HOW IN-CLASS ELECTRONIC COLLECTION OF STUDENT EVALUATIONS IS PROVIDING TEACHERS AND MANAGERS WITH BETTER INFORMATION FOR THE DEVELOPMENT OF TEACHING

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Abstract
This paper investigates the impact of Evaluate, an in-class electronic collection of Student Evaluation of Teaching (SET) data, across a large UK university. It focuses on how Evaluate has enhanced the data provided to teachers and managers. Key features include immediate access to data and provision of mean and aggregate scores for individuals, schools and faculties. The results of this study showed a lower response rate for Evaluate compared to paper-based questionnaires, although this difference was small and the Evaluate response rate increased each year. Mean scores dropped initially but rapidly returned to a similar level. There was a significant difference between schools in the response rates achieved indicating that practice varies in terms of how Evaluate is used and promoted. The number of student responses and number of surveys completed increased by over a third with Evaluate compared to paper. A large number of written comments have been received which are now available to managers as well as teachers. Feedback from managers shows strong support for the enhanced data provided, but further improvements in both functionality and use are needed. Evaluate has transformed the processing and speed of release of results as well as improving the comparative data provided.

Keywords: electronic surveys, student evaluation, in-class collection, feedback for teachers and managers.

1 INTRODUCTION
Interest and research into student evaluation of teaching (SET) has grown throughout higher education [1]. The use of SET initially focussed on improving teaching by providing formative feedback to teachers [2], [3]. However, with the marketization of many higher education systems, SET is more frequently used as a summative measure of teaching effectiveness and staff performance [4]. SET results are also being made public to students to enable module choice, and used to provide evidence of quality to external funding bodies [5]. This paper contributes to existing literature by investigating the impact of in-class online collection of SET data across a large UK university. This study focuses particularly on how the use of this system has enhanced the data provided to teachers and ‘managers’. For the purpose of this paper, the term ‘manager’ includes senior academic and professional service staff leading schools, and data managers.

1.1 UK context
Within UK Higher Education, SET is now a core element of university practice. This has been driven by national developments in the UK such as the introduction of the National Student Survey (NSS) in 2005 and the Teaching Excellence Framework (TEF) in 2016. The NSS is an annual census of final year undergraduate students (~½ million students) at all publicly funded Higher Education Institutions. Its purpose is to gather student feedback to inform applicant choice, to provide information about the student learning experience and to provide public assurance [6]. Data from the NSS is published in a league table and has driven UK universities to focus their efforts on raising their score/league table position.

The TEF was introduced as a pilot in 2016. It covers undergraduate teaching and aims to “recognise and reward excellence in teaching, learning and outcomes, and to help inform prospective student choice” [7]. Participating institutions receive “a gold, silver or bronze award reflecting the excellence of their teaching, learning environment and student outcomes” which is valid for 3 years. Three of the NSS category scores are used as a metric of assessment for the TEFs teaching quality and learning environment criteria. A TEF award in England allows institutions to increase their student fees in line with inflation. The financial significance of NSS and TEF has heightened interest in how SET scores can be used to help raise teaching standards (and thereby NSS and TEF results).
1.2 Are SETs a reliable measure of teaching effectiveness?

The validity of SET as a measure of teaching effectiveness has been much studied, with some researchers indicating that student ratings are reliable, correlate with other indicators of teaching and are useful for course selection, personnel decisions and for feedback about teaching [1], [5]. Whilst SETs are generally considered to be just one measure of teaching effectiveness, they are seen as more reliable and valid than other methods such as peer review, focus groups and external review [8]. However, when assessing teaching effectiveness, other methods do need to be taken into account, including written feedback, peer observation and teaching portfolios [5]. Arguments against the use of SET as a measure of teaching effectiveness centre on issues of poor question design and potential bias [3]. However Marsh [1] argues that with careful consideration of measurement and theoretical issues, SETs are multidimensional, reliable, a function of the teacher not the course and useful in improving teacher effectiveness from the perspective of the student.

