

## **Demystifying Peer Assisted Study Sessions (PASS): What...? How...? Who...? Why...?**

### **Introduction**

Supporting the transition into higher education and providing a personalised learning experience is a key factor in retention, student motivation and achievement. As part of an integrated approach to student support and development The University of Manchester engages students as partners in two established Peer Support programmes: Peer Mentoring<sup>1</sup> and Peer Assisted Study Sessions (PASS).

Based on the Supplemental Instruction (SI)<sup>2</sup> model, PASS does not replace any form of interaction between staff and students but instead provides additional opportunity for all students to interact with their peers in collaborative study groups within the context of their discipline.

PASS is attached to a challenging unit(s) within a degree course and provides a safe environment for students to discuss ideas, share problems and resolve questions in a setting that supplements the core curriculum.

The University of Manchester has a well established and internationally recognised PASS programme, which was first introduced in 1995 in Chemistry.

---

<sup>1</sup> Peer Mentoring is a social support network for students assisting with orientation and socialisation. It fosters a greater sense of community through informal activity enabling interaction across the various student cohorts within a discipline. Sessions are informal and can be attached to tutorial groups or run independently. In September 2008, 39 disciplines operated a Peer Mentoring scheme with over 1100 students acting as Peer Mentors.

<sup>2</sup> Ody and Carey (forthcoming 2009) inform that Supplemental Instruction (SI) was developed at the University of Missouri, Kansas City and is an internationally renowned academic support and retention programme. Since its inception in 1973, it has since been implemented in over 1500 institutions across the globe. It is a peer facilitated academic assistance program that targets historically difficult courses so as to improve student performance and retention by offering regularly scheduled, informal review sessions. Students learn how to integrate course content and study skills while working together.

To assist with the implementation and to ensure the quality of a programme, staff training is provided by the International Center ([www.umkc.edu/cad/si](http://www.umkc.edu/cad/si)) and National Centres (currently these are located in Australasia, Mexico, Scandinavia, South Africa and United Kingdom).

Initial research of the Chemistry scheme (Coe *et al*, 1999) identified a positive impact of PASS on academic performance and the wider student experience. The growth of PASS has been significant and currently engages over 400 higher year student volunteers working in partnership with staff to enhance and personalise the learning experience.

As a co-curricular activity, PASS can be implemented to:

- support the learning experience and involve students as partners in their learning experience
- assist the transition into and within HE
- enable enhanced interaction with peers (within and outside year cohort)
- provide opportunities for students to become more engaged in their course
- improve academic performance and achievement and, increase retention
- provide an additional mechanism for communication and feedback between teaching staff and students
- provide further opportunity for the development of intellectual and professional competencies of PASS Leaders and attendees

### **The PASS approach**

Trained<sup>3</sup> higher year students (PASS Leaders) work in pairs to facilitate regular study groups usually comprising 6-12 lower year students (attendees). Sessions generally take place in weekly, one hour timetabled slots at a time available to all students, although sessions are not compulsory.

The sessions are intended to promote collaborative learning through exploratory discussion and provide an opportunity for PASS Leaders to share their experiences of the course, thus 'demystifying' the higher years of study and building the attendees confidence in themselves to progress through university.

---

<sup>3</sup> All prospective Leaders receive interactive facilitation training delivered by SI Supervisors, themselves trained by the International Center or a National Centre.

Of particular importance is that discussions in PASS are based on existing course materials – information that has already been received by the attendees or that which is in recommended texts. In this way, it helps to ensure PASS Leaders are not engaged in the delivery or teaching of new material. Additionally, Leaders do not re-teach material but instead encourage students to compare notes, clarify what they read and hear, analyse, criticise, question and seek verification of ideas. In addition to consolidating knowledge of the subject and gaining deeper conceptual understanding, study and learning strategies are integrated in sessions.

### **Session Content and Structures**

Whilst a PASS scheme is tailored to suit the individual needs of a discipline, working within the overarching principles of SI<sup>4</sup>, there are a number of broad approaches to both the content and structure of sessions.

The content around which a scheme, and therefore the session, is based is initially identified through consultation prior to implementation. Working with staff and students the content may focus on:

- *Elements of the whole course* – this is often the structure when all students follow a common pathway of units and enables discussion around any aspect of the course
- *Generic units* – primarily used for a ‘tutorial-based’ module that provides the foundations for the other specific units taken during the year. This type of content discussion may still cover broad topics but, because of the alignment to a module, it would have particular foci.
- *Specific (historically difficult) unit* – it is commonly the case that (almost uniformly) there is a unit in the programme perceived as being ‘difficult’ or ‘hard’. Attaching PASS to this type of module enables targeted exercises or questions to be developed that address the challenging concepts in an innovative way and provides another forum for discussion.

