



### Title of case study

Enhancing students' experience and academic performance through peer assisted learning

#### Staff Lead

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### School/ Department

Department of Chemistry

### Faculty

Faculty of Science and Engineering

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# Name of course and module (if applicable) case study took place within

n/a

### Please briefly describe the activity undertaken for the case study

The transition experience is a complicated issue, which involves several stakeholders, however, the literature shows that peer assisted learning (PAL) has a positive impact on students' progression and confidence, which results in improved retention.

PAL, a student-to-student academic support scheme, differs from a peer mentoring scheme, in which higher year students offer pastoral support to new students, by either giving advice on how to deal with a range of issues, or acting as a referral point to other contacts. PAL has been implemented in a number of universities in the UK and is growing in popularity due to a number of factors, including the research evidence of the impact of PAL on beneficiaries, as well as the scheme's promotion of 'students as partners' in learning. PAL was implemented in the Department of Chemistry in September 2012 after one year of research on various schemes at different higher education institutions.

The aim of the programme was to develop a suitable scheme to support first year undergraduate students in adjusting to university life in general, and also to provide help with a specific maths module which is regarded as one of the most difficult subjects in a Chemistry degree programme. In addition, the PAL programme was intended to support direct entry Year 2 international students. Currently, the scheme covers most Year 1 modules, in addition to the revision sessions for a couple of Year 2 modules and introductory sessions to practical chemistry and scientific writing for international students.





Our evaluations of the scheme during the past six years have shown a positive impact on students' experience, both the leaders and participants. Informal group discussions on challenging subjects and sharing higher year students' experiences of studying the same subjects have enhanced lower year students' confidence and academic performance. Leaders' employability skills, critical thinking, transferrable and leadership skills have been significantly improved which is the result of leaders' reflection on their own learning, and their practice on different ways of explaining the subject material to lower year students.

### How was the activity implemented?

Studying different peer assisted learning (PAL) systems in the UK showed me the importance of strategic planning in order to implement PAL and to keep it sustained over time. The programme was initially adapted from the model operated by Bournemouth University. Despite a great variation in the UK's PAL structures, there are key points to be considered by every institution in order to achieve the best outcome.

- Student's active engagement from the early stages of the process is a key element
  of a successful scheme. My strategies to implement and run PAL in our department
  are based on student-staff partnership, therefore I made sure the message was
  communicated to students that "PAL is a scheme which is run by students for
  students".
- I attended a training course delivered by the UK national centre to assist me to understand, plan, implement, and evaluate the scheme, as well as offering guidance on the training of undergraduate students to become PAL leaders. Consequently, I have created my own leader training material to be used by other academics who are interested in implementing PAL.
- The PAL sessions take place for one hour every week, with a variety of subjects being covered during each session according to student demand.
- Although the sessions are not compulsory, the PAL programme appears on student timetables. Organising the PAL sessions through the timetabling system ensures that the first year students are able to attend if they wish, and also that the second and third year PAL leaders are available to lead the sessions.
- The PAL sessions are held in a large seminar room which allows students to split into groups of typically 6-8 participants, with each group focusing on a specific subject or topic. Each group will be led by one or a pair of PAL leaders and there may be up to three different subjects/topics covered at each weekly session.
- Learning strategies and session activities are planned mainly by PAL subject leaders. Since 2014-15, the PAL student coordinators have organised the PAL leaders' and the subject leaders' duties. They keep in regular contact with the academic coordinator to provide feedback on the scheme throughout the year and also assist in training new PAL leaders every academic year.
- Four key roles have evolved for the PAL programme:
  - Academic staff coordinator with overall responsibility for the programme in the department.
  - o PAL leaders students who facilitate specific PAL sessions.





- o PAL subject leaders Students who take primary responsibility for coordinating materials to support a particular subject/topic and ensure appropriate materials are available for that subject for a particular session.
- PAL student coordinators –This is a small team of Year 4 students who now organise and coordinate the PAL programme, assign the PAL leaders for the various sessions, and support them as required.