1.3 Online versus paper-based surveys

Research has compared the effect of in-class paper-based SET with online out-of-class surveys. The majority of online surveys are completed out-of-class and studies have looked at the difference in terms of the following key aspects:

1.3.1 Response rates

A number of studies have shown that response rates are better for paper-based surveys than online ones. For example, one study found a response rate of 60.6% for paper-based surveys and 35% for online surveys (after a reminder email this increased to 47.8%) [9]; another showed an average of 56% for paper-based and 33% for online [10] and another found over 4 years a range of 53.5 to 56% for paper-based and a year on year increase of 26.3 to 42.8% for online surveys [11]. This difference in response rate for paper-based and online surveys is considered to be mainly due to not being administered in-class [10] and various strategies such as reminder emails, prizes and other incentives have been used to try and increase online survey response rates with varying success [10], [12]. Some research has shown that response rates improve with familiarity [11], [13]. For both online and paper-based surveys, there is evidence that response rates increase if students have confidence that their feedback will be acted upon [11].

1.3.2 Impact on scores

A number of studies looked at whether the mode used to collect data, online or paper-based, had any impact on the scores. While some have found no significant difference in results between in-class paper-based and out-of-class online surveys [12], [14], others have shown lower average SET scores online [15].

1.3.3 Written comments

Studies provide evidence that more comments are provided online [9], [13]. Sorenson and Reiner [16] reported also that students provide longer comments online than for paper-based questionnaires. They suggested that this may be due to more available time for online responses (if completed out-of-class), preference for typing over handwriting and the increased anonymity of typed over handwritten text.

1.3.4 Data entry and administration costs

Moving to an online survey reduces costs as it removes the need for manual data entry, the processing of results is faster and overall administration is cheaper [12]. Cost and efficiency were major drivers for the development reported here.

A number of student and staff concerns regarding online surveys have been reported. Students worry about time and about anonymity as they have to log in to the online system [9], [17]. However Ha and Marsh [18] found that most students prefer online evaluation and have few problems completing the questionnaires. Staff concerns tend to centre on the lower response rates, less accurate scores and fears that non-attending students will complete the online survey [18], [19]. In summary the main advantages of online SETs are considered to be the reduced costs, speed of data processing and feedback of results, and their resistance to undue teacher influence [12]. However low response rates for out-of-class online surveys have been problematic and led to various strategies being employed to mitigate this.
1.4 Student Evaluation of Teaching at the University of Nottingham

The University of Nottingham (UoN) has over 33,000 students and 3,500 academic staff based at its Nottingham campuses and is part of the UK Russell Group of Universities. In June 2017 it was recognised as delivering a Gold standard in the Teaching Excellence Framework (TEF). UoN is divided into 5 faculties, each comprising between 3 and 7 schools. SET questionnaires have been used at the university since 1998. They enable students to give feedback on teaching and provide a standardised method of generating evaluation data to support promotion. The paper-based questionnaires comprised 5 fixed questions, optional questions chosen by the school and 3 open-response questions. There was a 5 point rating response from Strongly Agree to Strongly Disagree. The questionnaires were printed in schools and given out by teachers in their classes. Student volunteers collected the completed paper questionnaires at the end of the class and these were posted to a data entry company. Once the rating scale responses were entered, the completed questionnaires were returned to the teacher. Results were printed and posted to the individual teacher and their Head of School. At the end of each academic year school, faculty and university means were calculated and reports produced.

Participation in SET was compulsory for all staff with responsibilities for teaching and every other academic year at least one quarter of their teaching was evaluated. This format of data collection was used until 2013/14 in which year there were 2,963 SET surveys carried out with 78,440 responses. Annual results identified top and bottom schools and faculties and enabled Heads of Schools to compare the teaching performance of their staff. SET results were used for various academic processes including promotions and appraisals. Some of the issues with this method of data collection were:

- Survey results were received up to 3 weeks after the questionnaires were completed due to manual processing and posting;
- Comments could not easily be amalgamated or shared meaning that action in response was left largely to the individual teacher;
- Heads of Schools received a printed summary of the rating-scale responses for each SET survey for their staff up to 3 weeks after the questionnaires were completed. They did not see the comments and they received the collated results for their School in October/November, by which time the new academic year had already started;
- The process was cumbersome and time-intensive;
- The costs of printing, posting and analysing the surveys were high.

To counteract the issues with paper-based SET, a new in-class online system called Evaluate was developed to collect the data. This was designed to be compatible with all SMART devices, connect to wireless systems and work in all teaching areas. It was trialled and introduced across the University in September 2014.

2 METHODOLOGY

2.1 The Development of Evaluate

To inform the development of Evaluate, a questionnaire was sent to all Heads of Schools and Deans of Faculties in December 2013. They were asked what data they found useful and what additional data they would like included with online SET. Eleven responses from 34 managers (32%) were received. These identified a wish to:

- easily identify top and bottom scores;
- compare an individual's performance over several academic years;
- see responses for individual questions and total scores;
- easily access the number of questionnaires completed for each survey;
- access school and faculty mean and median scores.

