

Using peer learning and peer support in medical undergraduate special study components

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Abstract

Introduction

We present the use of peer support and peer learning within Student Selected Components (SSCs).

Method

Subjects and setting: 22 3rd year medical students; study period 2011-13. There was a range of topics: autism; poverty; disability; safeguarding; medical education; audiology: vulnerable groups. Two supervisors shared the facilitation of fortnightly meetings. For each meeting students presented progress and problems. These were discussed enabling group participation and cooperative problem solving. Evaluation: We reviewed marks and other outcomes to assess the quality of the final SSCs. and sent out a questionnaire to all students.

Results

Marks: - All passed, with 18 distinctions. Outcomes: - 6 papers were published; 4 others presented at scientific meetings. 3 won prizes.

Questionnaire results: (15 of 22 responded)

- Peer-learning:- 14/15 reported that they had learned from other students
- Peer-support: - 11/15 said they had received support; 11/15 felt that they had supported others; 14/15 felt peer-support was important.

Thematic analysis showed that almost all enjoyed learning about the content of others' work, and felt this enhanced their learning.

Conclusion

This was a successful model. It enhanced the value of these attachments, and widens opportunities for peer learning and peer support in the medical undergraduate curriculum.

Practice points:

1. Student Selected Components can be adapted to successfully incorporate peer-support and peer-learning
2. Peer-support and peer-learning enhances the value of SSCs for student's learning and development
3. Adopting this approach for SSCs widens the opportunities for peer-support and peer-learning in the undergraduate medical curriculum.

Keywords: Undergraduate

Article

Introduction

In accordance with the recommendations of "Tomorrow's Doctors", our undergraduate medical syllabus in Cardiff University includes opportunities for Student Selected Components (SSCs). This paper presents the use of peer support and peer learning to enhance the value of these attachments for student's learning and development.

Definitions

- **Student Selected Components** are optional elements within the undergraduate medical syllabus (Murdoch-Eaton, Ellershaw, Garden, et al 2004)
- **Peer learning** "is an educational practice in which students interact with other students to attain educational goals." (O'Donnell, & King 1999)
- **Peer support** "occurs when people provide knowledge, experience, emotional, social or practical help to each other". (Mead, Hilton, & Curtis, 2001)

Background

SSCs allow students to achieve some general learning outcomes including core skills - for example: research skills; knowledge of research ethics; audit and governance; teaching; service evaluation - in the context of in-depth learning around a topic of particular interest to them (Stark, Ellershaw, Newble et al 2005); this enables them to contextualise these general learning outcomes and core skills within a topic they are particularly motivated to study.

Teachers in Cardiff University can offer SSCs for students to choose, but students can organise their own bespoke SSC as long as they can find a teacher prepared to supervise it. Our particular area of clinical expertise, community child health, provided opportunities for a wide range of SSC topics that included public health, health equity and social justice, and tends to attract politically and socially aware students wanting to follow their own bespoke SSC in, for example, asylum, domestic abuse, childhood disability, for example. As the authors were involved in diversity and professionalism teaching prior to the SSC component of the course, and had introduced ourselves to them in this context with a brief summary of what we did clinically, students began to approach us to see if we could fit their particular ideas into an SSC. We were happy to comply, and as we were both part-time, decided to offer these jointly supervised.

We started with a group of three students studying different aspects of autism, and for practical reasons arranged to see them together initially. As they gelled well we decided to continue to meet them as a group regularly over the next 8 weeks. What we had inadvertently done was to set up a support group of three students, who previously had not known each other, who learnt from, and supported each other, in other words a group of peers providing support and teaching to each other.

Peer learning is a well-established educational approach, in medical education (Ross & Cameron 2007) and beyond, providing benefits to both learners and teachers that extend beyond simply informational gains and skills acquisition (Topping 2005). As far as we could ascertain, this approach had not been employed within SSCs. We decided to set up a more formal structure for the next three years, and then evaluate the students', and our, experiences.

Method

Subjects and setting: Third year undergraduate medical students at the School of Medicine, Cardiff University, studying their SSC component in the academic years 2011-12, 2011-12, 2012-13.

We did not offer pre-designed SSCs but made it known that we were very willing to supervise SSCs in any area of community child health, and then supported any student that approached us to develop a bespoke SSC in their area of choice in accordance with the School of Medicine guidance. For each one we arranged two days a week of a related clinical/practical attachment, with the other 3 days for their particular task. For some students we co-opted a third supervisor if their clinical attachment was in an area in which we did not have experience.

