

Student voice: how best to hear it?

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This paper presents the initial findings from a project that was set up to investigate how best to hear students' module-specific academic voice. Experience indicates student reluctance to participate in activities such as student-staff consultative committees and paper-based questionnaires. Informal discussions with students have pointed to several reasons for this reluctance and led to the creation of this project. The aim is to find a mechanism that will encourage participation and satisfy the needs of both students and tutors. The merits and drawbacks of five techniques were evaluated, on the principle that using the right feedback mechanism is the first step towards encouraging student participation. The techniques chosen are shown below in the order they were run and evaluated during the year:

1. Clickers (hand-held keypad devices)
2. Structured interviews(peer-to-peer)
3. AnonyMail (custom-built anonymous email system)
4. Virtual Learning Environment survey (Blackboard)
5. Traditional paper-based questionnaire

The paper highlights a number of discussion points, based on the findings, and makes recommendations for the next phase.

Introduction

It is difficult to define objectively and precisely what is meant by *student voice*. A simple internet search returns over five million links, demonstrating its widespread application in different contexts and levels of education. In higher education, *student voice* covers a range of activities that run before or during academic studies. For example, the Aimhigher Project in Sussex is a pre-studies project that is run to make all interested parties aware of the benefits of higher education. It uses student voice panels for feedback, and a Facebook group for communication, to ensure delivery of material to potential applicants that is fit for purpose. Similarly, there is the publication, to prospective students for marketing purposes, of feedback collected from students during their studies (Williams, unknown year).

Student voice activities during studies constitute the majority of reported cases. One example is the use of focus groups to determine how students in general benefit from the university library (Weber & Flatley, 2008). Another, more focused, example is the use of surveys to determine how the evolving information technology can satisfy the needs of law students (Jayasuriya *et al.*, 2007). Similarly, there is the use of discussion groups, coupled with surveys, to determine the reliance of students on the internet for their research (Head, 2007).

The provision of specialised tools that concentrate on evaluating classroom understanding and performance is also widespread. For example, Oxford Learning Institute makes available a number of pre-designed forms and questionnaires for recording students' course experiences, reflections on specific tasks, and thoughts on teaching (Oxford Learning Institute, 2010), while Cambridge University provides a tool that can be used to create questionnaires for students to fill in (Cambridge University 2010). Similar tools are also available from Edinburgh Napier University (2009) and Victoria University in Wellington (Vic Careers, 2010). Much simpler versions of these tools also exist as the One-minute Paper (Steele, 1995) and standard Post-It notes, as used in many workshops (personal contact). Student voice projects can also be instrumental in evaluating the accessibility of learning and teaching support for disabled students (Chelin, 1999).

To sum up, *student voice* could mean any one or a combination of the following:

1. Students developing an individual academic perspective and style of expression
2. Students demonstrating their growing understanding of the subject they are studying
3. Students expressing an opinion on their university experience (learning, personal development, independence, and enjoyment)
4. Students using various tools and techniques to have a say in their education

Background

In the Faculty of Technology, students have the following feedback opportunities, excluding the National Student Survey (NSS):

1. Student-Staff Consultative Committee (SSCC), at course level, held twice a year, in explicitly time-tabled slots
2. Paper-based, end-of-year questionnaires, at module level
3. Individual module leaders conducting their own feedback activities

Some faculties also use NSS-style programme-level feedback questionnaires but the authors have no direct experience of this technique and it is, therefore, excluded from this discussion. Work is in progress to replace the Faculty of Technology's paper-based questionnaires with online surveys but it is not yet complete. This project may contribute to that work also. Scheduled student-staff consultative committees, managed by year tutors, are generally poorly attended, even though the time and the place for both are in the timetable. Informal discussions with students point to several reasons for this situation and they are, in no particular order: lack of relevance to their immediate needs, not being recipients of resulting improvements, personal difficulties with articulation, unavailability on the day, perceived lack of influence, and lack of anonymity. Ultimately, not having an opinion to express is also a reason. As a possible solution to this situation, only the elected student representatives were asked to attend SSCC meetings, bringing with them feedback gathered from their peers. This was not successful either, because gathering and collating feedback is not easy to do, and students generally have no experience of it. As a result, the cohort voice continues to go unheard.

The end-of-year questionnaires, managed by the faculty's student advice centre, fared no better. The aim is to gather student feedback on each module they take. This is necessarily a retrospective look at module structure, teaching and assessment methods, and contact with tutors. However, the number of completed questionnaires reaching individual module tutors shows a very poor take-up of this feedback opportunity. Moreover, these few responses can be bland, clichéd, a blanket positive/negative response, or a rant on a pet issue. As a result, the impression the authors have is that these methods, in their current form, often give results that are incomplete or biased. In short, they do not deliver the true academic voice of the cohort.

Reflecting on these issues, it was decided that our student voice project should aim to develop a mechanism that:

1. Students like and engage with readily, to give their honest and considered opinion
2. Tutors can set up and run easily, including the processing of results with minimum effort

We thus take 'student voice' to mean: students' opinion of their learning experience and how they express that opinion.

