‘Shadow Module Leaders’ - Student experiences as Peer-Teachers and facilitators of Peer-Assisted Learning

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Abstract

Peer-assisted learning is a powerful pedagogy that benefits both the student tutor and the student being instructed. In student-focused and student-led ‘Shadow Modules’, students work collaboratively on supplementing and supporting their learning, in collaborative sessions organized or taught by a fellow student ‘Shadow Module Leader’ (SML). The SML either structures collaborative learning sessions, or actively teaches fellow students. This study aims to investigate the motivations, experiences and insights of SMLs. 6 SMLs kept reflective logs of their experiences running Shadow Modules. These reflective logs were analysed qualitatively, and questions identified for semi-structured intensive interviews with 4 SMLs. Preliminary findings suggest that SMLs find peer-teaching to be empowering and beneficial to their own development. But SMLs also exhibit concern over their own potential limitations, and frustration at limited student engagement. SMLs were universally positive overall about peer-teaching.

1. Introduction

Engaging students as partners in learning is a current concern within the UK HE sector. Engaging students as partners can increase participation and enhance development of independence and lifelong-learning skills. One partnership approach, peer-mediated, or peer-assisted learning (PAL) has a considerable body of evidence to support its effectiveness [1], [2]. There are several formats in which PAL can be effective, the most common format in HE being ‘co-operative learning’, which typically involves a group of students being tasked with an activity and a subsequent division of labour between members of the group. This approach is limiting in impact, as meaning-making is only undertaken by individuals, and so each student becomes an expert in only one aspect of the subject. Truly collaborative approaches, where students discuss concepts and come to a shared understanding of the whole of the task [1], have significantly greater potential for supporting all participants’ understanding across all aspects of the subject.

A key activity within the collaborative process is an individual explaining, coaching or teaching peers in an aspect that they understand, but their peers do not. Peer-teaching can therefore also be a powerful pedagogy, helping consolidate the learning of the peer-teacher, as well as supporting the understanding of the peer-tutee. The peer-tutee benefits from the insights of a peer who has recently undergone the same ‘learning journey’ that is required, and can feel more comfortable, safe, and more willing to admit knowledge deficiencies, with someone who is not a member of staff [3]. Recipients of peer-teaching can show equal or greater knowledge compared to formal didactic teaching by an expert, and demonstrate increased knowledge in areas they themselves taught [4]. A peer-teacher can be either a true peer (a student from the same year group), near-peer (from a close, but senior year group), or a far-peer (a more-senior student, such as a postgraduate). Both collaborative learning and peer-teaching are effective learning tools, and ways of engaging students as partners in learning, rather than passive consumers.

We have pioneered ‘Shadow Modules’ [1], [5] - student-led, student-focused learning communities that parallel taught modules (see Figure 1).

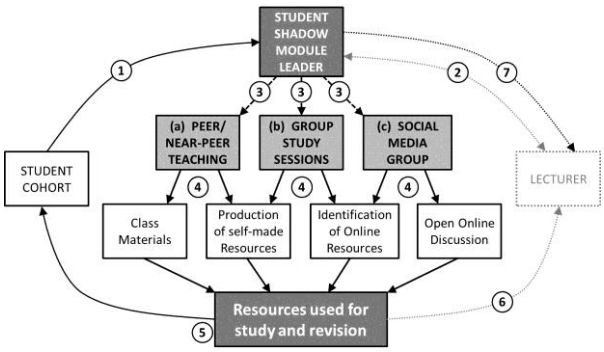

Figure 1. Shadow Module flow chart. [1]

Shadow Modules are led by a student (see (1) on figure 1), either a true-, near- or far-peer, who organizes and co-ordinates collaborative activities and liaises with the academic Module Leader (2). Shadow Module sessions (3) are either peer-taught classes, large collaborative group sessions, or online communities through social media and each produces a range of outputs (4) which can then be

shared with other students in the module (5) who are not actively engaged in the collaborative sessions. Shadow Module outputs (6) and SML feedback (7) frequently impacts on the Academic Module Leader, and lead to revisions of the module content or teaching approach. The SML therefore has the potential to impact on the ongoing revision of the academic module [1], [5].