At the start of each SSC, in May, we (EW &RB) met all the students as a group, asked them to introduce themselves, and formally describe their SSC to us and to their peers. For each SSC a plan and targets for the first two weeks were developed, plus a more flexible plan for the whole 8 weeks. We set fortnightly dates to meet. For each meeting every student was asked to prepare an informal presentation of progress, together with successes and problems. These were discussed within the group, with the facilitators enabling group participation and cooperative problem solving. Targets were drawn up each time for the next fortnight. Two days prior to the hand-in of their essays, we met again as a group. On this occasion students presented a 10 minute formal power point of their completed SSC, together with 10-15 minutes for questions, critiques and discussion. This gave the students time to incorporate any new learning into their final essay. The presentation was marked formatively, so that if any of the projects were to be accepted at an academic meeting, the students were armed with a well prepared presentation, and with the confidence that came for having already presented it to a safe and familiar audience.

The range of SSC topics studied, the methodologies used, and the study contexts are shown in Table 1.

Table 1 : SSC Topics of participating students

Year	Topics	Clinical/practical attachment	No.
2011	Autism: (all literature reviews)	Special school for ASD: clinics: ADOS observations & Cognitive Assessment	4
	• Sensory processing		
	• Gender differences		
	• Autism phenocopies		
2011	Child poverty (all literature reviews)	Save the Children Wales Office with Child Poverty Officer	2
	• Homelessness & health in children		
	• Maternal education on child health in the developed world		
2011	Safeguarding	Acute wards	1
	• Audit of risk assessment for young people on adult wards		
	TOTAL		7
2012	Intellectual Disability (ID) (prevalence study)	Special school for children with ID	1
	• Ethnic differences in complex disability		
	Child poverty _(literature reviews)	Save the Children Wales Office with Child Poverty Officer	2
	• Outcomes for children in institutional care settings		
	• Health risks of street children		
	Safeguarding _(literature reviews)	Sexual health clinic Welsh Refugee Council	2
• Young people trafficked for sexual exploitation			
• Play as therapy in children in the asylum system			
Medical education _(literature review & elite interviews)	Not applicable	1	
• The importance of evolution in the medical curriculum			
	TOTAL		6
2013	Safeguarding	Looked-after service Cardiff Women's Aid	5
	• Vaccination in looked after children (1 Audit)		
	• Domestic abuse & emotional health: (4 studies)		

Health services access	Save the Children “Travelling ahead” team	1
• Gypsy Travellers (Qualitative study)		
Autism	Special school for ASD: clinics: ADOS & cognitive assessment	1
• Development of parental leaflet for assessment pathway		
Intellectual Disability	Special school for children with ID	1
• Changing demographics of children with severe and profound ID (prevalence study)		
Audiology	Audiological service	1
• Pneumococcal vaccine in cochlear implanted children (audit)		
Pathways into diagnosis after neonatal screening 9service evaluation		
TOTAL		10
Grand Total over 3 academic years		22

Evaluation

We reviewed marks & other outcomes to assess the quality of the final SSCs.

We sent out a semi-structured questionnaire including space for free text comments, to all participating students, using Survey Monkey, between 5 months, & 2 years 5 months since completion of their SSC. The questionnaire included the definitions of peer learning and peer support given above.

We had reflective discussion with each other and the co-opted third supervisors to explore our experiences and views.

Results

Marks: All passed, with 18 A grades (81%). (The overall scores for those year groups in our medical school was 64% A Grades and 2% fails.)

Other outcomes (see Table 2): Six papers were published – 4 web-based publications and 2 peer reviewed articles. Eight others presented at scientific meetings. Three also won prizes.

Questionnaire results:

QUANTITATIVE

- 15 of 22 responded (68%).
- **Peer-learning:**- 14/15 reported that they had learned from other students
- **Peer-support:** - 11/15 said they had received support; 11/15 felt that they had supported others; 14/15 felt peer-support was important; 7/15 reported that they felt more positive about the value of peer support.

QUALITATIVE ANALYSIS OF FREE TEXT.

Responses were analysed using a simple content analysis. All respondents were overwhelmingly positive about their SSC as a whole. The group supervision model which allowed for peer learning and peer support received positive responses from all but one student, but that student was positive about the overall experience and about the tutors who ran the group.

The themes about the group supervision which emerged were those of difference and similarities between projects, with both being viewed as beneficial.

Positives:

- Differences; providing a breadth of learning about related paediatric topics

- **Similarities;** provided opportunities to learn from difficulties other students were experiencing e.g. how to do a literature search.

‘ I think this model for SSCs is very successful and provides an environment where students encourage and support each other and everyone learns something about a topic that is not their own.’

- Support from and to their peers was reported as a mix of academic and pastoral support

‘Encouragement, coffee and discussion about work and non-work related things’

Negatives:

The main criticism was that the group method was time consuming, with the length of meetings which a common theme. In addition there was comment about some of the conversations being too complex for a student not doing that topic to understand.

