

**The impact of a peer-feedback intervention on the attitudes and beliefs of first-year Social Care students in Ireland**

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**Abstract**

One way of actively engaging students with the feedback process and enhancing feedback literacy is through peer-feedback. However, there is little research to date in Ireland on undergraduate students' beliefs and attitudes towards peer-feedback. All participants completed a validated questionnaire, 'Beliefs about Peer-feedback Questionnaire', to explore their beliefs about and attitudes towards peer-feedback, before and after a peer-feedback intervention. Both before and after the intervention, approximately 80% of respondents valued peer-feedback as an instructional method and as an important skill, while 87% of these first-year students engaged with the peer-feedback intervention. A clear implication for teaching is that peer-feedback can and should be further utilised to address the feedback problem in Ireland. Prior to the intervention, approximately 60% of students were confident in their ability to generate peer-feedback while approximately 80% were confident in their peers' ability to generate feedback. The intervention changed these attitudes with confidence in their own ability growing slightly (10%) and confidence in their peers' ability decreasing substantially (by 20%). Developing students' evaluative judgement and the capacity to generate high-quality feedback through training and repeated opportunities to practise is a key recommendation. A longitudinal study, exploring beliefs and confidence with cumulative experiences over time, is also highly recommended.

**Keywords**

Peer-feedback; peer-review; student beliefs; student attitudes; questionnaire.

**Introduction**

Research has shown that graduates are dissatisfied with feedback procedures in higher education (Deeley et al., 2019). This would appear to be a particular problem in Ireland with the Irish Survey of Student Engagement (ISSE) reporting that only 37.6% of students believe "that lecturers/ teaching staff provided feedback on a draft or work in progress" and only 43.1% of students believe 'that lecturers/ teaching staff provided prompt and detailed feedback on tests or completed assessments' (ISSE, 2022). One way of actively engaging students with the feedback process and enhancing feedback literacy is through peer-feedback (Carless, 2006). Peer-feedback is a reciprocal process whereby students produce feedback reviews on the work of peers and receive feedback reviews from peers on their own work (Liu and Carless, 2006; Nicol, Thomson and Breslin, 2014).

Nicol, Thomson and Breslin (2014) argue that the capacity to critique the work of others and provide quality feedback is both a fundamental graduate skill and an attribute actively sought by employers. Within Ireland, the health sciences are becoming increasingly professionalised and regulated with the establishment of the Health & Social Care Professionals Council (CORU) under the Health and Social Care Professionals Act, 2005. One of the functions of the Registration Boards at CORU is to monitor and approve education and training programmes and the Boards have outlined the standards of proficiency (SoP) that Social Care Workers must possess to be considered competent for professional practice. The fifth SoP under Domain 4 (Professional Development) highlights the importance of peer review: "Understand the importance of and be able to seek professional development, supervision, feedback and peer review opportunities in order to continuously improve practice". Furthermore, "communication, collaborative practice and team working" also feature strongly in the SoP. Clearly,

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peer feedback is one way in which students can enact collaborative practice, develop communication skills and peer review the work of others. However, the literature reports very few articles or case studies of peer feedback being used in social care contexts within Ireland or further afield<sup>1</sup>. This would suggest that while peer feedback has a particular relevance to the social care higher education context, in practice, it is under-utilised.

Overall, research on peer-feedback is positive (Wen and Tsai, 2006; McGarr and Clifford, 2013). Peer-feedback can help students better understand the assignment (Cho and MacArthur, 2011), identify strengths and weaknesses (Ashenafi, 2017) develop ideas for improving their own drafts (Lundstrom and Baker, 2009), foster self-regulation and critical thinking (Baker, 2016) increase autonomy, self-confidence and reflection (Dochy, Segers and Sluijsmans, 1999) and promote deep learning (Brew, Riley and Walta, 2009). Furthermore, a meta-analysis by (Huisman *et al.*, 2019) found a significant improvement in students' academic writing when they engaged in peer-feedback compared to when they did not provide/receive any type of feedback and compared to self-assessment. Peer-feedback is also one of the few feedback mechanisms that enables individual feedback to be provided in large classroom settings and is more timely compared to teacher-student feedback (Topping, 1998).

