Students' strategies for managing social loafers in PBL: Interactional means of dealing with unequal participation in group work

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In this new era of education, employers require graduates who are not only academically proficient, but who also possess a variety of attributes such as being communicators, leaders, and networkers (Davidson & Major, 2014). As well as technical and practical subject knowledge, today's students of the 'Information Age' (Lee, Huh & Reigeluth, 2015) must be capable of working with others and jointly making decisions, regardless of the unpredictable work-based challenges that they may face (Woods, Briedis & Perna, 2013). Essentially, employers demand the professional skills which gear graduates directly towards industry needs, and these competencies must be cultivated by educational institutions throughout (Imafuku, 2012). Problem-based Learning (PBL) – a group-based pedagogical approach where students are placed at the core of their learning – has been shown to foster these very skills (Boud & Feletti, 1997).

As a student-centred pedagogy, PBL is in clear contrast to the authoritative dynamics of traditional didactic teaching; the student is no longer forced into a passive learning role, and is instead empowered to be accountable for their own learning (Kindler, Grant, Kulla, Poole & Godolphin, 2009). Through its modern theoretical foundations (Dolmans, de Grave, Wolfhagen & van der Vleuten, 2005), students must work actively, and collaboratively, if they are to develop resourceful solutions to the problems at hand. Through its focus on authentic scenarios, PBL aligns with the realities of graduate employment, and recognises the necessity of socialising learners towards professional identities, and in functioning autonomously (Imafuku, 2012). In turn, PBL is associated with positive cognitive effects including deep learning, critical thinking, enhancement of intrinsic motivation, and the ability to more readily integrate knowledge with applied problem tasks (Dolmans & Schmidt, 2006).

One major challenge in the implementation of PBL and other forms of group work, however, is that of dealing with the social loafer: a group member who continuously disengages with the tasks at hand, yet seeks academic reward from the efforts of his/her peers by freeloading (Aggarwal & O'Brien, 2008). The social loafer concept derives from social psychology (Latané, Williams, & Harkins, 1979), and is classed as a critical incident in PBL tutorials (de Grave, Dolmans & van der Vleuten, 2001), and one which leads to dysfunctional groups as a result of chronic tardiness, absenteeism and a lack of commitment (Kindler et al., 2009). Previous research has illuminated the detrimental consequences of social loafers in impeding the effectiveness of group work (Elder, 2015; Kindler et al., 2009), where even highly motivated team-players become worn down, and serious relationship conflicts often ensue (Lee, Huh & Reigeluth, 2015). These issues of uneven participation have been linked to the primary reasons for student dissatisfaction with group work (Aggarwal & O'Brien, 2008), and may be one reason why students feel short-changed when exposed to PBL, despite attaining their learning goals more successfully than in traditional teaching (Warnock & Mohammadi-Aragh, 2016; Yadav, Subedi, Lundeberg & Bunting, 2011). In short, social loafing is a main

contributor to dissatisfaction with group work, and has major implications for the successful implementation and overall productivity of PBL.

While it has been established that social loafing is the principal complaint associated with student group work (Woods, 2001), very little research has considered the social processes of PBL in action (Imafuku & Bridges, 2016). This is problematic, as previous studies have demonstrated the importance of the intricacies of student interactions (e.g. Hendry, Wiggins & Anderson, 2016; Imafuku, 2012; Jin, 2012; Skinner, Braunack-Mayer & Winning, 2012), and thus, they must not be overlooked if we are to meaningfully determine what works in PBL (Imafuku & Bridges, 2016). For instance, in studies of traditional group work, British students showed clear resistance to 'doing academia', where maintaining alliances with fellow students was prioritised over educational endeavours, and they were heavily reliant on the tutor dealing with any arising social challenges on their behalf (Benwell & Stokoe, 2002; Sharma, 2013). In contrast, PBL encourages the students themselves to develop the necessary competencies required to smooth out their difficulties (i.e. instances of social loafing) if they are to thrive as a functional group (de Grave, Dolmans & van der Vleuten, 2001; Woods, 2001).