In addition to the questionnaire, a further 15 stakeholders were consulted about their reporting requirements. They included senior academic and professional service staff leading schools, and data managers. Their requirements were categorised in order of priority and then included in the Evaluate development roadmap.
2.2 The Implementation of Evaluate

The Evaluate Policy requires teachers to have their teaching evaluated at least once per academic session. This minimum requirement may be increased where teachers are new, if a promotion case is being prepared, or if a teacher has been identified as requiring support to improve their teaching. From September 2014 to August 2016 the 5 fixed questions in the paper-based questionnaires were used with a 5 point rating scale of Strongly Agree to Strongly Disagree. Since September 2016 a different group of 5 SET questions have been used. Schools also have the option to include up to 3 additional questions. One open question is included in the questionnaire asking for additional feedback.

SET surveys are created by school administrators; when a survey is created or edited a confirmation email is automatically sent to the administrator, the teacher and any other staff who need to open the results (e.g. module convenor or supervisor). The teacher informs their students when the survey opens and encourages them to complete it during class (usually 10 mins at start or end of class). Students log into Evaluate using their smartphone or tablet and enter their university username and password; any survey that they need to complete is shown. Students select the appropriate survey and then complete the questionnaire. Once responses are submitted ‘Thank you for completing the survey!’ is shown and the student is unable to access that survey again. A survey monitor was added to Evaluate in September 2015 to improve response rates. This monitor can be opened by teachers whilst the students are completing the survey. It shows a live update of the number and percentage of responses and can be used in teaching sessions to encourage participation.

2.3 Reporting

As soon as a survey closes the named teacher, their Head of School and other senior staff (as appropriate) have access to the results. These show the school, teacher name, module code and title, the date of the survey, the number of students completing the survey, the number registered on the module and the response rate. Mean scores for questions 1 to 5, mean scores for the optional questions (if used) and an aggregate score are shown for the survey and an average for all SET surveys for that academic year is given for comparison. Anonymous responses for individual students and their comments are included in the report and bar or pie charts display the data for each of the 5 questions.

Evaluate also provides a ‘Head of School’ report which shows mean scores for the school by academic year. Heads of Schools can also access all the individual results for their staff. Several staff can be given ‘Head of School’ level access to reports, including School Managers, Directors of Teaching and Learning and Faculty leaders. More senior staff have access to a ‘UoN Executive’ report which shows mean scores for the campus, faculties and schools. Data can be sorted so that top and bottom schools and faculties are easily identified and results compared across academic year. They also have access to all the individual reports so can view students’ comments and specific teachers’ results.

3 RESULTS

3.1 Comparison of response rates and scores for Evaluate and paper-based surveys

The response rate for Evaluate increased each year from 38.6% to 42.7%, as shown in Table 1. Response rates were not calculated at the time for paper questionnaires. The questionnaires were given out in class, students completed them and handed in the form before leaving, so the response rate was probably close to 100% for the students in attendance on that date. To determine the actual response rate for the paper based questionnaires, the number completed on the module and the response rate. Mean scores for questions 1 to 5, mean scores for the optional questions (if used) and an aggregate score are shown for the survey and an average for all SET surveys for that academic year is given for comparison. Anonymous responses for individual students and their comments are included in the report and bar or pie charts display the data for each of the 5 questions.

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A two sample T-Test was used to compare individual response rates for surveys in Evaluate and for paper questionnaires. Over the 3 years of Evaluate there were 12,455 surveys (mean response rate = 41.1%, SD = 26.4) and 11,193 over 5 years for paper questionnaires (mean = 46.0%, SD = 28.3) (the number of students registered on the module could not be identified for 885 surveys). A significant difference was found between the two, t(23646) = -13.71, p < 0.001, indicating that response rates are slightly lower overall for Evaluate than for previous paper questionnaires.
Table 1 shows the number of SET surveys completed each year and the number of student responses. Until 2016/17, more SET surveys were completed and more students responded each year. The slight reduction in 2016/17 was mainly due to concerns about student survey fatigue. The biggest increase in the number of surveys was between 2013/14 (paper) and 2014/15 (online) when there was a 41% increase; similarly there was a 36% increase in the number of student responses for these 2 years.

Table 1. Response rate, number of SET surveys and responses and mean score by academic year.

