

# Perceived tutor benefits of teaching near peers: insights from two near peer teaching programmes in South East Scotland

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## Abstract

**Background and aims:** There is little evidence about the benefits to junior doctors of participating in teaching, or how to train doctors as teachers. We explore (through South East Scotland based teaching programmes):

- How prepared do junior doctors feel to teach?
- What junior doctors consider to be the main challenges of teaching?
- What motivates the junior doctors to continue teaching, and what is the perceived impact of teaching on their professional development?

**Methods and results:** 'Questionnaire 1', distributed at 'tutor training days', explored (i) attitudes towards teaching and (ii) tutors' preparedness to teach. 'Questionnaire 2', distributed after completion of a teaching programme, evaluated the tutor experience of teaching.

**Results:** Seventy-six per cent of tutors reported no previous teacher training; 10% were able to teach during allocated work hours. The strongest motivation for teaching was to help students with their learning and to develop teaching skills. Ninety one per cent of tutors felt more prepared to teach by the end of the programme. Tutors also improved their clinical skills from teaching.

**Conclusions:** There is a body of junior doctors, who see teaching as an important part of their career, developing both teaching and clinical skills in the tutor. If teaching is expected of foundation doctors, rotas ought to be more flexible to facilitate both teaching and teacher training.

## Keywords

Near peer teaching, post graduate education, feedback, junior doctors, evidence-based education

## Background

Increasing emphasis is now being placed on training to teach and practical teaching experience for doctors at all stages in their careers.<sup>1–4</sup> A number of junior doctor- and medical student-led teaching programmes have been described in the literature, with some evidence suggesting that students perceived such programmes of similar quality to teaching from senior faculty.<sup>5–9</sup> However, there is little evidence on the benefits to junior doctors of participating in such schemes, and more generally on how best to facilitate development of teaching competencies in junior doctors.

Expectations of junior doctors are that they will participate in teaching from graduation. In the UK for example, this is now assessed as part of the Foundation Programme curriculum.<sup>4,10</sup> Unlike senior faculty, protected teaching time is not usually allocated

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to junior doctors. Across Europe, recent working time directives have also meant junior doctors have even less time to deliver formal teaching sessions, resulting in potential difficulties in creating teaching opportunities.<sup>11</sup>

In South East Scotland, attendance at a tutor training day is compulsory for those teaching on near-peer teaching programmes. A more full explanation of the five-year history of the training days, and teaching programmes has been previously detailed.<sup>12</sup> The training day lasts six hours and is intended to help junior doctors gain a basic grasp of the principles and practice of evidence-based education. Three sessions are delivered by faculty in the morning on teaching methodology, covering 'small group teaching', 'delivering feedback', and 'how we learn'. Afternoon sessions are devoted to practical training in specific teaching programmes selected by the participants. Two such teaching programmes in South East Scotland are 'Bedside Teachers' (teaching clinical examination skills centred on real patients with real clinical signs) and 'Year 5 Prescribing' (teaching practical prescribing in common clinical scenarios),<sup>5,9</sup> though individuals attending the training day can also teach on other programmes.

We aimed to answer the following questions:

- After completing medical school, how prepared do junior doctors feel to teach?
- For those doctors who want to teach, what do they consider to be the main challenges to teaching?
- What motivates the junior doctors to continue teaching, and what is the perceived impact of teaching on their practice and on their professional development?

## Methods

A study protocol was sent to the South East Scotland Research Ethics Service who indicated that no formal ethical approval was required.

Junior doctors who had participated in South East Scotland teaching programmes from August 2010 until August 2011 were recruited to take part in the study. They were invited to complete questionnaires at two separate points in time:

'Questionnaire 1' was distributed at the 'tutor training day' undertaken by all junior doctors at the start of the teaching programme. This questionnaire was designed to explore (i) the junior doctors' attitudes towards teaching and (ii) their perceived preparedness to teach. A number of statements were listed and study participants were asked to rate how strongly they agreed with them.

'Questionnaire 2' was distributed to junior doctors on the 'Bedside teachers' and 'Year 5 prescribing' programmes at the end of the academic year. Questions were designed to evaluate the junior doctor's experience of teaching, in particular any challenges met when organising tutorials and the perceived impact of teaching on the personal and professional development of the junior doctor. To assess motivations for teaching, participants were asked to rank six possible reasons for teaching in order of personal relevance. A cumulative preference score was then calculated for each factor (on a scale of six points awarded for being ranked first, to one point awarded for being ranked sixth).