The presence of social loafing is an especially prominent concern in tutorless (Woods, 1996) and floating facilitator (Duch, Groh & Allen, 2001) PBL models, where the self-regulatory skills of students are more explicitly called upon to effectively managing team interactions (Lee, Huh & Reigeluth, 2015). The floating facilitator PBL model is becoming more widely implemented in light of increasingly large cohort sizes in educational institutions, and limited tutor numbers (Delaney, Pattinson, McCarthy and Beecham, 2017). In this way, one facilitator 'floats' between several PBL groups, and only intermittently offers face-to-face contact with the students, leaving the students to plan, organise and monitor the vast majority of their PBL progress (Dolmans et al., 2005). This may seem like an impractical pressure to inflict upon student learners, but these expectancies are no different from the social requirements of employment today (Marra, 2012). That is, alongside their core knowledge of the discipline at hand, graduates must possess the necessary professional skills to disagree – both appropriately and effectively – if they are to maintain their position within workplace communities (Woods, Briedis & Perna, 2013; Marra, 2012).

Despite the fact that the processes within tutorless PBL environments remain largely unexplored by interactional research, it is often assumed that student groups have no capacity for self-managing social problems (Clouston, Westcott, Whitcombe, Riley & Matheson, 2010), and that interpersonal complications override any meaningful gains from PBL itself (Elder, 2015). In turn, short-term solutions tend to be adopted by inexperienced tutors (e.g. transferring problematic group members to other groups, or premature/overly directive intervention) but this inhibits the adaptability of students for future novel situations and differing learning styles (Woods, 2001). By removing student ownership for managing difficult incidents, not only are the values of PBL abandoned – the need to actively participate, negotiate and positively manage group interactions (Dolmans et al., 2005) – but the developing learner identity is obstructed from its opportunity to learn from these occurrences, and to develop strategies for what is inevitable in real-life work (Kindler et al., 2009).

Aims
In summary, whilst the goal of PBL is to promote collaborative and equal engagement in the discussion of problem tasks, this does not always happen. Uneven participation is a significant challenge in tutorless PBL, but it is also important to recognise that PBL itself is deliberately ill-structured and thus, some degree of pressure is necessary if students are to gain from their

experiences (i.e. to acquire the generic skills necessary for teamwork) (Imafuku, 2012). Therefore, students need to learn how to collaborate – this is just as critical as the knowledge itself – and so, some trial and error is inevitable (Lee, Huh & Reigeluth, 2015). In the present chapter, we raise important questions in terms of *how* students self-manage instances of social loafing (if at all), alongside delicate issues of learner identity and pressures to fit in as part of the PBL team. The analysed data come from projects utilising the floating facilitator approach (Duch, Groh & Allen, 2001), which is predominately student-driven, and forces accountability for PBL onto its students.

Methods
Participants
22 Chemical Engineering undergraduates comprising four groups (October 2015 – March 2016: 30 hours) as well as five Psychology students in one group (October – December 2012: 21 hours) were voluntarily video-recorded during PBL tutorials at a UK university. In order to encapsulate all visual and auditory elements of the interaction, students were filmed in private meeting rooms during their tutorials. Both sets of data were transcribed with reference to the Jefferson (1984) system (see appendix). Full approval was granted by the ethics committees of both departments whose students participated in the study.

Students were exposed to the floating facilitator PBL model (Duch, Groh & Allen, 2001), where a distanced stance is taken by the PBL tutor who only intermittently participates in the monitoring of academic tasks, acting as the scaffolding of support (Wiggins & Burns, 2009). However, with this newfound autonomy for groups comes the responsibility to self-manage social difficulties (e.g. social loafing), and it is these tutorless fragments that will be examined in more depth.

Analytical approach
Conversation Analysis (CA) allows a micro-analysis of the sequential organisation involved in the student-driven PBL experience (e.g. the management of educational business without the continuous support of the tutor) (Antaki, 2011). Through its systematic focus on what emerges from naturally occurring interactions, attention was given to how students attend to the institutional demands of 'being' a PBL learner (and 'doing education') alongside social pressures to fit in as part of the team (Schegloff, 2007; Benwell & Stokoe, 2002). With that in mind, it was noted that two groups (one from each of the separate datasets) had issues with a group member who was repeatedly late for PBL sessions, failed to adequately prepare for meetings or did not fully contribute during tutorial meetings. The analysis therefore centres on instances taken from those group meetings in which participation in group work was explicitly addressed. The discussions with and about the 'problematic' group member – pseudonyms Regina and Callum – are then the focus of the analysis (extracts 2-6), with extract 1 included as an insight into the management of one-off occurrences of social loafing (e.g. pseudonyms Sharon and Linzi, who only once failed to contribute to the PBL task preparations). Through CA, we were able to examine the interactional strategies used by students as recipients of loafing behaviours, as well as the typical patterns of talk presented by those engaging in loafing behaviours themselves (Schegloff, 2007).