<table>
<thead>
<tr>
<th>Method</th>
<th>Academic Year</th>
<th>Response Rate (%)</th>
<th>Number of SET surveys</th>
<th>Number of Responses</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper</td>
<td>2009/10</td>
<td>48.6</td>
<td>1706</td>
<td>64523</td>
<td>21.48</td>
</tr>
<tr>
<td>Paper</td>
<td>2010/11</td>
<td>46.4</td>
<td>2158</td>
<td>66298</td>
<td>21.71</td>
</tr>
<tr>
<td>Paper</td>
<td>2011/12</td>
<td>42.0</td>
<td>2414</td>
<td>68477</td>
<td>21.75</td>
</tr>
<tr>
<td>Paper</td>
<td>2012/13</td>
<td>45.2</td>
<td>2837</td>
<td>71332</td>
<td>21.88</td>
</tr>
<tr>
<td>Paper</td>
<td>2013/14</td>
<td>43.6</td>
<td>2963</td>
<td>78440</td>
<td>21.98</td>
</tr>
<tr>
<td>Evaluate</td>
<td>2014/15</td>
<td>38.6</td>
<td>4181</td>
<td>106560</td>
<td>21.41</td>
</tr>
<tr>
<td>Evaluate</td>
<td>2015/16</td>
<td>42.1</td>
<td>4285</td>
<td>109806</td>
<td>21.73</td>
</tr>
<tr>
<td>Evaluate</td>
<td>2016/17</td>
<td>42.7</td>
<td>3989</td>
<td>106146</td>
<td>21.99</td>
</tr>
</tbody>
</table>

Table 1 also shows the mean scores for each of the 5 years for the paper based surveys and for 3 years in Evaluate. For the paper questionnaires the mean scores gradually increased year on year from 21.48 to 21.98 (out of 25) and for Evaluate they more rapidly increased from 21.41 to 21.99. There was a drop in mean scores for the first year of Evaluate to a pre-2009 score, but over the 3 years of online data collection the mean score increased to a similar level as paper questionnaires in 2013/14.

3.2 Response rate in Evaluate between schools

The difference in response rate between schools for Evaluate SET surveys was also investigated using a one-way ANOVA. Response rates differed significantly between schools, F(28,12426) = 39.00, MSE = 640.9, p < 0.001. These differences are shown in Figure 1. This shows the mean response rate for each school for SET surveys over the last 3 years and the 95% confidence interval for the mean. Mean response rates ranged from 27.8% to 58.0%; schools had between 13 and 1571 SET surveys.

Figure 1. Mean response rate for each school and the 95% CI for the mean.

3.3 Students comments in Evaluate

For the paper questionnaires, students’ comments were not analysed so may have only been read by the individual teacher, if at all. In Evaluate, as soon as the survey is closed, the students’ comments are available for the individual teacher, their Head of School and other managers to use for quality
enhancement or performance management as required. Large numbers of student comments have been received in Evaluate. For 2016/17, 26,268 SET comments were made (i.e. 25% of respondents also provided written feedback). The survey with the highest number of comments contained 43,567 characters and 8,676 words from 36 students; an average of 241 words per student. SET surveys with comments have on average 16 comments per survey; 68.5% of the comments received were positive overall, 19.9% neutral and 11.6% negative. Examples of positive comments include: ‘Made an effort to know each student on a personal level’, ‘I felt engaged with the material at all times’. Examples of neutral comments include: ‘Sometimes went through the examples a little too quickly’, ‘Occasionally forgets to record lectures’. Examples of negative comments include: ‘Lecture was dull’, ‘Talks very fast and hard to understand’.

Occasionally a student’s comments and their ratings are deleted from Evaluate if they are personal or abusive about the teacher; the student requests that they are deleted as they mis-read the questionnaire and incorrectly chose the wrong end of the rating scale or the survey was incorrectly created and the teacher did not teach that module. In 2016/17, 12 comments and ratings were deleted; this is 0.01% of the total number of responses.

3.4 Managers’ Feedback on Evaluate

To investigate how senior managers use the results from Evaluate a questionnaire was sent to 61 school managers. Twenty-seven (44%) completed the questionnaire; of these 18 were a Head of School/Department, 4 Head of Faculty, 3 School Administration Managers and 2 Directors of Teaching. They were based in all 5 Faculties; ranging from 1 response for 1 faculty to 10 for another. They were asked to rate how useful they find the data currently produced by Evaluate on a 5-point scale from ‘Extremely useful’ to ‘Not at all useful’. Results are shown in Table 2.