However, peer-feedback is not without limitations. Some of the barriers to peer-feedback include students' lack of feedback literacy and the large amount of time required to implement it (Liu and Carless, 2006). There is also evidence that students' engagement with peer-feedback is linked with their attitude to peer-feedback, students may be reluctant to judge their peers' work, lack confidence in giving feedback to peers (Nilson, 2003) and they may also lack trust in the feedback received from peers (Wang, 2015). Furthermore, students may reject or ignore the feedback they receive (Wichmann, Funk and Rummel, 2018) and the absence of positive peer-feedback (Bean and Melzer, 2012) may also influence the success of peer-feedback. Research also suggests that students believe that assessment should remain the responsibility of the instructor (Biggs and Tang, 2011).

In order to optimize the effectiveness of peer-feedback, adequate resources must be allocated to feedback and the peer review process and students must be trained on how to actively engage with feedback (Nicol, Thomson and Breslin, 2014). Teachers can increase student engagement in the process by explaining to students what peer-feedback is, why they are doing it and how it will work (Van Zundert, Sluijsmans, and Van Merriënboer, 2010), without such training and support, the benefits of peer-feedback are unlikely to transpire (Patton, 2012). There are links between the quality of peer-feedback and its effectiveness (Dawson *et al.*, 2019). Modelling, rubrics and exemplars can be used to help clarify standards of work, develop students' abilities to make judgments and discuss feedback together (Price, Handley, and Millar, 2011). Tutors can help students produce high-quality feedback by assessing the quality of the feedback and in doing so contribute to the development of evaluative judgement (Boud, Lawson and Thompson, 2013). Additionally, van den Berg, Admiraal and Pilot (2006) propose that feedback quality can be enhanced when written feedback is orally explained and discussed with the receiver. Although students may initially express doubts and resist engaging with peer-feedback, research has shown that this resistance decreased over time (Ashenafi, 2017).

Effective feedback has the potential to positively impact student learning and peer-feedback is one mechanism for achieving this. However, student attitudes towards peer-feedback is contested. Some studies report less positive attitudes after participating in a peer-feedback activity (Mulder, Pearce and Baik, 2014; Wang, 2014), with others reporting more positive attitudes afterwards (Sluijsmans *et al.*, 2004) while Keskin (2022) reports no significant change in student attitude after experiencing a

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<sup>1</sup> Searches of the Irish "Journal of Social Care" and the "Irish Journal of Applied Social Studies" using the term "peer feedback" returned no relevant articles. Likewise, a search of the ERIC database using "social care" AND "peer feedback" AND "higher education" returned no results. Higher education was replaced with college and university but the result was the same. Searches performed on 27<sup>th</sup> November 2023.

peer-feedback activity. While we have no data relating to the use of peer-feedback in first-year courses at higher education institutions in Ireland, anecdotally – certainly in our University and within the Applied Social Studies Department, it is under-utilised. This may be due to staff concerns relating to (i) the appropriateness of peer-feedback in the first-year curriculum and (ii) student willingness to engage with peer review processes. Therefore, our research aims to add to what is already known about peer-feedback by exploring students' attitudes towards and beliefs about peer-feedback, which may lead to more successful implementation of student peer-feedback, improving assessment and feedback practices (Mulder, Pearce and Baik, 2014). Specifically, within a social care context in Ireland, this study will explore student attitudes and beliefs before and after participation in a peer-feedback intervention. To date, there has been relatively little research investigating students' perceptions of peer-feedback in Ireland. Hence, the primary contribution of this paper is to inform the existing debate on the relationship between participation in peer-feedback activities and student attitudes to peer-feedback by generating further empirical data on this topic.

## **Methods**

### *Research aims*

This research will explore students' attitudes towards and beliefs about peer-feedback. The research will aim to answer the following two research questions:

1. What are MTU first-year Social Care students' beliefs and attitudes towards peer-feedback?
2. Does a peer-review intervention impact on MTU first-year Social Care students' beliefs and attitudes towards peer-feedback?