Analysis
The analysis will illustrate how the issue of social loafing is managed within PBL tutorial interaction by students in which there is no tutor present. Extract 1 (below) follows immediately

from a brief conversation in which Linzi and Sharon admit to having failed to prepare for the current PBL session. It is at this point that Craig, who is chairing this session, asks whether others have prepared:

Extract 1 – PBL Group A

```
1   Craig:   did anyone else do anything (.) did anyone even do their
2            research?
3   Linzi:   I've already [said
4   Craig:                [outside now Linzi£
5   Linzi:   I'll accept a verbal warning
6   Sharon:  so will I accept a verbal[warning
7                                     [actually it's a written£
8   Craig:   warning now
9   Annie:   e:m no but how can we: what can we improve on as a team?
10  Craig:   do: the research£
11           ((group laughing))
```

This first extract elucidates the somewhat playful negotiation of social loafing. Initially, Craig's utterances emphasise the significance of the situation ("did anyone else do anything", 1), where his requests to the group call for *some* degree of conversational uptake ("did anyone even do their research?", 1-2). In response, Linzi reiterates her admission of failing to prepare ("I've already", 3), as though she has already been forthright, and her accountability has been established through earlier discussions. As we move to line 4, note how Craig's overlapping turn teasingly scolds Linzi where he acts as the disciplining teacher by asking his student to leave the classroom ("outside now Linzi£"). In doing so – as someone who has actually prepared for the session – Craig alleviates the seriousness of the previous interactions. This is also shown through Linzi and Sharon's readiness to accept their punishment ("I'll accept", 5; "so will I accept", 6), and Craig's humorous upgrade ("written£ warning now", 7-8), as though escalating forms of punishment will ensue if social loafing continues. In this way, the offending students are forced to acknowledge their failures to contribute – and that boundaries *do* exist – but use co-constructed humour to avoid a hostile PBL environment, which would be detrimental in the long-term.

In line 9, Annie's participation in these discussions orient to the sole purpose of the PBL session: the necessity of doing education (Stokoe, Benwell & Attenborough, 2013). Annie opts not to engage in the group humour ("e:m no but", 9) where these utterances call attention to the seriousness of the matter at hand (i.e. that PBL is not running as it should). Note how Annie also makes repeated reference to the collective group ("we:"; "improve on as a team", 8), and thus, each member holds a duty to ensure they complete their fair share of the workload. This is reciprocated by Craig's blunt response ("do: the research£", 10), but again ends on a laughing note (11). This allows the problem to be addressed without being too authoritative, which could be damaging to team morale, and could cast Craig or Annie as substitutes for the absent tutor; a prominent issue in these tutorless occurrences.

In summary, this first analytical extract shows how the students of group A negotiate the direct implications of social loafing through shared humour, coupled with subtle orientations to warning talk, and the notion of 'being in it together' (Benwell & Stokoe, 2002). Let us now explore another instance of loafing behaviours as we visit group B in a similar scenario:

Extract 2 – PBL Group B

```
1   Jackie: we're just trying to decide just now like what-
2   Nadia:  what we're doing and how [best to like do it
3   Regina:                          [yeah … I've been so:: unwell-like
4           really really unwell
5   Jackie: so have we:£
6   Nadia:  I feel like I'm gonna throw up any minute-I'm glad I can see
7           the bin£ ((Nadia laughs))
8   Regina: really? oh God I'm just-I'm still doped up on pain killers
9           but I couldn't even really work I-(.)read the first one right-
10          I'll just be honest with you-I read the first one and I've
11          read half of the [the other one
12  Nadia:                   [I've only read one and I was like what is this?
13  Regina: it's so difficult … just didn't want yous to think I wasn't
14          bothering
15  Nadia:  no I-no-I never even got onto the second one
```

Lines 3-4 follow on from Regina's late arrival to the meeting, where she offers an emphatic excuse for her tardiness ("been so:: unwell-like really really unwell"). Jackie and Nadia immediately align with Regina's account and, as seen in extract 1, laughter is used to maintain a relatively informal learning environment, each adding an upgraded assessment of their respective health status. As such, they not only manage their identity as sharing similar experiences, but also project forward to their accountability for not having been able to do their work. Ill-health provides a morally justifiable reason for not having completed the work, and is one that is hard for others to challenge or refute. For instance, Regina prefaces her admission that she has not completed the required reading for the week ("still doped up on pain killers"; "couldn't even really work", 8-9), as though her having failed to complete the required preparations is justified by her unavoidable health state, and not something she would normally do (i.e. these are extreme circumstances).

