.org/10.1080/10790195.2022.2033647)

Seery, C., Andres, A., Moore-Cherry, N. et al. (2021). Students as Partners in Peer Mentoring: Expectations, Experiences and Emotions. *Innovative Higher Education*, 46, 663–681. [doi.org/10.1007/s10755-021-09556-8](https://doi.org/10.1007/s10755-021-09556-8)

Souza, M. G., Reato, L. & Bellodi, P. L., (2020). Ressignificando a Relação entre Calouros e Veteranos: Mentoria de Pares na Visão de Alunos Mentores. *Revista Brasileira de Educação Médica*, 44(4), 1–9 [doi.org/10.1590/1981-5271v44.4-20200113](https://doi.org/10.1590/1981-5271v44.4-20200113)

Stuart, M., Lido, C., Morgan, J., Solomon, L., & May, S. (2011). The impact of engagement with extracurricular activities on the student experience and graduate outcomes for widening participation populations. *Active Learning in Higher Education*, 12(3), 203–215.

Syameer, M., Shafiaai, F. M., Kadirvelu, A. & Pamidi, N. (2020). Peer mentoring experience on becoming a good doctor: student perspectives. *BMC Medical Education*, 20(494), 1–9. [doi.org/10.1186/s12909-020-02408-7](https://doi.org/10.1186/s12909-020-02408-7)

Thompson, C., McDonald, J., Kidd, T., Falkmer, T., Bölte, S. & Girdler, S. (2020) “I don’t want to be a patient”: Peer mentoring partnership fosters communication for autistic university students. *Scandinavian Journal of Occupational Therapy*, 27(8), 625–640. [doi:10.1080/11038128.2020.1738545](https://doi.org/10.1080/11038128.2020.1738545)

Venegas–Muggli, J. I., Barrientos, C., & Álvarez, F. (2021) The Impact of Peer–Mentoring on the Academic Success of Underrepresented College Students. *Journal of College Student Retention: Research, Theory and Practice*. Advance online publication. [doi.org/10.1177/1521025121995988](https://doi.org/10.1177/1521025121995988)

White, L.E. (2020) A Report on Northern student experience at Durham University. Available at: [www.researchgate.net/project/Report-on-Northern-student-experience-at-Durham-University](https://www.researchgate.net/project/Report-on-Northern-student-experience-at-Durham-University) (Last accessed: 13 November 2021).