‘felt clueless at times since most projects were of different topics which I didn’t know much about’

Table 2 – SSC Outcomes

Key: BACCH – British Association of Community Child Health; BAPA - British Association of Paediatricians in Audiology; BAAF - British Association for Adoption & Fostering; ISSOP – International Soc. of Social Paediatrics;

Year	SSC	Outcome
2011	Homelessness and child health outcomes	Published Save the Children Website
	Impact of maternal education on child health in the developed world	Published Save the Children Website and in Welsh Paediatric Journal (WPJ)
2012	Outcomes for children in institutional care settings	Published Save the Children Website
	Health risks of street children	Published Save the Children Website
	Young people trafficked for sexual exploitation	Published WPJ and won “Meducation” Community Collaboration Prize 2012
2013	Access for Gypsy Travellers	Published Save the Children Website “Travelling ahead”
	Development of parental leaflet for autism assessment pathway	Poster at BACCH ASM 2013
	Domestic abuse & emotional health	4 SSCs combined with 1 5 th yr SSC & presented at ISSOP 2014 & BACCH 2014
	Audiology	1 presented at: South West BAPA ASM 2013 (1st prize) & UK BAPA ASM 2014. 1 presented at: South West BAPA ASM 2013; UK BAPA ASM 2014 (2 nd prize); RCPCH 2014 (Poster); Rosemary Isaac Prize.
	Looked after	Presented WPS autumn meeting 2014

RCPCH – Royal College of Paediatrics & Child Health; Rosemary Isaac Prize - Internal medical school prize for best community paediatric project; WPS - Welsh Paediatric Society.

Reflective discussion

All facilitators reported that students appeared to enjoy this model, and to have learnt more widely.

The two lead facilitators who hosted the group meetings found them positive and enjoyable. The facilitators felt that all three year groups gelled well, and all students, with the exception of one very reserved student in one cohort, took an active part in discussions.

The initial reason for having two facilitators was that both (EW and RB) work part time, and co-facilitation meant there was always someone available at meetings, and between meetings to respond to interim queries and problems. However there were unexpected benefits. Two facilitators provided the students with a wider range of knowledge - “two heads better than one”. It also highlighted that there are sometimes no clear answers to questions – sometimes the facilitators expressed different ideas and solutions to the same problems allowing students a choice of how to go about solving a problem. Sometimes students will come up with ideas the facilitators had not thought of, or had dismissed. This sometimes seemed to be because their lack of knowledge meant they didn’t see barriers that the facilitators did; this was an added strength of peer support and learning.

The facilitators felt that it had been an opportunity for them to enjoy peer support and peer learning as well – an unexpected bonus

Discussion

All the students on these SScs did well, some exceptionally so, with 80% getting distinctions and nearly half scoring over 80%. These scores are above average for our school. Thirteen of the students had their work either published or presented at an academic meeting. We cannot assume that this model was responsible, but it seems safe to assume that it certainly does not disadvantage students, and may have contributed to the excellent marks and outcomes.

With one exception, this model was acceptable and enjoyable to all the students. The only student who appeared daunted by the approach was in the group size of 10, and this is possibly too large a group, perhaps for a less confident student. The length of the meetings and specificity of some discussions will be addressed by limiting the group size and continuing to offer offering 1-1 sessions with students where more detailed discussion is needed. Having a range of diverse topics seemed positive. Diverse topics can still present the same challenges: how to find literature; how to search grey literature; how to combine and analyse data; how best to travel from a to b, for example. Students had shared their solutions, had had opportunities to both support and be supported, and to inform and be informed, by their peers. Coming up with solutions not just for their problems, but for those of others, was a positive experience.

This approach worked well for the facilitators, enhancing their teaching experience and satisfaction.

Conclusion

This was a successful model with associated positive effects on examination scores, student satisfaction and personal and professional development reported, in line with previous literature on peer learning in other areas of medical education.

It shows that Student Selected Components can be adapted to successfully incorporate peer-support and peer-learning, both enhancing the value of these attachments for student's learning and development and widening the opportunities for peer-support and peer-learning in the undergraduate medical curriculum.

Notes on Contributors

Elsbeth Webb has worked in undergraduate and postgraduate medical education for over two decades, including directing a Master's program in child health, and developing and delivering postgraduate and undergraduate teaching materials in diversity and in a human rights approach to practice. Her clinical interest include vulnerable groups, and autism assessment.

Although her background is in engineering, Chisako Okada has been providing logistical support to both post-graduate and undergraduate teaching in child health in Cardiff University for over 10 years and been involved in the development of assessment and evaluation tools used in the department

Rachel Brooks worked for 15 years as Course organiser for the Cardiff Master's program in Child health, latterly becoming involved in undergraduate teaching. She is particularly interested in communication skills teaching in Child health, and in assessment. Her clinical interests and research include domestic abuse and children, and childhood autism.

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