---

<sup>4</sup> Supplemental Instruction has a common set of 21 principles that help to guide the implementation and continuation of a scheme (The University of Manchester, 2009)

With regards to structuring a session, two clear ways emerge:

- Student led and Agenda based – this type of session passes control of the session back to the attendees. Leaders, during their training, explore how to enable the group to set an agenda based on their learning experiences over the previous week. Leaders then, in conjunction with attendees, structure these areas for discussion and plan the session to cover as much material as is feasible. With this approach, attendees take greater control (and therefore ownership) over the session, which results in greater satisfaction that PASS is actually addressing their needs.
- PASS sheet – this structure is often used when a PASS scheme is focussed on a 'Specific unit. Staff and students work in partnership to identify the most challenging aspects of the unit, which assists in the design of a supplementary 'PASS sheet', which comprises key discussion questions and group exercises to help focus the session and deepen the understanding.

The sessions are structured to ensure that a productive learning environment is created but it should also be noted that they are informal, flexible and can be fun!

It is clear that the nature of a PASS scheme is adaptable in terms of the structure and material discussed; the flexibility also extends to the size of cohort it supports. At The University of Manchester, schemes run with 4 PASS Leaders (supporting a cohort of 20) as well as almost 100 PASS Leaders (supporting a cohort of over 550).

It has already been mentioned that all PASS Leaders receive comprehensive training at the start of term. However, ongoing support is also critical to the maintenance and development of a scheme. Initial training is supplemented with ongoing observations and weekly, discipline-based debriefs after each PASS session; these bring all Leaders together to share best practice and challenges/successes of their individual sessions. Leader debriefs focus on both process and content of sessions: reflecting on their initial training and current experiences to provide support in their facilitation skills and techniques; ensuring effective feedback to academic staff on common problems experienced by attendees and an insight into how the current material delivered within lectures, seminars and tutorials is being received.

## **Benefits**

Whilst it could be perceived that the main beneficiaries of the implementation of a PASS programme are the attendees, there is significant evidence (Donelan and Kay (1998), Coe *et al* (1999), Garside *et al* (2006)) to suggest that the benefits reach much further than this initial 'target' group.

During the 14 years since PASS started, The University of Manchester has continually observed its positive impact on people, groups and cultures across the entire Institution.

PASS offers benefits at several levels to various stakeholders. At an institutional level it provides an additional cost-effective method of student support, which has been highlighted as good practice by the Quality Assurance Agency in supporting the student experience. The impact of PASS on a student's employability is also recognised by employers and professional accreditation bodies; during a recent visit to the School of Chemical Engineering and Analytical Sciences the IChemE reported positively on the use of PASS and notably its impact on the transferable skills developed by PASS Leaders. Anecdotal feedback from a range of graduate employers recognises that students who engage in voluntary roles, such as a PASS Leader, develop competencies and transferable skills that increase their employability prospects.

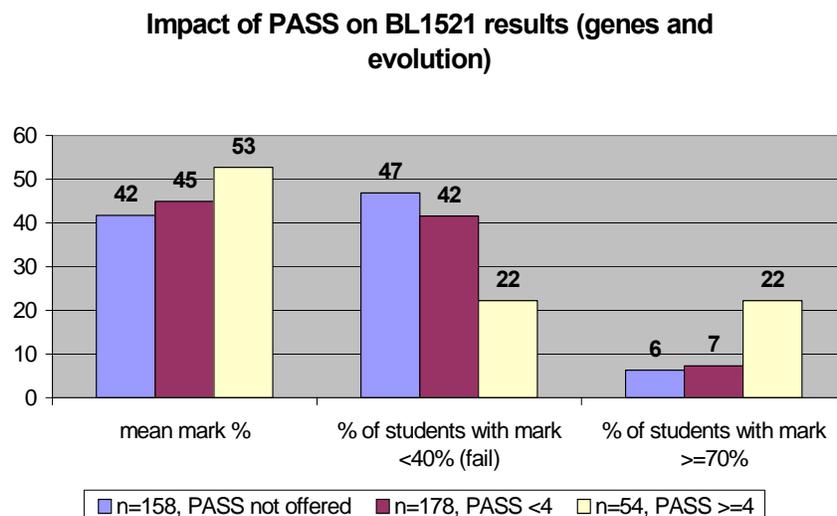
Academic staff have reported changes in the level of student engagement, recognising the programme's positive impact on community and collegiality; PASS forges links between year groups and creates student partnerships with academic and administrative staff.

Leaders are able to provide additional regular feedback to the course teaching team through weekly debriefs. In addition to formal student representation structures, PASS Leaders are often invited to engage with focus groups and student staff liaison committees to comment on wider student related issues.

Research and published benefits have primarily focussed on the attendees with the majority of this quantitative research being carried out in the USA and Australia. The results demonstrate a positive correlation between students who

attend PASS and their academic performance. Additionally research consistently shows that subjects that run PASS attain lower failure and attrition rates.