Due to their significance of SMLs in the PAL process, their experiences are of interest to our understanding of students as peer-teachers. The aim of this study is to investigate the motivations and experiences of the SMLs, and their perceived long-term impact on themselves and others.

2. Body of Knowledge

2.1. Methodology

6 SMLs were asked to keep a session-by-session reflective log of their experiences during a semester in which they coordinated a Shadow Module. These logs were analysed using a Constructivist Grounded Theory approach to identify significant themes. Analysis was undertaken using NVivo coding software. Initial coding was performed independently by 3 researchers, then discussed and agreed categories identified. A subsequent round of independent coding by 3 researchers was also used to frame a question set for interviews with SMLs.

Semi-structured intensive interviews were held with 4 SMLs. Interviews were transcribed and analysed independently in a similar manner to the reflective logs. Further rounds of coding on logs and interviews will be performed until full saturation is reached in the analysis.

2.2. Initial findings

The initial analysis of reflective logs identified numerous codes, grouped into 12 categories.

1) Approaches and methods for Collaboration
2) Curriculum development for Shadow Module and critique of taught module curriculum
3) Perceived impact on SML
4) Positive and negative SML emotions
5) Factors affecting motivation of SML
6) Perceived impact on student participants
7) Extent of student participation
8) Self-perception and critique of own ability
9) Logistics of organising sessions
10) Communication with students and staff
11) Academic staff involvement
12) Workload of SML and students

Major themes from these categories are an understanding of the empowering potential of peer-taught activities, both for peer-teachers and participants; concern from the SML over their own capabilities and knowledge base, and euphoria from peer-teaching sessions that worked well, but frustration at the limited engagement by other students, the often-poor turnout at Shadow Module sessions or limited engagement in online discussions.

The analysis of the reflective logs enabled the framing to a question set for semi-structured intensive interviews with 4 of the SMLs to further investigate their experiences. These have yet to be analysed in full, but initial review of the transcripts suggests that the SMLs themselves showed considerable adaptability and resilience in the planning of the pee-teaching activities, and that typically the SMLs adopted a role of facilitator and coach, rather than didactic teacher. All SMLs interviewed felt they had made a positive contribution to the taught academic module through their feedback to the module academic staff.

3. Conclusions

The overriding feedback from SMLs was that organizing a peer-taught activity was extremely beneficial overall, and something which they felt has had a significant positive impact on their own personal development. Peer-teaching is empowering for the peer-teacher, and supports the peer-teacher in developing confidence in their own ability, but also reflecting on their own knowledge base and limitations. The SML role is therefore a powerful example of students as partners in learning for HE.

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4. References

[1] J.L. Scott, S. Mistry, B.J. Moxham, and S.M. Rutherford, "How can technology support and enhance collaborative activity and student engagement within and outside-of the formal curriculum?" In. S.M. Rutherford (Ed.) *Collaborative Learning: Theory, Strategies and Educational Benefits*. Nova, New York, 2014, pp.149-174.

[2] J.A. Hammond, C.P. Bithell, L. Jones, *et al.* "A first year experience of student-directed peer-assisted learning", *Active Learning in HE*, Sage, London, 2010, pp. 201–212.

[3] S. Hall, M. Lewis, and S. Border, "Near-peer teaching in clinical neuroanatomy", *Clinical Teacher*, Wiley, Malden, 2013, pp. 230–235.

[4] W.J. Hendelman, M. Boss, "Reciprocal peer teaching by medical students in the gross anatomy laboratory", *J. Medical Education*, Wiley, Malden, 1986, pp. 674–680.

[5] J.L. Scott, B.J. Moxham, and S.M. Rutherford, "Building an Open Academic Environment - New Approaches to Empowering Students in their Learning of Anatomy". *J. Anatomy*, Wiley, Malden, 2014, pp. 286-289.