### *Participants*

In this smallscale study, all students (N = 84; males, n=12; females, n=72) enrolled in the 1<sup>st</sup> year module A Healthy Food & Recreation at Munster Technological University Cork were invited to participate in the study. A total of 36 students completed the beliefs about peer-feedback prior to the intervention and 19 students completed the questionnaire following the intervention.. Participants were selected via convenience sampling. These students had no prior experience with peer-feedback in the context of an academic writing assignment within this Social Care programme.

### *Data Collection*

#### Beliefs about Peer-feedback Questionnaire (BPFQ)

Quantitative data was collected using the Beliefs about Peer-feedback Questionnaire (BPFQ) (Huisman *et al.*, 2020). Advantages of quantitative data include a larger sample size, enhancing the generalisation of the results; greater objectivity and accuracy of results; validity and reliability; the research can be replicated, analysed and compared with similar studies; and minimising personal bias (Babbie, 2010). Furthermore, the concise nature of this validated questionnaire made it practical to administer and minimised the burden on teachers' and students' time (Huisman *et al.*, 2020). The questionnaire contained 10 questions and was scored using a 5-point Likert scale, these ranged from 1 ('completely disagree') to 5 ('completely agree'), or from 1 ('completely not applicable to me') to 5 ('completely applicable to me'), see Table 1. All questionnaires were administered in paper-and-pencil format during the starting lecture of the course on the 24th of January 2022. The same questionnaire was administered at the end of the semester (May 5<sup>th</sup>, 2022), following the intervention.

### *Peer-feedback intervention*

During class time, students were introduced to peer-feedback as an instructional method through explanation, instruction, exercises, and formative peer-feedback activities. One of the main assessment tasks in this module was a written paper designing a four-week physical activity programme for a service user from a chosen group in a Social Care setting. Students produced a draft on one section of the assignment and were asked to generate anonymous peer reviews of this draft.

During class time (approximately one hour per week for 3 weeks), students engaged with past examples of the written paper as well as the assessment criteria (rubric), to help them develop an understanding of expectations around quality so that they were better equipped to generate appropriate feedback. Students submitted their draft assignment via the Universities Learning Management System (LMS) focusing on section 2 of their assignment (identification of the health needs of the service user/s and implications of these needs on planned activities, approximately 250 words). They were then assigned two draft assignments to review and provide feedback on. The draft assignments and peer reviews were completely anonymous and were randomly assigned by the LMS. When providing feedback, students were directed to use the rubric. While guidance was provided on constructive feedback, students were not asked to grade other students' work. The peer review was worth 5% of their final grade, students needed to submit a draft assignment in order to engage with the peer review.

#### *Data Analysis*

Data were analysed using IBM SPSS (Version 26.0 for Windows). Descriptive statistics were used to examine questionnaire responses before and after the intervention. To further explore the impact of peer-feedback, students' performance on the written assignment was evaluated by comparing the average grade of those that engaged with the peer-feedback process with the average grade of those that did not. Mean and standard deviation were used to summarise the data for all continuous variables and an Independent Samples t-test was undertaken to investigate statistically significant differences. All statistical testing was performed using a 5% level of significance.

#### *Ethical Considerations*

Ethical approval was obtained from the MTU Human Research Ethics Committee (Ethical Approval No. MTU22034A). All participants were briefed on the study and what would be expected of them when taking part. Participation in this research was entirely voluntary. Students participating were asked to provide consent via an Informed Consent Form to use the data for research purposes. A summary of this information was included at the start of the survey instrument and students were again asked to explicitly provide consent to use the data for research purposes by selecting a tick box. The survey data was collected anonymously. Within reason (e.g. prior to data analysis), participants were free to remove themselves from the study, without explanation.

### **Results**

#### *Students' beliefs about peer-feedback pre-intervention*

A total of 36 students completed the beliefs about peer-feedback prior to the intervention, giving a response rate of 42.9%. Table 1 presents the percentage of respondents that selected each of the response options 1 (*completely disagree/completely not applicable to me*) to 5 (*completely agree/completely applicable to me*) prior to the intervention.