If we now move to line 10, Regina makes reference to her candidness regarding her lack of preparation ("just be honest"). This 'honesty formulation' works to assert her sincerity (Edwards & Fasulo, 2006), as though she is fulfilling an obligation to remain transparent with her team ("with you"). However, Regina makes clear that she has attempted at least *some* of the work ("read the first one"; "read half of", 10-11). This is critical, as her peers have also verbalised their unwellness, but have still attended the session on time, and may have come fully prepared, too. For Regina to have made no contribution at all, the validity of her excuse would be put into question, and her loafing may not be so smoothly defused.

The ensuing lines work in Regina's favour, as Nadia provides her own admission of having "only read one" (12) of the required articles. What is particularly marked here is Nadia's orientation to the complexity of the reading materials ("I was like what is this?", 12), which co-constructs the "difficulty" (13) of the academic tasks as being to blame, rather than the group's own lack of effort. These strategies align with previous student interactional research (Hammar Chiriac, 2008; Benwell & Stokoe, 2002), and were congruous with the present analysis, where cohesion is maintained by projecting accountability outwith the group (e.g. onto the academic institution). This is shown through Regina's further display of allegience to her team ("didn't want yous to think I wasn't bothering", 13-14: the plural 'yous' emphasising group alliances), and her excuse is legitimised once more by Nadia's final assessment ("no I-never even got onto the second one", 15).

Therefore, as shown in the previous extracts – and throughout the data corpus – one-off instances of social loafing were treated as relatively minor group offences when they occurred in early PBL meetings, as they were not in close proximity to the pressures of the final PBL group assessment. In the next extract, however, we revisit group B several weeks later, as they face an imminent joint deadline. Rather than being a singular offence, Regina has persisted in her lateness, and inadequate preparation for PBL sessions. Let us first consider the discussions prior to Regina's entrance, where gossip talk is used as an interactional strategy to manage the group's struggles:

Extract 3 – PBL Group B		

1	**Ally:**	Regina'll probably be late
2	**Nadia:**	walk in late or train won't get in 'til £five past
3		*((group laughing))*
4	**Nadia:**	that's what she says every single day so why don't you get
5		the *((inaudible swearing – Jackie and Ally smile))*
6	**Jocelyn:**	*((to Nadia))* that's like us-like we get here on the dot
7	**Ally:**	if she needs to get her kids to school or whatever
8	**Nadia:**	she puts them in breakfast club
9		*((group laughing))*
10	**Ally:**	oh so there's not really much reason then
11	**Nadia:**	and she goes runs before she comes in
12	**Ally:**	hhhh *((laughing))*
13	**Jocelyn:**	are yous getting annoyed already?
14	**Jackie:**	yeah we have been-was nearly having a nervous breakdown£

In briefly examining these interactions which occur prior to Regina's arrival, we see how the group members engage in a series of gossiping behaviours, where active voicing (Wiggins, 2017) is used to mock Regina's commonly used excuses ("train won't get in 'til £five past", 2; "what she says every single day", 4). Typically, groups direct this teasing talk towards external parties, and in turn, strengthen their own cohesion as a united team (Hendry, Wiggins & Anderson, 2016). In this case, however, by projecting these negative evaluations onto an absent Regina, her status as a fellow in-group member is threatened. For instance, in line 6, Jocelyn references her own train journey with Nadia ("that's like us-like we get here on the dot") and how they ensure their punctuality, where personal pronouns ("us"; "we") emphasise their dissimilarity with Regina. That is, by constructing Regina as the group other, the remaining peers further their sameness, and power through the uneven PBL participation which has been inflicted on them (Stokoe, 2000).