Framework of the pilot project

The host module for our pilot project was a compulsory, 30-credit, year-long, 2nd level module, taken by 37 HND/BSc Computing students during the 2009-2010 academic year. The module integrates several software development-related topics, preparing students for tasks they are likely to encounter in employment after graduation, as well as for their final-year projects. The module includes several milestones, following the various phases of a classic software development project. This structure thus provided a natural framework on which to hang the feedback activities.

The primary aim of the project was to gauge student response to various feedback mechanisms. However, because the project was being integrated into a specific module and the students would be asked to participate at set times during the year, the decision was taken to exploit this opportunity for performance monitoring purposes also. Consequently, the pilot project activities were used to find out what students thought of the host module and, crucially, to see if the tutors could respond to feedback in time for the students to benefit from it. The aim was to show to students that their opinion could make a difference.

A module guide is distributed to the students each year, outlining pertinent aspects of the module contents, assessments and tutor expectations. It is both an introduction to the module and a reference guide during the year, with sections on learning outcomes, activity plan, explanation of deliverables, guidance on assessment criteria and suggestions on where to find help with various study skills, such as report writing. Copies are available from the authors. An explanation of the pilot project was included in this guide, as shown below, setting out the project aims and which activity would be carried out, and when, during the year. One bonus mark per activity completed was offered as an incentive to participate:

Project aims:

1. To improve the module management and content in response to student feedback on an ongoing basis but, more importantly, to be in a position to make immediate improvements, if possible, during the academic year
2. To monitor and improve the effectiveness of the module teaching and learning activities
3. To evaluate the merits and drawbacks of the following data collection and feedback methods

<u>Method</u>	<u>Week (semester)</u>
a) Clickers	3 (1)
b) Structured interviews (peer-2-peer)	9 (1)
c) AnonyMail	16 (2)
d) VLE Survey (Blackboard)	23 (2)
e) Traditional Questionnaire	32 (3)

Feedback Activities

Each of the following sections describes one activity and summarizes the findings from it. Findings are presented as tables, with arguments for and against from students. Tutor reflections are also included. Questions were constructed with two objectives in mind:

1. To be able to make comparisons between the results of each activity; and
2. To obtain snapshots of students' perception of their performance and the grades they would award themselves at different stages during the module

Therefore, the questions for the different feedback activities were mostly the same. Individual questions were tailored to gauge the effectiveness and relevance of the learning activities carried out prior to each milestone. Results from snapshots of students' perception are not relevant to this paper and are not, therefore, included in what follows.

Clickers

Also known as hand-held keypads or, collectively, as a classroom response system, this technology integrates radio-frequency transmission and reception with presentation software. Successful use of clickers in learning situations has been reported elsewhere (Dearing *et al.*, 2006; Nelson and Hauck, 2008), using the 'vote-discuss-continue' type of approach. The activity requires the use of specialised hardware (clickers themselves and the receiver) and software (on laptop). A projector to display the questions and results is also needed. The tutor prepares the questions, in multiple-choice format, and loads them onto the laptop. At the start of the session, each student is given a uniquely-numbered clicker and the software is initialised to know which clickers have been handed out. During the session, questions are displayed on the screen, one at a time, under tutor control. When a question appears on the screen, students indicate their answer by pressing the

relevant keypad button. The software shows on the screen which clickers have responded and which not. This enables the tutor to ensure that each respondent is recorded. The actual answers are written to a database and a statistical summary is displayed on the screen.

Our findings are as follows:

Table 1. Summary of clickers

Clickers (hand-held keypad devices)		
	Arguments for	Arguments against
From students	<ul style="list-style-type: none"> • Anonymous – encourages frankness • Easy, interactive and fun • Informative, because it shows the group's views 	<ul style="list-style-type: none"> • Little time for thought before having to answer • Cannot change answer if an error is made • No room for comments
From tutors	<ul style="list-style-type: none"> • Straightforward to run easy to process results, once familiar with the equipment and software • Easy to maintain sets of questions • Captive audience • Can lead to focused discussions • Immediate feedback promotes enthusiasm 	<ul style="list-style-type: none"> • Multiple-choice format only • Time to become familiar with the software to: (1) prepare the questions; (2) gather the data; and (3) analyse/present results • Time to set up the equipment for each session

This activity had a response rate of 84%. This was mainly because attendances were still high in week 3 and the activity was carried out as part of the scheduled tutorial classes. Nevertheless, students liked the novelty value of clickers and found them easy to use. While this was the most popular activity overall, two students said they disliked clickers because it was hard to understand and gave no feedback, which is interesting because that is the opposite of what the majority (and the tutors) felt. Maybe, they were referring to the wording of the questions or to the lack of detail in the feedback the system gives while votes are being cast. One student said he did not like it because it was time-consuming when the tutor made mistakes during the session. Students knew that anonymity was maintained, as it was apparent that tutors could not tell who had pressed which button.