#### *Students' beliefs about peer-feedback post-intervention*

Only 19 students completed the beliefs about peer-feedback following the intervention, giving a response rate of 22.6%. Table 2. presents the percentage of respondents that selected each of the response options 1 (*completely disagree/completely not applicable to me*) to 5 (*completely agree/completely applicable to me*) after the intervention was completed. Figure 1. presents a summary of the change by displaying the percentage of participants that agreed (i.e. selected *completely agree/completely applicable to me* or *agree/applicable to me*) with questions 1-10 before and after the intervention.

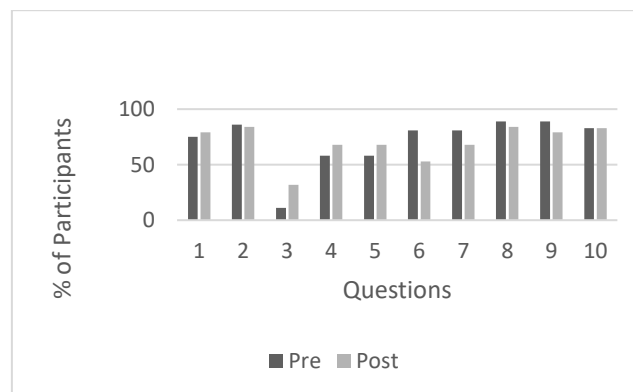
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**Table 1.** Pre-intervention Beliefs about Feedback (Huisman et al. 2020). For Q1, Q2, Q3, Q8, Q9, Q10 1 = completely disagree & 5 = completely agree. For Q4, Q5, Q6, Q7 1 = completely not applicable to me and 5 = completely applicable to me.

<b>Questions ↓ / Response Options →</b>		<b>1 (%)</b>	<b>2 (%)</b>	<b>3 (%)</b>	<b>4 (%)</b>	<b>5 (%)</b>
<b>Valuation of peer-feedback as an instructional method</b>		<b>1.9</b>	<b>2.8</b>	<b>19.4</b>	<b>31.4</b>	<b>44.5</b>
Q.1	Involving students in feedback through the use of peer-feedback is meaningful	0	0	25	33	41.7
Q.2	Peer-feedback within [course] is useful	0	2.8	11.1	33.3	52.8
Q.3	Feedback should only be provided by the teaching staff [ <b>reversed</b> ]	38.9	27.8	22.2	5.6	5.6
<b>Confidence in own peer-feedback quality ('CO')</b>		<b>0</b>	<b>4.2</b>	<b>37.5</b>	<b>38.9</b>	<b>19.5</b>
Q.4	In general, I am confident that the peer-feedback I provide to other students is of good quality	0	5.6	36.1	36.1	22.2
Q.5	In general, I am confident that the peer-feedback I provide to other students helps them to improve their work	0	2.8	38.9	41.7	16.7
<b>Confidence in quality of received peer-feedback ('CR')</b>		<b>0</b>	<b>4.2</b>	<b>15.3</b>	<b>41.7</b>	<b>38.9</b>
Q.6	In general, I am confident that the peer-feedback I receive from other students is of good quality	0	2.8	16.7	50	30.6
Q.7	In general, I am confident that the peer-feedback I receive from other students helps me to improve my work	0	5.6	13.9	33.3	47.2
<b>Valuation of peer-feedback as an important skill ('VPS')</b>		<b>2.8</b>	<b>1.9</b>	<b>8.3</b>	<b>16.7</b>	<b>70.3</b>
Q.8	Being capable of giving constructive peer-feedback is an important skill	2.8	2.8	5.6	16.7	72.2
Q.9	Being capable of dealing with critical peer-feedback is an important skill	2.8	0	8.3	19.4	69.4
Q.10	Being capable of improving one's work based on received peer-feedback is an important skill	2.8	2.8	11.1	13.9	69.4

**Table 2.** Post-intervention Beliefs about Feedback (Huisman et al. 2020). For Q1, Q2, Q3, Q8, Q9, Q10 1 = *completely disagree* & 5 = *completely agree*. For Q4, Q5, Q6, Q7 1 = *completely not applicable to me* and 5 = *completely applicable to me*.