From the above extract, it is also apparent that Regina's continuous loafing tendencies are not the only complaint of the group about Regina. In line 7, for example, Ally raises the challenges of Regina's role as a mother ("if she needs to get her kids to school"), but her sympathies are quashed by Nadia's questioning of Regina's authenticity ("she puts them in breakfast club", 8). The ensuing lines more firmly construct Regina's excuses as disingenuous ("not really much reason then", 10; "she goes runs before she comes in", 11), which raises the burden being placed upon the group ("getting annoyed", 13; "nervous breakdown", 14). If we now shift to Regina's eventual arrival to the PBL session, we gain insight into the group's management of face (Goffman, 1955). Notice how the humorous atmosphere is very quickly dissolved as the group focus on the educational business at hand, but institutional politeness (Brown & Levinson, 1978) remains:

Extract 4 – PBL Group B

```
1              ((Regina knocks at the door))
2    Jackie:   ↓enter£
3              ((Nadia, Jackie and Jocelyn laugh))
4    Regina:   HIYA:
5    Nadia:    why don't we just get to the aims then (.) then the
6              methodology then findings and write notes for each of them?
7    Jackie:   yeah
8              ((Nadia, Jackie and Jocelyn chat amongst themselves))
9    Nadia:    who's being the chair then?
10   Regina:   I'll be the chair
11   Nadia:    okay
12   Regina:   right quickly run over how we're doing this again?
13   Nadia:    we're just gonna go through each one again and just get the
14             main points out of it so we all like understand
15   Regina:   mhmm okay
16   Ally:     first of all how did you find it ↑Gina?
17   Regina:   emm the-well I was only focusing on that man-the one-
18   Ally:     the 'man face' (article)
19   Regina:   yeah yeah, I mean obviously-I mean you weren't here last time
20             but I burst into tears
21   Nadia:    heh heh
22   Regina:   'cause I was finding it really £difficult em but yeah em this
23             one it took me-although this was the easiest it took-
24             me a long time
25   Nadia:    mhmm
26   Regina:   still but I think I got the main gist of it
```

When Regina knocks on the door, Jackie speaks in a low-pitched laughing voice ("↓enter£", 2), but does not project her utterances loud enough for Regina herself to hear; an intentional move, with the joke being shared amongst the in-group only. Furthermore, despite knocking at the door and energetically greeting her peers ("HIYA:", 4), the group continue their ongoing discussions of the PBL tasks and display no acknowledgement of Regina's presence. These conversations are lengthy (8), and it is not until Regina actively works herself into the interactions ("I'll be chair", 10) that she is verbally involved by her peers. By promptly volunteering her acceptance of the chairperson role, Regina orients to the fragility of her identity as a group member, and the need to restore her connection with her peers.

However, Regina's gesture of good will receives only minimal response ("okay", 11), and is made more problematic by her request for clarification ("quickly run over", 12), which makes it clear that she has no inclination of what the PBL role actually entails. In turn, Ally's interjection in line 16 questions Regina's ability to proceed as chairperson ("first of all how did you find it ↑Gina?"). This checking formulation (Stokoe, 2000) serves to determine whether Regina has completed the required preparation work, but is delivered in such a way (e.g. the intimate "Gina" nickname) that avoids being too probing. In line 17, Regina responds with the indirect admission ("I was only focusing on"; as opposed to 'I only read one') that she has read only one of the two articles, as she succumbed to the pressures of the academic task ("I burst into tears", 20; "finding it really difficult", 22). This is an intruiging point in the interaction; Regina not only justifies her lack of progress through this emotion category (Edwards, 1999), but she also works to neutralise her wrongdoings by emphasising the nonattendance (i.e. a

potential loafing behaviour) of another group member ("I mean you weren't here last time", 19).

Despite Regina's proffers, her peers are unreceptive to her excuses (Nadia's minimal responses: "heh heh", 21; "mhmm", 25). In light of this, whilst she admits that she found even the "easiest" (23) task to be "really £difficult" (22), as in extract 2, Regina is cautious not to position herself as being wholly incompetent in doing academia, as this would be truly catastrophic for her group membership. By showing an understanding of at least the core knowledge ("got the main gist", 26), she salvages her membership to some degree, and enables the task to proceed (Stokoe, Benwell & Attenborough, 2013). Therefore, regardless of their private gossiping beforehand, the students recognise the expectations of the institutional environment (Brown & Levinson, 1978), where even social loafers must be allowed to participate in the educational business at hand (i.e. to do PBL). However, as shown here, the boundaries between professional and personal are also made explicit, and the group are intolerant of Regina's excuses, as well as her discursive rights to be involved in the social 'luxuries' of group humour.