## Results

A total of 122 junior doctors attended the training day (78 Foundation Year 1 doctors – first postgraduate year of work; 44 Foundation Year 2 doctors; second postgraduate year of work), of which 91 (75%) completed Questionnaire 1. A total of 48 of these doctors subsequently participated in either the 'Bedside Teachers' or the 'Year 5 Prescribing' teaching programme, all of whom returned Questionnaire 2.

A total of 37 Foundation Year 1 and 7 Foundation Year 2 doctors delivered a total of 196 prescribing tutorials over the 2010–2011 academic year. A total of 11 Foundation Year 1 doctors also delivered 40 bedside teaching sessions over the same period.

### Questionnaire 1: Preparedness to teach

Sixty six per cent of respondents reported that they had taught medical students whilst working as a junior doctor. Seventy two per cent had taught other medical students whilst they were medical students themselves. Seventy six per cent reported that they had no formal teacher training before the tutor training day.

Ninety six per cent saw teaching as part of the core competency of junior doctors; 71% percent would have liked teacher training as a medical student; 51% would have valued being formally assessed in teaching as a medical student; 13% felt that only doctors with formal teacher training should be allowed to teach; 8% of junior doctors had previously felt pressured into teaching on the wards when they did not feel sufficiently prepared to. These results are summarised in Table 1.

### Questionnaire 2: Organisation of teaching

One hundred per cent of junior doctors felt that they were able to teach at a time convenient to them,

**Table 1.** Responses to 'questionnaire 1' on preparedness to teach before participation in foundation doctor led teaching.

	Strongly agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly disagree (%)
<i>'I see teaching as part of my role as a doctor'</i>	63	33	3	0	1
<i>'I would have liked teacher training as a medical student'</i>	19	42	32	6	1
<i>'I would have valued being formally assessed on my teaching competence as a medical student'</i>	12	39	38	9	2
<i>'I think only doctors that have been given formal training teaching should be allowed to teach medical students'</i>	3	10	31	39	17
<i>'I have felt pressured on the wards into teaching when I did not feel ready'</i>	1	7	19	37	34

Participants were asked to assess how much they agree with the above statements.

**Table 2.** Responses to 'questionnaire 2' on organisation of teaching after participation in either 'Bedside Teachers' or 'Year 5 Prescribing'.

	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly disagree (%)
<i>'I was able to teach at a time convenient to me'</i>	42	54	0	0	0
<i>'I prepared before delivering each of my tutorials'</i>	63	31	2	0	0
<i>'I found communication and organisation of tutorials efficient'</i>	64	29	2	0	0
<i>'I was able to teach during allocated work shifts, rather than having to do it in my free time'</i>	2	8	8	42	34
<i>'I was able to leave my bleep with a colleague'</i>	0	6	29	31	27

Participants were asked to assess how much they agree with the above statements.

and 94% were able to prepare in advance of each of their tutorials; 98% felt that both schemes, which used an electronic portal to organise tutorials, were efficiently organised. Only 10% were able to teach during allocated work hours and 6% were able to leave their pager ('bleep') with a colleague whilst teaching. Table 2 summarises the full results.

### Motivation for teaching and professional development

The strongest reasons cumulatively reported by junior doctors for involvement in teaching were to help students with their learning and to develop teaching skills. The calculation of cumulative preference scores is shown in Table 3.

Ninety six per cent of junior doctors enjoyed teaching on this programme, 96% felt more confident, and 91% felt more enthusiastic about teaching as a result of participation in their teaching programme; 27% would have liked more teacher training before commencing the programme, but 91% felt more prepared to teach and 93% reported that they were motivated to do more to improve their teaching skills by the end of the programme. These results are summarised in Table 4.

### Prescribing programme

Of the 37 prescribing tutors, 94% perceived that they improved their prescribing knowledge and 80% that their prescribing practice as a result of teaching; 91% now have more enthusiasm for prescribing teaching.

### Bedside teachers programme

Of the 11 bedside teacher tutors, 100% felt that they had improved their examination knowledge by participating as tutors and 100% considered their examination practice to be better as a result of teaching; 100% reported that they now have more enthusiasm for bedside teaching.

### Discussion

#### Preparedness to teach

Doctors attending the South East Scotland Tutor Training day considered teaching a core role for clinicians, even though around three quarters had no prior formal teaching training.

**Table 3.** Responses to 'questionnaire 2' on motivation for teaching after participation in either 'Bedside Teachers' or 'Year 5 Prescribing'.