<b>Questions ↓ / Response Options →</b>		1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
<b>Valuation of peer-feedback as an instructional method</b>		<b>5.3</b>	<b>5.3</b>	<b>21.1</b>	<b>31.6</b>	<b>36.9</b>
Q.1	Involving students in feedback through the use of peer-feedback is meaningful	0	0	21.1	36.8	42.1
Q.2	Peer-feedback within [course] is useful	0	0	15.8	36.8	47.4
Q.3	Feedback should only be provided by the teaching staff [ <b>reversed</b> ]	21.1	21.1	26.3	15.8	15.8
<b>Confidence in own peer-feedback quality ('CO')</b>		<b>2.7</b>	<b>5.3</b>	<b>23.7</b>	<b>31.6</b>	<b>36.9</b>
Q.4	In general, I am confident that the peer-feedback I provide to other students is of good quality	5.3	5.3	21.1	26.3	42.1
Q.5	In general, I am confident that the peer-feedback I provide to other students helps them to improve their work	0	5.3	26.3	36.8	31.6
<b>Confidence in quality of received peer-feedback ('CR')</b>		<b>0</b>	<b>7.9</b>	<b>31.6</b>	<b>50.0</b>	<b>10.6</b>
Q.6	In general, I am confident that the peer-feedback I receive from other students is of good quality	0	10.5	36.8	47.4	5.3
Q.7	In general, I am confident that the peer-feedback I receive from other students helps me to improve my work	0	5.3	26.3	52.6	15.8
<b>Valuation of peer-feedback as an important skill ('VPS')</b>		<b>0</b>	<b>7.1</b>	<b>10.7</b>	<b>28.7</b>	<b>53.5</b>
Q.8	Being capable of giving constructive peer-feedback is an important skill	0	5.3	10.5	31.6	52.6
Q.9	Being capable of dealing with critical peer-feedback is an important skill	0	10.5	10.5	21.1	57.9
Q.10	Being capable of improving one's work based on received peer-feedback is an important skill	0	5.6	11.1	33.3	50.0



**Figure 1.** Percentage of participants that selected completely agree/agree or completely applicable to me/applicable to me for Q1-10, pre- and post-intervention.

**Impact on student learning and results**

A total of 64 students (7 males, 57 females) were included in the analysis of grades. An independent-samples t-test was conducted to compare mean scores on the written assignment for those students that participated in the peer-feedback intervention and those that did not. 87% of students engaged in the peer-feedback process, 13% did not engage. There was a statistically significant difference in the scores for students who completed peer reviews (14.88) compared to those that did not (8.68),  $p < 0.05$  (see Table 3). Marks for the assignment were out of a total possible score of 25% of the total module marks.

**Table 3.** Mean Scores on Written Assignment.

Independent Samples T-Test						
	Peer Review	N	Mean	Std. Deviation	Std. Error Mean	Significance P Value
Written Assignment Mark / 25	No	9	8.6822	2.65080	.88360	<.001
	Yes	55	14.8844	3.46171	.46678	

**Discussion**

The primary purpose of this small scale study was to explore students' beliefs and attitudes towards peer-feedback. A main finding was that these first-year students held very positive perceptions of peer-feedback. This positive attitude, before and after the peer-feedback intervention, has equally positive implications for teaching and would suggest that peer-feedback can and should be harnessed to help address the feedback problem in Ireland (ISSE, 2022). Recent research on feedback has identified evaluative judgement (Tai *et al.*, 2018) and feedback literacy (Carless, 2022) as critical skills, the potential of peer-feedback as a specific strategy with the capacity to address both (Hoo, Deneen and Boud, 2022; Malecka, Boud and Carless, 2022) and the importance of the first-year in developing feedback literacy (Malecka, Boud and Carless, 2022). Hence, this literature would suggest that peer-feedback is appropriate in first year. Our study complements these by providing empirical data to show that first-year students are willing to engage with peer-feedback processes. In our study, 87% of first-year students engaged with the peer-feedback intervention and approximately 80% of them valued peer-feedback as an instructional method and important skill. An implication is that these findings could be useful in challenging staff concerns around the use of peer-feedback in first year curricula.