We shall now examine the case of Callum – a student from group A – who has similarly displayed recurring loafing behaviours. Like Regina, Callum uses metatalk to distract from the PBL work to be tackled, and instead dwells on process issues which have supposedly inhibited his participation:

Extract 5 – PBL Group A

```
1   Callum:  I dunno I found it quite: difficult to actually find
2            information on this-found the main suppliers (0.2) you know
3            obviously you've already written about it ((points to
4            Sharon)) you've written about it ((points to Craig))
5   Sharon:  E:MM a bit of crossover's not bad
6   Callum:  yeah
7   Sharon:  like (.) as long as you're not doing the same thing twice
8   Annie:   yeah BUT there will be-you'll be able to rea:d (.) the stuff
9            on the forum
10  Callum:  yea:h
11  Sharon:  mhmm
12  Annie:   should be able to read theirs ove::r a:nd (.)
13  Callum:  I know (.)
14  Craig:   Linzi's up next
```

Callum's opening lines illuminate the standard excuse format, where he first details the struggles he encountered in his individual research ("found it quite: difficult to actually find information", 1-2) but does not put his capacity to do education in jeopardy (Stokoe, Benwell & Attenborough, 2013), noting that he has "found the main suppliers" (2) (i.e. the bare minimum). He attempts to neutralise his failure to obtain the relevant information, not as a result of his lack of effort, but as an avoidance of repeating work already achieved by the group ("obviously you've already written about it", 3). Callum formulates hearer-specific appeals accompanied by physical gestures, to establish solidarity with Craig and Sharon, as though his actions are justified; that there is no point in wasting time and effort when the problem has already been solved. Similar to Regina in the previous extract (and throughout the overall data corpus), Callum steps out from the *content* of the PBL tasks, and instead reports on group *processes* in orienting to an underlying issue which has prevented his equal participation.

In line 5, Sharon is the first to oppose Callum's rationale ("bit of crossover's not bad"), followed by Annie's explicit alignment with Sharon's stance which makes relevant the availability of academic support networks ("you'll be able to rea:d (.) the stuff on the forum", 8-9). That is, Callum has no excuse for failing to communicate his concerns with the team, and thus, his excuse is treated as inauthentic. Annie's reference to the group forum is particularly significant, as our analyses highlighted a deliberate shift made by students from their own private social media spaces (e.g. Facebook and WhatsApp), to the institutional discussion forum. In this way, the group documented Callum's worsening behaviours through a digital paper trail, available for the class leader to monitor. They tracked their unsuccessful efforts to encourage Callum's involvement, without directly informing the tutor, and this may function as an alternative strategy for powering through the self-managed PBL.

A pivotal point in the extract comes in the final line; after a very brief pause (14), Callum loses his discursive space, as Craig positions a new agenda ("Linzi's up next"). Having experienced several PBL sessions with this recurring behaviour, the group do not dwell on Callum's inadequate contributions, and swiftly continue their focus on the remaining academic business at hand. Furthermore, if we reconsider Callum's responding turns throughout, despite being granted the opportunity to defend his position, once confronted by Sharon and Annie's oppositions, Callum seems to quickly back down from his justification (which might suggest that he himself knows his position to be indefensible). However, similar to the previous case of Regina, whilst they co-constructively shut down Callum's excuse, the group first ensure he is given the space to offer his account on matters; essentially, a diplomatic dismissal (Brown & Levinson, 1978).

Callum's loafing is further examined in the final extract, where Craig orients to the group's reliance on each member if they are to proceed in the tasks; that is, Callum's lack of participation is damaging to the productivity of the whole group:

Extract 6 – PBL Group A

```
1   Craig:    see my section is nowhere near completed (.) because: (.) see
2             for me to find numbers I'd have to research your whole section
3             (.) so like: I made a lot of changes to it (.) BUT like see
4             your section for the distillation column?
5             ((gazing at Callum))
6   Callum:   yeah
7   Craig:    you'd have to find the numbers yourself
8   Callum:   do you want them?
9   Craig:    yea:h
10  Callum:   'cos I-didn't know-I was gonna talk to you about that-
11  Craig:    yeah it's like a JUDGEMENT CALL (.) but see for ME: 'cos
12            to-I'd have to like redo your whole research again
13  Annie:    YE:AH ((whilst nodding))
14  Craig:    like: (.) Annie read it as well (.)
15  Callum:   I didn't even think you wanted to like (numbers in) (.) and
16            then everybody would be like 'what are you doing?'
17  Craig:    AWW like: definitely
```

