Title of Project | Action Learning Sets: A collaborative approach to work based learning in the undergraduate medical curriculum  
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| Pip Hardy and Tony Sumner (Digital Stories- handbook and online dissemination of student stories).  
| Dr Michele Westhead, School of Nursing,(student experience interviews and write up)  

### PROJECT DETAILED

**Outputs:** What has been produced?

‘Action Learning Sets’ (ALS) were piloted in Phase 3 of the undergraduate medical curriculum in 2014. The aim of the pilot was to support students in their transition from formal classroom based learning, to engaging in work based learning in the clinical setting. Action Learning Sets provide a collaborative and inquiry based approach to develop *learning from experience*, with an emphasis upon skills of reflection and self-directed learning. This approach to learning is very different from that used in the pre-clinical years of the current curriculum which emphasizes lecture based transmission of knowledge. The CTF pilot provided evidence that ALS’s are an educationally appropriate process to support student work based learning and enabled us to identify the core skills our undergraduate medical students need to fully engage in Action Learning Sets.

The project enabled us to produce:

1. **Learning resources** to use within *action learning sets* (AMK, SM, DC and AF). These include materials from a range of other disciplines in the *humanities and performing arts* that support the development of work based learning and the ‘soft skills’ of contemporary medical professionalism. (‘Soft Skills’ are described later p2 Outcomes/Impact.)

2. **Identify core skills students’ need to enable them to engage in ALS’s and create relevant resources** for those (AMK and SM). This will inform how we prepare students to participate in ALS in their introductory weeks of a future version of ALS’s.

3. **Evaluation of the student experience (MW).** This was undertaken by a colleague from another faculty who had not facilitated the ALS’s. The evaluation was anonymized.

4. As part of the ALS pilot a Digital Story SSC was created, called ‘Physician Know Thyself’. A digital story is a 2 minute video of a reflective account of the student’s experience. Four students each created 2 Digital Stories. **We held a premiere of the stories** in the Prideaux lecture theatre, St Thomas’s hospital. The premiere audience included the parents and friends of DS students, clinical teachers, members of the school of nursing, senior members of the Centre of Advancement in Inter-professional Education (CAIPE) and graduates of Leicester Medical School. The stories stimulated a lively discussion about how to support student reflection on experience and the ‘emotional labour’ involved in...
medical education and the practice of medicine. The stories are public and can be viewed at www.patientvoices.org.uk/pkt.htm. (Physician Know Thyself collection)

5. **KLI Conference presentation.** This involved students as presenters, identifying the strengths and challenges of learning within ALS’s from their perspective. It attracted a large audience.

6. **Research proposal for Wellcome Trust ‘Seed Funding’ to develop the work further** (Submitted February 2015. Results April 2015). Evaluation of the ALS project and direct feedback from participating students suggests that it is worth continuing to develop this curriculum approach at undergraduate level. We plan to undertake this educational development in a research based way, contributing to literature in the fields of medical education, action research and medical humanities and performing arts.

7. A recent invitation to talk about Digital Stories to an NHS Social Partnership and Well-Being group supported by NHS Employers London, resulted in us being encouraged to develop a proposal to South London LTEB to fund another Digital Stories SSC for our students. We have also been invited to help shape and join a BMA webinar about reflection.

8. **Learning from the ALS’s innovation was disseminated to P3 students during their induction.** An introductory talk was followed by 6 parallel workshops around which students rotated throughout the day.

9. **Faculty Development training for clinical teachers is planned for May/June 2015** in readiness for a larger roll out of ALS in September 2015 – if we secure the ‘Wellcome Funding.’

10. AMK will present a paper at the American Educational Research Association annual conference in Chicago (April 2015).

**Outcomes/Impact:** To what extent have you achieved the original aims of the project? Please include examples where possible.

The main aim of the pilot was to address problems of student transition from formal classroom based learning to informal learning in the clinical context. This included not only approaches to developing work based learning but also reducing our student’s sense of isolation and drift from the College.

We were successful in:

1. Engaging participating students in an inquiry–based and collaborative approach to learning which they claim enabled them to:
   a) ask focused questions in the clinical environment,
   b) develop awareness of who to question, with sensitivity about when and where to ask their question (understanding the clinical context as a learning environment),
   c) develop a system for learning in the clinical setting,
   d) engage in reflection – not just be told how to do it,
   e) learn with and from each other in their ‘safe’ ALS’s,
   f) develop awareness of how to present themselves professionally and how their presentation of self could be perceived by others and the implications of that, and
   g) keep a connection with the College.

2. The impartial evaluation reported that students experienced ALS’s to be ‘transformative’, ‘cathartic’ and empowering’. They described developing skills of “reflection, questioning, listening and presentation of a professional (persona) which they believed developed professional attributes of ‘empathy, mindfulness and resilience.” These are some of the ‘soft skills’ of contemporary professionalism.