<table>
<thead>
<tr>
<th>How useful is the following data:</th>
<th>% Extremely Useful or Very Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean scores for each question</td>
<td>74%</td>
</tr>
<tr>
<td>Total (overall) SET score</td>
<td>85%</td>
</tr>
<tr>
<td>Response rate for an individual survey</td>
<td>82%</td>
</tr>
<tr>
<td>Number of student responses</td>
<td>81%</td>
</tr>
<tr>
<td>Students’ comments</td>
<td>93%</td>
</tr>
<tr>
<td>Mean scores for school/department</td>
<td>74%</td>
</tr>
</tbody>
</table>

The positive comments about Evaluate included:

- Useful data provided e.g. ‘All of these data are useful in identifying the performance of colleagues in the Department and putting the results into context.’
- Student comments very useful e.g. ‘Student comments provide valuable insight into what is driving their responses.’
- Software appreciated e.g. ‘Evaluate is a valuable tool to allow SET evaluation.’

Respondents were mainly positive about the data that are currently provided by Evaluate, but 13/27 (48%) also provided suggestions for improvement or provided negative comments:

- It can be slow and difficult to find the required data e.g. ‘it is quite a clunky process accessing the info for individuals etc. and sifting through the searches.’
- Additional data required e.g. ‘I would like to see averages for gender and age (or age-in-profession) profiles. Is the module core or optional?’
- Questioning the validity of SET e.g. ‘I don't think that SET data is a useful metric of teaching performance at all.’

Managers could select multiple responses to a question asking how they identify good SET performance:

- 42% identified scores over a particular value (e.g. over 23/25, top quartile, ‘order by total SET score and look at top scores’, ‘consistently high scores across a range of modules’);
• 35% investigate students’ comments;
• 16% identify the top 10% of scores.

Good SET performance was rewarded in various ways including: a certificate; voucher; letter of congratulation; consideration for peer academy; mentioned in staff meetings; asked to undertake peer mentoring. Most comments included that good SET scores were only considered alongside the number of students registered on the module and the response rate.

Respondents identified poor SET performance as follows:

• 53% identified scores below a particular value (e.g. scores below 17 to 20 (different values for different schools and faculties), bottom quartile, ‘repeated aggregate scores in the teens’; ‘order by SET score and look at the worst ones’);
• 29% investigate student comments;
• 8% identify the bottom 10% of scores;
• 8% (3 individuals) had not used SET data in this way.

Poor SET performance was tackled in various ways. These included a faculty based Teaching Improvement Scheme; discussion at performance review meetings; training and peer support; self-reflection; peer observation and/or mentoring; identification of recurring problems with modules.

4 DISCUSSION

4.1 Response Rates

Getting students to complete the online evaluation in-class has resulted in a better response rate (42.7% in 2016/17) than reported in previous studies for out-of-class online evaluations (approximately 34%). However the response rate was lower for our online system Evaluate (39-43% across 3 years) compared with the previous paper-based questionnaires (42-49% across 5 years). Whilst this confirms findings from previous research that online responses are generally lower than paper-based surveys [10], [11], [12], the difference is small. An important difference between this study and previous research is that Evaluate is designed as an in-class online survey, which may explain the smaller difference (<10%) between the two modes of data collection.

As identified by Dommeyer et al. [19], a major issue has been staff perceptions of the impact of Evaluate on response rates. Response rates were not provided for paper-based questionnaires and staff’s perception was based on most students in attendance completing questionnaires. However, our analysis shows that actual responses rates compared with the number of students registered on the module were not too dissimilar to the response rates for Evaluate. Since the inception of Evaluate response rates have gone up each year from 38.6% in 2014/15 to 42.7% in 2016/17. This reflects the research by Johnson [13] that response rates can take a few years to improve. Various measures have been taken to improve response rates, including the incorporation of a survey monitor that can be used in a lecture to show a live response rate. User guides have been developed for teachers and students to encourage participation and an Evaluate video produced which highlights how to complete surveys, confidentiality of responses and the value placed on students’ feedback. This later aspect was identified by Nair et al. [11] as being a key factor in improving response rates. More recently, reminder emails have been introduced; these are sent to teachers one week before their survey opens reminding them to encourage their students to complete the survey.