In the previous week's PBL meeting, Craig volunteered to prepare the upcoming group report on behalf of his peers. Once again, however, Callum's minimal participation has amplified the complexity of what should have been a relatively simple task. In the opening lines, Craig states that his own progress has suffered ("my section is nowhere near completed", 1) as a result of

Callum's failure to perform fundamental calculations ("for me to find numbers", 2), and being left with little option but to rectify these flaws on his behalf ("I made a lot of changes to it", 3). Alongside these utterances, Craig makes his target explicit through his persistent eye gaze towards Callum (5), and his emphasis on what Callum *should* hold individual ownership for ("your section", 4). Here, it is Craig who discursively steps outside of the PBL content, and instead discusses group processes as means of pulling Callum to account for his lack of contribution.

In line 7, Craig continues his forthright approach, where he positions Callum's duties as non-negotiable ("you'd <u>have</u> to"). This is also apparent in his response to Callum's query ("do you want them?", 8), where significant stress is placed upon this assertion ("<u>yea:h</u>", 9), as though this is an obvious expectation. In turn, Callum's struggles are shown through repeated reformulations ("'cos I-didn't know-I", 10), where he appeals to Craig through an unknowing stance, as though he intended to seek his opinion within this current meeting ("was gonna talk to you", 10) (Heritage, 2012). Given the imminence of the PBL report deadline, Craig underscores the importance of making one's own "JUDGEMENT CALL" (11), which orients to the necessity of members functioning with some level of independence – as opposed to consulting one another every step of the way.

As we approach line 11, Craig raises the personal burden ("see for ME:") which he faces in being left to complete the work of another team member. Here, he accentuates the immensity of these pressures ("I'd have to like redo your whole research again", 12), and Annie's loudened assessment ("YE:AH", 13), accompanied by her supportive nodding gesture, affirms Craig's stance; that Callum's levels of participation are unacceptable. Note also how Craig uses Annie's reciprocation to overpower Callum's excuses; that he is not the singular member confronting Callum's lack of ownership (Benwell & Stokoe, 2002). Consequently, Callum continues his unknowing stance ("didn't even think", 15), as though he did not wish to appear foolish in front of his peers ("everybody would be like 'what are you doing?'", 16) (Heritage, 2012). Although, once more, Craig firmly establishes the inclusion of these calculations as being essential ("AWW like: definitely", 17), and Callum's case is closed.

Discussion

The current analysis details how accountability for social loafing in floating facilitator PBL (Duch, Groh & Allen, 2001) is self-managed by students. In early PBL sessions (e.g. weeks 1-2), loafing behaviours were positioned as relatively minor transgressions, where the complexity of the academic tasks were constructed as being at fault, rather than the ill-prepared students in question (Benwell & Stokoe, 2002). This leniency granted by the groups seems to be reflective of the final group assessment being far from sight. Similarly, the enactment of punishments (e.g. verbal/written warnings) were raised during teasing behaviours, and in this way, the implications of social loafing were minimised as a means of sustaining group cohesion (Hendry, Wiggins & Anderson, 2016). Although, from consideration of the wider data corpus, these orientations to academic authority – albeit in their relaxed manner – also held connotations to the seriousness of social loafing and hinted at the need for discipline, should any member violate the group boundaries (i.e. going beyond a one-off event). Additionally, crucial aspects of these formulations were the relevant individuals' open admissions of guilt; the notion that, despite failing to prepare for the PBL session, allegiance to the team could be restored through displays of 'honesty' (Edwards & Fasulo, 2006). Being constructed as disingenuous – as shown in the second section of the analysis – was extremely problematic for one's PBL membership.

In contrast, recurring instances of social loafing involved intensified interactional work, where students applied a series of intricate discursive strategies in self-governing their troubles in tutorless PBL. For instance, the offenders consistently formulated overly convoluted excuses with displays of vulnerability (e.g. Regina's illness/emotional state) (Edwards, 1999) and adopted 'unknowing stances' (e.g. Callum's continuous prompts for clarification) (Heritage, 2012) in their 'struggles' to complete their PBL duties. Rather than discussing the content of the PBL problems, Callum and Regina presented a series of process issues which distracted from the academic business, and therefore, forced their recipients to acknowledge these wider problems. In turn, both groups faced the dilemma of policing these acts of social loafing, alongside the institutional norms for politeness (Brown & Levinson, 1978). That is, the students did not position themselves as 'expert' enough to make tutor-like moves (Benwell & Stokoe, 2002), nor did they wish to be perceived as overly authoritative; another problematic move for group cohesion (Kindler et al., 2009).