	1st	2nd	3rd	4th	5th	6th	Cumulative preference score
<i>'I taught because it would help students with their learning'</i>	11	13	6	4	4	5	180
<i>'I taught because I wanted to develop my teaching skills'</i>	7	10	10	2	15	2	170
<i>'I taught because I enjoy teaching'</i>	11	6	1	21	1	2	167
<i>'I taught because it will help my job applications'</i>	9	5	10	7	9	5	163
<i>'I taught because it will make be a better clinician'</i>	4	5	6	10	14	7	138
<i>'I taught because it is a requirement of the Foundation Programme curriculum'</i>	4	7	7	2	8	14	123

Participants were asked to rank the above statements on the extent to which each motivated them to teach. A cumulative preference score was then calculated for each factor (on a scale of six points for being ranked first to one point for being ranked sixth).

**Table 4.** Responses to questionnaire 2 on professional development after participation in either 'Bedside Teachers' or 'Year 5 Prescribing'.

	Strongly agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly disagree (%)
<i>'I would have liked more teacher training than was provided'</i>	4	13	40	35	2
<i>'I enjoyed teaching on this programme'</i>	73	23	0	0	0
<i>'I feel more confident as a clinical teacher'</i>	51	44	0	0	0
<i>'I have more enthusiasm for teaching'</i>	56	35	2	0	0
<i>'I feel more prepared to teach'</i>	60	31	4	0	0
<i>'I want to do more to improve my teaching skills'</i>	58	35	2	0	0

Subjects were asked to assess how much they agree with the above statements.

Summer schools, weekend courses and degree programmes all exist whereby motivated doctors can obtain teacher training. However, if junior doctors are expected to teach in accordance with the Foundation Programme, it should be the responsibility of the relevant deaneries to ensure that junior doctors are sufficiently trained to deliver evidence-based teaching. Incorporation of tutor training days like that in South East Scotland into postgraduate training should therefore be encouraged. If not, junior doctors should be expected to demonstrate that they are competent in teaching before teaching students, in a similar way to how junior doctors are expected to demonstrate competence in basic life support, or in practical procedures before performing them independently.

### Delivering teaching

There is a clear body of junior doctors in South East Scotland, who see teaching as an important part of their career. Central coordination of teaching assists in organising such teaching sessions, putting enthusiastic tutors in contact with those students that not only

want additional teaching, but are also available at a time and place mutually convenient with the tutor. However, junior doctor rotas are not currently flexible enough to accommodate additional teaching. Despite few tutorials being delivered by each individual junior doctor, the majority of teaching had to be delivered outside of working hours. Even when tutorials were delivered whilst at work, most junior doctors were unable to teach 'bleep free', and therefore were likely to be subject to interruptions.

If junior doctors are going to be expected to teach, rotas ought to be more flexible to facilitate teaching. Near peer teaching could become more formalised, and integrated into the duties of a junior doctor in a similar way to how teaching is integrated into the timetable of senior clinical faculty. This will have to be balanced against the challenge of ensuring service delivery.

### The professional development of junior doctors

We have also demonstrated that junior doctors perceive there to be direct benefits from teaching to their

professional development, both in terms of teaching and also in terms of clinical competence. Both of these serve as strong motivating factors for junior doctors becoming involved in teaching, particularly the development of teaching skills. For both programmes, junior doctors after participation felt more confident, enthusiastic, and prepared to teach, both for their specific programme, and for teaching in general. In addition, participation in tutorials is associated with a perceived improvement in both clinical skills and clinical knowledge. These benefits add even greater weight to the importance of accommodating teaching in both postgraduate curricula and junior doctor rotas.

### Limitations

The results are limited by self-selection of tutors and subjective measures of performance. However, this is of benefit in certain areas such as assessing self-motivation for teaching. Further, the sample size is relatively large, and results obtained were similar when comparing participants of two separate teaching programmes.

### Conclusions

The benefits of junior doctor-led teaching are intimately linked to both how well junior doctors can be prepared to teach, and how easily teaching can be facilitated. There currently seems to be a lack of teacher training in undergraduate and junior doctor curricula, which may be partially addressed by schemes such as the tutor training day in South East Scotland. We have developed a near peer led teaching model that helps junior doctors organise and prepare for teaching sessions. Without greater support from foundation programme organisers and deaneries, however, junior doctors will continue to have to teach in their spare time or whilst also having clinical duties.

Given the potential benefits of facilitating teaching on both clinical and teaching skills, plus the increasing emphasis of teacher training in postgraduate curriculum, more should be done to incorporate both

teacher training and teaching opportunities into junior doctor timetables.

### Declaration of conflicting interests

None declared.

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