Examining the percentage of participants that selected *agree/completely agree* or *applicable/completely applicable to me*, our results show that valuation of peer-feedback as an instructional method decreased somewhat after the intervention (from 75.9% pre-intervention to 68.4% post-intervention) as did participants valuation of peer-feedback as an important skill (from 87.0% to 82.2%). Participants confidence in their own peer-feedback quality increased (from 58.4% to 68.4%) while confidence in the quality of received peer-feedback decreased (from 80.6% pre-intervention to 60.6% post-intervention). These changes resonate with reported findings in the literature by (McGarr and Clifford, 2013) who found that students were confident in their ability to provide feedback to peers and Huisman *et al.* (2018) who report that students have more confidence in the quality of the feedback they generate than the quality of the feedback they receive. Combined, the overall trend in our data is towards less positive attitudes after participating in the peer-feedback activity, a finding that aligns with prior research (Mulder, Pearce and Baik, 2014; Wang, 2014). From Figure 1., it is evident that the biggest changes in the pre- and post-intervention data were in response to the questions about feedback only being provided by staff (Q3), and students confidence in the quality of feedback from peers (Q6 and Q7). The intervention had the most impact on participants rating of peer feedback quality. Prior to the intervention, 22% more participants were confident (selected

*applicable/completely applicable to me*) in the quality of the feedback generated by peers compared to their own feedback quality. But after the intervention this reversed, and 7.8% more participants were confident in the quality of their own peer-feedback – a change of almost 30%.

While our data reveals what happened in relation to participants attitudes to peer-feedback, the absence of qualitative data means that it is unclear why some of these changes happened. The smaller changes relating to valuation of peer-feedback as both an instructional method and important skill along with the increase in confidence in participants own peer-feedback quality may simply be “noise” on the data or linked with the smaller response rate for the post-intervention survey. Repeating the study with a larger population would help to inform this issue. It is also possible that the overall decline in our results may in part, be because participants were first-year students with limited prior peer-feedback experiences and initial perceptions may have been based on naïve views of peer-feedback. The decline may also be related to the single peer-feedback activity that these students engaged with and opportunities for additional peer-feedback might have led to richer learning (Huisman et al., 2018) and in turn, more positive beliefs about peer-feedback. There is also evidence that it is the beliefs of those that generate peer-feedback that are most impacted by the process (Martin and Sippel, 2021) and that students may be hesitant to involve themselves actively and critically in feedback processes (Carless, 2022). Hence, there may be a need to explore how participants actually engaged with the process and the subsequent impact of that engagement on beliefs and attitudes towards peer-feedback.

Participants' confidence in their own and the received peer-feedback is a significant change revealed in our data. With just over 80% of participants confident in the quality of received peer-feedback prior to the intervention, this change could be linked to naïve and, perhaps, overly positive expectations of the type of feedback participants were going to receive. However, given the noticeable decline in the percentage of respondents (81% to 53% selecting *applicable/completely applicable to me*) confident that the peer-feedback they received from other students was of good quality, it could of course also be linked to the actual quality of received peer-feedback. This lower quality peer-feedback may result from a lack of effort or motivation (Pearce, Mulder and Baik, 2010). Providing learners with opportunities for repeated practice, and scaffolding those with instructor comments on the peer-feedback quality can help to calibrate students' judgements over time (Hu, 2005; Hartberg et al., 2012; Boud, Lawson and Thompson, 2013). Alternatively, Schillings et al. (2021) used face-to-face dialogue in addition to written feedback and the findings reported by Schillings et al. (2021) indicated that students felt confident in both the quality of the peer-feedback they gave to others and the peer-feedback they received. The peer-feedback in our study was done anonymously. One of the limitations with anonymous feedback is that it does not provide the opportunity for dialogue. As the study by (van den Berg, Admiraal and Pilot, 2006, p. 135) argues “written peer-feedback needs to be orally explained and discussed with the receiver” to allow students to clarify feedback and suggest revisions. It may also be useful and necessary to discuss with students emerging evidence from the literature on peer-feedback which indicates that it is the critical act of generating feedback that most impacts learning (Nicol, Thomson and Breslin, 2014; Culver, 2023). Raising awareness of this aspect and designing peer-feedback interventions that focus on supporting students to authentically engage with generating peer feedback should reduce concerns about the quality of received peer-feedback while simultaneously improving its quality.