Despite this resistance to institutional hierarchy, however, the students also oriented to the necessity of doing education, and the need for regulation of participation in PBL. Subsequently, they opted for very subtle displays of authority, and indirectly hedged around failures to commit to team duties (e.g. transitioning communications from Facebook to the institutional discussion board, where the tutor had direct access to individual contributions, as with Callum). If we reconsider the case of Regina, for instance, note how her peers engaged in cohesion-building gossip talk in her absence; their means of withstanding the ongoing social difficulties, perhaps. However, upon her arrival to the group, in the spirit of institutional democracy, Regina was granted the discursive space to contribute to the PBL tasks, still. Instead, once excuses for slacking were established as inauthentic, the group members targeted social 'luxuries' by avoiding uptake of these justifications, disbanding their engagement in humour/off-topic chats, and making no displays of empathy. This process of othering was also shown in their swift moves towards new educational business, where they oriented to the burden being imposed on them, and then very promptly pushed on with other PBL tasks (i.e. the loafer being discursively dismissed).

Conclusions

These analytical findings are some of the first to illuminate the resilience of the PBL learner identity, in that the students adapted to the complications of social loafing behaviours, and self-managed these occurrences without engaging in explicit team conflicts. Rather than avoiding the inevitable challenges which come with group work – detrimental to meaningful learning in itself (Kindler et al., 2009) – students autonomously applied their own interactional strategies in mitigating the issues raised as a result of social loafing. Learner identities are often viewed as static or insignificant, but this extensive video corpus sheds light on the dynamic student identity which comes into play in student-driven PBL (Sharma, 2013). The social dimensions of PBL hold significant influence over group productivity (de Grave, Dolmans & van der Vleuten, 2001), yet the current study shows how students self-monitored some of the principal complaints of tutorless PBL themselves (Woods, Duncan-Hewitt, Hall, Eyles & Hrymak, 1996).

In summary, the social processes of PBL must not be overlooked if we are to meaningfully inform educational practices by way of tutor and student training (Imafuku & Bridges, 2016; Teng & Luo, 2015; Skinner, Braunack-Mayer & Winning, 2012). Given the scarcity of research centring on how effective PBL collaborations can best be sustained (Hmelo-Silver & Eberbach, 2012; Jin, 2012), future studies should continue to adopt qualitative

analyses to explicate interactions which foster positive PBL experiences. Furthermore, the present study was limited to a Scottish educational context with English as the native language, and this raises implications for the generalisability of our analytical findings. Similarly, it would be insightful to examine the management of social loafing in PBL across different years of education (e.g. undergraduate versus postgraduate), and to consider factors such as how long students have worked together as a group. How one deals with the complexities of social loafing is likely to vary considerably across different linguistic and cultural contexts, and therefore, it is important to address these issues in PBL settings in other institutional contexts.

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Appendix

Adapted from Jefferson (1984) Transcription Convention
(.) – A dot in a bracket indicates a pause of less than two-tenths of a second.
(0.2) – Numbers in brackets refer to pauses in tenths of a second.
CAPITALS – Indicates a sound that is louder than the surrounding speech.
°quieter° – Degree signs indicate talk that is noticeably quieter than the surrounding talk.
<u>**Underline**</u> – Indicates emphasis on speech.
↑↓ – Pointed arrows indicate a marked rising or falling in speech intonation. Placed *before* the change in intonation.
£ – A pound sign indicates talk that is suppressing laughter or leading into a 'laugh'.
[ ] – Square brackets indicate the beginning/end of overlapping speech.
Cut- – A dash following a word indicates a cut-off sound in the speech (usually as another speaker interjects).
= – Equal signs indicate continuous talk between speakers.
(()) – Words in double brackets and italicised reference non-verbal aspects of the interaction. In the present analysis, reference to physical gestures and objects are also labelled here.
>< – 'More than' signs enclose speech which is noticeably faster than the surrounding speech; 'less than' **(<>)** signs label slower speech.
.h – A dot before 'h' indicates an in-breath. More 'h's = longer in-breath.
h – 'h's *without* a dot before them indicate an out-breath.
:: – Colons indicate an extension of the preceding (vowel) sound. More colons = greater the stretching.
(estimation) – Words in brackets label unclear speech, where estimations have been made by the analyst.