In 2005-2006, the Faculty of Life Sciences introduced PASS and, due to such a large cohort, PASS was offered to half the cohort in Semester 1 and half in Semester 2 in this pilot year. Therefore an experimental control group was created: those who were not offered PASS. The results presented are for 3 groups: the experimental control group (Group 1), those who could attend PASS but attended less than 4 sessions (Group 2) and, those who could attend PASS and attending 4 or more sessions (Group 3).



**Figure 1: This graph presents the results obtained for the unit BL1521 in January 2006 - mean mark (%), fail rate (% of students with mark < 40%) and 1<sup>st</sup> class rate (% of students with mark  $\geq$  70%) - for the regular PASS attendants (PASS  $\geq$ 4) and the two control groups (PASS not offered, and PASS <4).**

Those who attended PASS regularly showed an improvement in 3 key areas:

- 1) a significantly higher mean mark: 53% in Group 3 compared to 45% in Group 2 ( $p < 0.01$ ) and 42% in Group 1 ( $p < 0.001$ ).
- 2) a 2 fold reduction in the fail rate (22% in Group 3 compared to 42% and 47% in Group 2 and 1, respectively)

- 3) a 3 fold increase in the number of 1<sup>st</sup> class marks (>70%) (22% compared to 7% and 6% in Group 2 and Group 1, respectively)

It is often questioned whether those who would benefit most academically from PASS (i.e. those with a lower academic mark) are the students who are selecting not to attend. Fostier and Carey (2007) present data that indicates that the distribution of academic mark represents a diverse range of academic ability.

However, to recognise the wider benefit to the student it is necessary to consider more than just quantitative results. Qualitative evaluation identifies that PASS had “*engaged students successfully in a meaning gathering approach rather than a purely strategic one*” (Fostier and Carey, 2007 pp. 148).

Increased confidence, involvement and ownership of their learning combined with improved study have been recognised as benefits by the attendees and Leaders (Fostier *et al*). Changes in attitude to learning have been reported to have a positive impact on the wider discipline in terms of staff time and development of communities.

Leaders recognise a variety of benefits to themselves including:

- revision of core material
- understanding of learning theory in practice
- increased engagement with academic staff
- skills development and,
- enhanced employability prospects

Indeed, The University of Manchester has recognised the benefits to the Leaders in enhancing their student experience as well as that of the attendees.

These benefits, and those for the wider institutional community, were highlighted in the recent ‘Review of Undergraduate Education’, which made recommendations to expand the use of PASS both horizontally into new disciplines and vertically into higher years where appropriate

The University of Manchester has been recognised internationally as the UK national benchmark for PASS and in April 2009 will become the National Centre for PASS/SI<sup>5</sup>.

The anticipated growth/expansion of PASS is therefore expected to be significant as part of an integrated approach to personalising the student experience.

## References

- Coe, E., McDougall, A. and McKeown, N. (1999) Is Peer Assisted Learning of benefit to undergraduate chemists? *University Chemistry Education*, 3(2), 72-75
- Donelan, M., and Kay, P. (1998). Supplemental Instruction: Students helping students' learning at University College London (UCL) and University of Central Lancashire (UCLAN). *The International Journal of Legal Education*, 32 (3), 287-299
- Fostier, M., and Carey, W. (2007). *Exploration, experience and evaluation: Peer Assisted Study Scheme (PASS), sharing the experience of The University of Manchester: 480 1st year bioscience students*. Paper presented at the Science, Learning and Teaching Conference, Keele University, UK.
- Fostier, M., Speake, T., and Sheffield, L. (2006, May). *Evaluation of the implementation of Peer Assisted Study Sessions (PASS) on a major scale for Biosciences 1st year undergraduates at Manchester University (UK)*. Paper presented at the Supplemental Instruction International Conference, Malmo, Sweden.
- Garside, J., Embury, S., and Carey, W. (2006, May) *Changing the Student, Changing the Culture*. Paper presented at the Supplemental Instruction International Conference, Malmo, Sweden
- Ody, M.C. and Carey, W. (forthcoming 2009), Peer Assisted Study Sessions: personalising the learning experience. In D. Calderon and D. Nutt (Eds.), *International perspectives on the first-year experience*. Columbia, S.C.:

---

<sup>5</sup> National Centres (and the International Center) are accredited to deliver training for SI Supervisors; this provides support on aspects relating to the implementation, ongoing management and evaluation of a PASS/SI programme. The UK National Centre will facilitate a network of PASS/SI practitioners, enabling opportunities and events to share practice and assist in collating national research.

University of South Carolina, National Resource Center for the First-Year  
Experience and Students in Transition

The University of Manchester. (2009). *PASS at The University of Manchester*.

Retrieved March 12, 2009, from

[http://www.campus.manchester.ac.uk/tlso/studentsaspartners/peersupport  
/pass](http://www.campus.manchester.ac.uk/tlso/studentsaspartners/peersupport/pass)