The increase in the percentage of respondents that believe feedback should ONLY be provided by teaching staff (from 11.2% that *agreed/completely agreed* pre-intervention to 31.6 that *agreed/completely agreed* post-intervention) is interesting and somewhat conflicts with participants overall valuation of peer-feedback as an instructional method and important skill. This change may be linked with the decline in participants confidence in the quality of peer-feedback that they received. While still relatively small, this change should be monitored over time. While participants appear to be



advocating for teacher feedback, as (Carless, 2022, p. 143) notes, teacher “transmission approaches are unlikely to provide a good investment of time and resources because they fail to draw sufficiently on student agency” and hence an increased focus on feedback literacy may be required to counteract this effect. The feedback literacy process could also emphasise how quality feedback is being provided by teaching staff through the provision of assessment criteria, exemplars and workshops supporting active and dialogic engagement with these resources. More generally, this change perhaps supports the argument by (Malecka, Boud and Carless, 2022, p. 913) that feedback literacy is “most pressingly needed” in the first year of university.

Understanding student perceptions may foster the development of strategies to improve student engagement and lead to more successful implementation of student peer-feedback (Mulder, Pearce and Baik, 2014). The data gathered from our research indicates that these first-year students continued to value peer-feedback and therefore there is less need to focus on this aspect. However, students’ confidence in both generating and receiving peer-feedback is lower and should be the focus of subsequent work. This should include exploring the quality of feedback generated to determine if students authentically engaged with the task. The second area for development would include additional opportunities for training, practice, discussion and calibration via tutor feedback. To maintain a manageable workload, tutor feedback may be based on a sample of peer-reviews and target the whole class. Future research should continue to monitor students’ beliefs and attitudes towards peer-feedback and investigate assessment literacy over the course of the curriculum (Price *et al.*, 2012). This would explore whether these positive attitudes towards peer-feedback remain stable and how confidence levels in generating/receiving quality feedback change over time and with practice. The low response rate for the questionnaire, especially following the intervention, is also of concern as the data may not be representative of all students. A longitudinal study with a larger sample size across multiple disciplines and year levels is needed to help direct peer-feedback teaching strategies.

This peer-feedback intervention also demonstrated a positive impact on student learning, this is reflected in the significantly higher grades achieved by students who participated in the peer-feedback intervention. This finding is consistent with (Huisman *et al.*, 2019) who found a significant improvement in students’ academic writing when they engaged in peer-feedback compared to when they did not provide/receive any type of feedback and (Serrano-Aguilera *et al.*, 2021) who also reported an improvement in students’ performance following engagement with peer review. However, this study also had limitations that point to directions for future research. For example, the absence of a control group in the study design and other potential mediators (overall grades, support of peer review) implies that the peer-feedback effect is likely to be confounded with other variables e.g. general interest in the course/module, student motivation etc. So, while this improvement in students’ academic writing is welcome, we cannot conclude that it is exclusively related to engagement in the peer-feedback activity.

## **Conclusion**

The current study had two central aims:

1. to examine first-year Social Care students’ beliefs and attitudes towards peer-feedback
2. to explore the impact of a peer-review intervention on these beliefs and attitudes.

A main finding is that 87% of these first-year students engaged with the peer-feedback intervention and almost 80% of students value peer-feedback as an instructional method and important skill. This positive attitude and willingness to engage with peer-feedback has implications for teaching, suggesting that peer-feedback could be used more extensively to enhance feedback practices in first-year curricula. Following the intervention, students report more confidence (+10%) in the feedback

they provide, but less confidence (-20%) in the feedback they receive. This then suggests that subsequent interventions should focus on developing evaluative judgement and the capacity to generate high quality feedback. This could be achieved through additional opportunities for training, practice, discussion and calibration via tutor feedback. Finally, we would recommend that future research adopt longitudinal designs exploring beliefs and confidence with cumulative experiences over time.

### **Ethical Approval & Informed Consent**

Ethical approval (Ethical Approval No. MTU22034A) for this study was received from the Institute's Human Research Ethics Committee.

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### **Declaration of Conflicting Interest**

The Authors have no conflicts of interest to declare.

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