The most important element to the successful sustainability and development of this programme has been the continuous involvement of the students in the planning and development of the PAL programme, a key element in fostering ownership and ensuring that the programme is tailored to the needs of the students, the discipline and the department.

## Has this activity improved programme provision and student experience, if so how?

PAL has provided one such educational opportunity that benefits all participants and reinforces the role of 'students as partners' – in this case, as partners in the design of the learning, as well as partners in implementing and supporting the learning of other students. Our evaluation of the PAL scheme demonstrates the many benefits. Both the student leaders' and student participants' learning experiences were enhanced.

- Year 1 students appreciate PAL as valuable support at university which raises their confidence, helps them to adapt to university life and study, and supports them with challenging subjects. As a result, PAL improves students' experience and retention.
- Leaders appreciate PAL as it enhances their employability, transferable and leadership skills. It also consolidates their learning of the subject material and enhances their interaction with academics which gives them an understanding of the university educational environment. Leaders' critical thinking and independent learning are enhanced as the result of the reflection on their own experiences at university while supporting lower year students with their studies.

# Did you experience any challenges in implementation, if so how did you overcome these?

Participant attendance was a significant issue during the year in which PAL was launched in our department. Although the Year 1 attendance always diminishes through an academic year there are a few strategies to make sure the drop is not significant, e.g. formally timetabling the sessions, booking a large room to increase flexibility when the number of attendees differs from one week to another, linking session plans to recent teaching materials and future class tests, starting PAL a few weeks into a semester so there is enough taught material to be covered.

Should the attendance drop become an issue at the end of semester two, a couple of sessions could be assigned to higher year modules.





Having had several requests from staff and students to cover Year 2 physical chemistry and organic chemistry modules, we organise four PAL sessions in semester two for second-year students.

# Which Liverpool University Hallmarks and Attributes does this case study relate to (tick all boxes that apply)

Research-connected Teaching
Active Learning X
Authentic Assessment
Confidence X
Digital Fluency
Global Citizenship

## How does this case study relate to the Hallmarks and Attributes you have selected?

#### **Active Learning**

PAL is a beneficial student engagement programme that can support the critical phase of transition into higher education. The literature demonstrates a positive relationship between students engaging in a range of activities and their student experience. PAL programmes provide one such educational opportunity that can benefit all participants and reinforce the role of 'students as partners' – in this case, as partners in the design of the learning, as well as partners in implementing and supporting the learning of other students. From a wider perspective, PAL recipients also have the potential to develop skills of communication (through communicating the difficulties they are having), teamwork (through working and sharing their thoughts with other students in the PAL groups), as well as learning about themselves through the act of supporting others with their learning.

#### Confidence

Our evaluation of the PAL scheme demonstrates that both the student leaders and student participants' learning experiences were enhanced. Year 1 students appreciate PAL as valuable support at university which raises their confidence, helps them to adapt to university life and study, and supports them with challenging subjects. PAL leaders enhance their confidence, leadership and communication, and hence employability skills.

### How could this case study be transferred to other disciplines?

The guidance notes and procedures of step by step processes I applied for planning and implementing PAL in our department have been used by five other departments/schools within the University of Liverpool in addition to other HE institutions, e.g. Dublin Institute of Technology, which shows the practicality of using the same strategies in different departments and institutions. However, it is important to keep in mind that each scheme must be tailored to the requirements of specific educational environments.





## If someone else were to implement the activity within your case study what advice would you give them?

To make sure the planning stage results in the most effective scheme for your students, taking a slow pace is preferred to a fast track to ensure the strategic development of the process which guarantees an effective and sustained scheme in future years. Each key stage in planning and implementing PAL is crucial, therefore bypassing a stage is not advised. Sufficient time must be taken to carefully plan and implement each step. The key success to a sustained scheme is ongoing reflection and evaluation in order to modify the scheme as time goes on with most changes being made almost immediately. Structure and organisation are key points to sustain PAL in your department. Detailed session plans linked to challenging subjects give structure to the sessions. Close communication between the PAL team and lecturers of the courses is critical in order to keep session plans focused and useful to students' studies.



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