The general practice (GP) training programme in the south-east of Ireland is made up of 40 GP trainees, 25 GP trainers, four programme directors and one administrator, giving a total of 70 people.

The programme is funded by the HSE and is based in the city of Waterford. GP trainees spend one day or one half-day a week attending on-site educational sessions during their four years of general practice training. Training locations are scattered in hospitals and general practices throughout the south-east and overseas.

During the Autumn of 2008, discussions took place within the training programme as to how best to enhance the on-site training with online learning. After a review of course management systems in use by universities and businesses, it was decided to deploy Moodle\textsuperscript{1}, an open source course management system.

Moodle is run on a web server, meaning that it can be accessed by anyone who has internet access and a web browser. It allows educators to create courses and make the content and interactions around these courses available online to students or trainees at any time of the day or night. For example, you can use Moodle to:

- Create a course for GP trainees and control access to the course
- Lay out the topics for a term and upload aims and objectives, documents, presentations, web links and multimedia
- Engage in discussion forums with teachers and learners
- Set and review assignments and receive submissions.

Moodle was commenced in the south-east training programme on February 2, 2009 and continues to be used.

Methods

Questionnaires were completed by the programme participants prior to implementation in January 2009 and after
four months of use, in June 2009.

The questionnaires asked about use of email and the internet and the effect of Moodle on training. Use of the Moodle site was monitored for activity during the five months from February to June 2009.

**Results**

**Pre-Moodle questionnaire**

The questionnaire administered prior to Moodle implementation had a response rate of 84% (59/70). Here are the results:

- All of the respondents had Internet access either at work or at home, usually both
- All of the respondents had either broadband or mobile broadband access to the internet
- Fifty of 58 respondents (86%) described their computer literacy levels as good or expert
- Fifty-five of 59 respondents (93%) send and receive email either several times a day or several times a week
- Twenty-eight of 59 respondents (47%) had not communicated electronically with a trainee in the previous week.

**Moodle activity monitoring**

Activity on trainee day release courses was monitored over a five-month period (February to June 2009). All of the courses posted details of the learning topics for each week, supported by documents, journal articles and learning objectives.

Each course had a discussion forum available, where teachers and learners could discuss topics before and after the face-to-face sessions. Table 1 shows the activity statistics for the discussion forums.

**Post-Moodle questionnaire**

The post-Moodle questionnaire was administered after four months of using Moodle and had a response rate of 63% (44/70). The main focus of the questionnaire was the experience of using Moodle. The results were as follows:

- Thirty-seven of 44 respondents (84%) believed that Moodle had brought positive changes to the training programme
- Forty-two of 44 respondents (95%) would recommend Moodle to colleagues in other GP training programmes.

Respondents were asked to comment on their experience of Moodle. In all, 95% of respondents made comments. The most frequent topics raised in the comments were:

“Easy to use, great communication tool, allows widespread sharing of information and cuts down on paper waste.”

Topics posted in plenty of time prior to meetings, which allows for better preparation and planning. Better follow-up by participants in topics raised as documents can be uploaded within the week.”

“Incredibly, promptness of reply and all the information in one place.”

“Has fitted in well with the running of meetings and also useful as a study tool.”

“It has resulted in better communication between trainees and programme directors and facilitated better planning of day release. It has also made it easier to communicate with the programme administrator.”

“Very positive, all GP training schemes should have one. Has facilitated communication and information-sharing greatly, I think it has been of enormous benefit.”

Frequency of use of email or use of email to communicate with trainees did not change with the implementation of Moodle.

**Discussion**

Moodle is easy to use, particularly for digital natives – people for whom digital technologies already existed when they were born. The online learning environment was rapidly adopted and maintained to facilitate teaching and learning.

The new environment did not significantly impact on use of email to communicate between participants. It provided a separate digital environment with new communication methods based on discussion forums and messages.

Moodle has been successfully implemented in the South East GP training programme. The course management system has received widespread acceptance and participation from trainees, programme directors and trainers.

Moodle repays the time and effort made by all parties in making it work. Moodle augments the day-release programme but is not a substitute for on-site training.

The members of the South East general practice training programme recommend the use of Moodle to augment general practice training. Moodle could also be of use in postgraduate medical training programmes in other specialties.

**Activity on course discussion forum**

| Topics discussed | 95 |
| Views by trainees | 655 |
| Posts by trainees | 120 |
| Posts by teachers | 22 |

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**References**

1. Moodle information available at http://moodle.org/