These are some extracts from the evaluation of what students said:

*You really need to know that clinical practice is about time limitation, asking questions in a certain way saves time and makes you more aware of your professionalism’ (Student K)*

*You should learn how to learn in hospital from day one. I got so much out of this I want others to feel*
The role play and questioning was very valuable as it was like holding a mirror up at myself and seeing how I was coming across to others. I was challenged on my use of language and encouraged to ask questions in a positive way. For example, rather than getting annoyed or upset when a doctor criticized my history taking I said: ‘That is very useful feedback, could you tell me how I could improve on it?’ And he did! I didn’t have the confidence before to ask for help through fear of looking like I couldn’t cut it. (Student J)

It is important to know how to declare ourselves. It can be difficult for people to notice you in the clinical environment (Student B)

Before I would clerk a patient and wait around for the doctor for a learning incident to happen. Now I proactively ask to go back to the patient with the doctor to get more out of the learning opportunity. (Student C)

They (F1 doctors who came to talk to ALS students in their set) hammered home that you need to have a system where you regularly ask questions, accept constructive criticism, learn from it and check and re-check your learning against the learning outcomes. This reiterated the importance of having a system which is what the ALS is all about. (Student A)

It didn’t really feel like reflection when you have to tell a story to yourself, breaking it down and being able to re-tell it in a way that is analytical and others can learn from it. I suppose just picking out the salient bits. (Student H, DS)

( I am a self-confessed non-arty scientist) I really enjoyed the creative aspect of (digital stories) filming with talking heads, vodcasts and blogging. It forced you to be discerning about what you include and not include. This is really were understanding the learning outcomes is so helpful. You have to answer the question and re-check your responses against the assessment criteria. (Student H, DS)

As medical students we are always ranking patients on how useful they are to us. In fact the doctors tell us not to ‘waste time seeing this or that patient, as we won’t learn as much as if we see this other one’. By the end of the course this mentality had dissolved so they (all patients) had equal worth. (Student C, DS)

3. **Providing student support.** Students valued working in small, collaborative groups focussed upon their own issues and learning needs. ALS’s provided an opportunity to develop skills and take responsibility for their own learning in a supportive environment. Weekly meetings enabled them to explore challenges and sensitive issues difficult to voice in other contexts.

This is what they said:

‘Being in a small group made it a safe space to explore issues that were troubling us with the facilitators and other group members.’(Student A)

I got a huge sense of well-being from the being involved in the project. There was a real sense of camaraderie and support. (Student B)

‘Focused on your own experience and learning, helps identify what was bugging you and showing
One student said that s/he was thinking of “leaving medicine” but with the support of ALS’s had not just recovered the “motivation but (also) skills to continue”.

All students valued the supportive environment of the ALS group and contrasted the collaborative nature of the group with what they described as the ‘competitiveness of medicine’.

4. Conducting this small pilot provided sufficient evidence with which to apply for ‘Wellcome Seed Funding’.

5. Undertaking the project enhanced the College/School of Medical Education relationship within the two pilot Teaching Campus sites. This included their interest in engaging in faculty development so that as clinical teachers they could facilitate sets. We are now planning to address faculty development with remaining funding.

6. The project was valuable because it enabled us to trial a different approach to supporting work based learning, and inform the future direction of the initiative.

**Supportive factors:** What were the main factors that contributed to the successful outcomes of the project?

1. The support of KLI’s Sharon Markless who co-facilitated one of the ALS’ and acted as a critical friend was key to how the ALS model was adapted during the pilot. Acting as ‘critical friends’ (a specific role within action research), enabled AMK and SM to conduct ‘First Order Action Research’. This means we engaged in evidence based, reflective approach to our facilitation, distilling learning from the experience during and after the pilot.

2. St Thomas’s and Canterbury Teaching Campus hospitals were very supportive, booking a regular place for the ALS’s to meet and access to any equipment requested. Canterbury also provided food and drink which was much appreciated by the students. They claimed it helped to make the sessions informal and made them feel valued.

**Challenges:** Have you experienced any barriers or challenges in developing your project? What could be done to support innovation in the curriculum?

Student participation was voluntary and low. We recruited two sets with 10 students in each set. This was much less than hoped for. Part of the recruitment problem may have been unfamiliarity with the ALS learning approach’ and how it can support their clinical learning.

There is work to be done in being clear about the benefits of the ALS approach and incentivising participation. The Phase 3 induction 2014, which included students from the ALS pilot talking to new Phase 3 students, showed the power of student advocacy of the initiative. A student recommendation to another student appeared to significantly improve interest.

We also need to collaborate with clinical teachers, so that ALS’s become a shared initiative based in the clinical setting. The involvement of clinical tutors may also help student perception of the value of this approach. It will also strengthen the sustainability of the initiative. Training clinical teachers had been part of the original proposal. Significant reductions to the budget meant this needed to be cut. However, low student numbers means that we have an underspend. We plan to use this to provide faculty development for clinical tutors.

A more robust research base is needed to identify how ALS’s support student learning in the undergraduate curriculum in order to persuade students and clinical teachers that it can make a worthy contribution to medical education. We are taking this forward with the *Wellcome* and *LETB* proposals.
**Recommendations:** Based on your study, what recommendations would you make for improving the curriculum and student experience generally? Are there any wider implications of your project for the College/University undergraduate and/or postgraduate curriculum? In particular what would be the implications of introducing your innovation on a large scale across a range of disciplines?

There is potential to engage students across the College in ALS’s, particularly in professions education. ALS’s are a form of inquiry based learning that support reflection and critical thinking. This is particularly important for postgraduate professional students who are required to engage in reflection and continue to develop practice from work based experiences.

The intended interdisciplinary ALS model being developed with the School of Medical Education, anticipates sets becoming student- led, once the core skills and sufficient set experience is in place. By the end of 10 weeks, at least one student in each set felt confident to lead part of a session. Student-led sets make a larger roll-out possible in the medium term.

As described under challenges, further educational research is needed to evidence the strengths and limitations of using this approach with undergraduates in work place settings and to enable us to further develop the inter-disciplinary model trialled in KCL.

**Dissemination:** How has the project been shared with colleagues within and beyond the institution?

Invited presentation *NHS Social Partnership Forum Health and Well-being*. London. (February 2015) This forum is supported by NHS Employers.

American Educational Research Association (AERA) presentation (April 2015 Chicago). This will provide the basis of a paper to ‘Medical Teacher’.

St Thomas’s premiere of student Digital Stories to both an internal and external audience.