Response rates for Evaluate varied significantly between schools, ranging from 28-58%. This suggests that there is different practice in terms of how schools promote Evaluate and encourage participation. However more work needs to be done to address staff perceptions of the impact of Evaluate on response rates and other staff concerns that are affecting how the system is used.

The introduction of Evaluate caused an increase of 41% in the number of surveys completed in 2013/14 (last year of paper-based) and 2014/15. This could be attributed to the new policy that stated that every teacher and module had to have at least one SET survey per academic year, but could also be due to the greater visibility of the SET data to senior managers making it harder for teachers to avoid taking part. Similarly, the total number of student responses increased by 36% when Evaluate was introduced. So it would seem that the introduction of an online questionnaire has had a positive impact on the volume of SET data collected.
4.2 Impact on scores

In this study, the mean score dropped in the first year of Evaluate from 21.98 to 21.41, which is similar to the trend reported by Nowell et al. [15] but different from the findings of Dommeeyer et al. [12] and Risquez et al. [14] who found no significant difference. However the mean score then improved over the following two years to reach a similar level to the last year of paper-based collection. Given that scores had been improving year on year prior to the introduction of Evaluate it seems to suggest that it was the introduction of online data collection that caused the initial reduction in scores in the first year of Evaluate. However as scores increased over three years to a pre-Evaluate level it appears that Evaluate has not had a lasting impact on scores obtained.

4.3 Written comments

One of the major benefits of Evaluate is that students’ comments are available to senior managers as well as to teachers. The other benefit is that Evaluate enables the number and type of comments and the topics to be investigated. Twenty-five percent of survey respondents provided written feedback amounting to over 26,000 comments in 2016/17, which is lower than the 63% reported by Johnson [13]. However, they examined online data collection outside class and this may explain the difference in findings. The length of written feedback provided shows that students are willing to comment extensively online, this supports findings by Layne et al. [9]. The written comments obtained via Evaluate are mainly positive and have provided a huge wealth of information for the university but also present challenges in terms of analysing this qualitative data.

4.4 Data Output from Evaluate

A major benefit of online surveys is the reduced cost and time for data entry and administration [12]. Although not a specific focus for this paper, cost savings have been significant as the introduction of Evaluate has removed the need to employ a data entry company and greatly reduced the time involved for central administrators. Evaluate has also transformed the speed of release of results as well as improving the comparative data provided. The teacher, school and University managers can now access results as soon as an individual survey is closed. Scores can easily be compared for staff in a school or faculty. This rapid processing and enhanced comparative data is undoubtedly the main benefit of introducing Evaluate.

4.5 Feedback from managers

The results from the school manager survey showed strong support for the enhanced data that Evaluate produces. However, there is room for improvement. School managers would like easier data access; e.g. seeing all reports for an individual member of staff rather than having to open each one separately, and having scores displayed graphically so that outliers can be quickly identified. They would also like additional comparative data such as faculty and department mean scores, teacher profiles (e.g. gender, age) and module information (e.g. core/optional, undergraduate/postgraduate). Since Evaluate was introduced in September 2014, there have been regular upgrades to the software and the results provided. Further enhanced reporting for managers is planned for the near future.

Enhanced reporting is just one element and the key consideration is how that data is then used to improve teaching effectiveness. Managers reported that they reward good SET performance in various ways (certificates, prizes, vouchers etc.) and similarly poor SET performance was tackled using a teacher improvement scheme, performance review meetings and peer observations. So although it is not a major focus of this paper, it is clear that there is some coupling of SET feedback with individual consultation as recommended by Marsh and Roche [2]. This could be enhanced by adding online support in a manner similar to Curwood et al. [20] who developed a mobile website that provides personalised recommendations for teaching resources.

5 CONCLUSION

This paper has demonstrated that the use of an in-class online evaluation system for collecting SET data can enhance the quality of information provided to teachers and managers. Although response rates dropped initially in the first year, they improved year on year and returned to a rate similar to that achieved for the previous paper-based questionnaires. So by doing the online evaluation in-class this has addressed the issues reported of low response rate for out-of-class online surveys. Similarly mean scores also decreased in the first year of online collection but then improved to a level similar to before.
A major benefit of the online system is that it is possible to collate and analyse written comments. The data collection and administration has been transformed and there is ongoing development of Evaluate to enhance the data provided. It is clear that schools are using the SET data both to reward good teaching and to address issues raised by the data. Various strategies such as individual consultations and peer observations are being used. The next challenge is to consider how to develop resources and systems to support staff whose scores are lower than desired.

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REFERENCES