Structured interviews

The tutors prepared a brief guideline on how to run structured interviews and a set of questions. The questions were derived from the clickers activity, with some modifications to reflect the interactive nature of interviews. The exercise was also used as a teaching tool, showing students how structured interviews work. During

the session, students were given copies of the guideline and the questions. They were then asked to organize themselves into pairs. Each student took in turn the role of interviewer and interviewee. The same questions were asked each time. Answers were recorded on the question sheet.

Table 2. Summary of structured interviews

Structured interviews (peer-to-peer)		
	Arguments for	Arguments against
From students	<ul style="list-style-type: none"> • Get to know another student • Interviewing a friend feels informal and easy • Useful in future career • Good way to learn interviewing technique • Informative – see someone else’s point of view 	<ul style="list-style-type: none"> • Time consuming • Boring (to some)
From tutors	<ul style="list-style-type: none"> • May be repeated with minimum effort • Guaranteed participation and return rates, as the exercise is run during class • Useful key skill to teach 	<ul style="list-style-type: none"> • Potential reluctance in (some) students to take it seriously and give considered answers • Manual analysis of replies • With many pairs in one room, background noise may be problematic; finding extra room(s) may be an even bigger problem • Disruptive to classroom routine

This activity had a response rate of 63%. Many students were reticent at the beginning of the activity and, while some warmed to the technique, others remained uncomfortable. This is reflected in the star ratings, as can be seen from the table below. Tutors did not get involved in the interview process at all but some students still had a perception of lack of anonymity. Many commented on the effort required to record the answers. The effort required is high, in terms of preparation, classroom management, and the analysis of results.

AnonyMail

This is a custom-built web-based application, created by staff in the Department of Computing Technology. It is similar in functionality to a number of forums on the internet. AnonyMail users have anonymity behind a nickname, which they choose when they register their preferred email address and become authorised users. Once registered, they can send and receive anonymous emails. For this activity, students were emailed the questionnaire in advance, with instructions on what to do,

which was to complete the questionnaire, paste it into AnonyMail and email it back to the tutor. The questions were derived from the structured interview activity, with modifications to reflect the teaching point in the academic year.

Table 3. Summary of AnonyMail

AnonyMail (custom-built anonymous email system)		
	Arguments for	Arguments against
From students	<ul style="list-style-type: none"> • Can be done in own time, from anywhere • Anonymity encourages honesty • Familiarity with emailing makes AnonyMail easy to use 	<ul style="list-style-type: none"> • Anonymity compromised by the registration process • Unnecessarily long process of filling in the questionnaire, and then pasting it into AnonyMail before emailing it to the tutor
From tutors	<ul style="list-style-type: none"> • 24/7 availability • Easy to broaden user base 	<ul style="list-style-type: none"> • Anonymity may tempt abusive content • Time to print out the returns and analyse answers

With AnonyMail, technical problems led to a delayed survey. Furthermore, the activity was run outside of classroom time. This gave a low response rate of 65%. However, those who did participate were mostly happy with the technique. AnonyMail is the second-highest 5-star rated activity, as can be seen in the table below. Students were asked to identify themselves so that bonus marks could be allocated, which, of course, destroyed anonymity. One student said the software was not reliable but that was because of the version being used. Reliability has now been restored. Another student said it was not quick and easy, which is assumed to be referring to the copying and pasting. This requirement will be removed from the next version of the software, by enhancing its functionality. Tutors are required to print out results for analysis, which is a major weakness.

Resident virtual learning environment (VLE)

In this activity, the University's resident VLE (Blackboard) was used. A survey was prepared and the students were given notice of the deadline via email, which also highlighted which links to follow. The VLE-based survey had a 68% response rate. Students, being familiar with Blackboard and online applications in general, found the survey readily accessible. It was the second-highest recommended technique by the majority of students, as can be seen from Table 7 below. Full anonymity is maintained in Blackboard surveys but students were not particularly aware of this. Tutors found the reporting of the results unsatisfactory, giving no readily usable layout. Extra time needs to be invested in finding out exactly what statistics and reports are on offer.

Table 4. Summary of VLE survey

VLE survey (Blackboard)		
	Arguments for	Arguments against
From students	<ul style="list-style-type: none"> • Can be done in own time, from anywhere • Easier and quicker than having to write the answers on paper • Previous experience of Blackboard 	<ul style="list-style-type: none"> • Not anonymous due to log in (misconception) • No home computer means campus or Internet Cafe access
From tutors	<ul style="list-style-type: none"> • Students are familiar with it • Easy to access • Electronic analysis of results • The availability of a wide range of question types • Blackboard monitors who has completed the survey (useful for rewarding purposes) but replies are not linked to individuals, so anonymity is safeguarded. 	<ul style="list-style-type: none"> • Gives students the impression that it is less anonymous than it actually is • Processing of results limited by non-intuitive VLE usability • Time to learn how to use the VLE's survey and analysis components

Traditional questionnaire

For this activity, a traditional paper-based questionnaire was prepared. The students were asked to complete it during the last lab session of the academic year, after they had demonstrated their final product. This was done to maximize return, in view of the important information being sought. Questions were very similar to those in the previous activity; but, the last page of the questionnaire asked the students to look back over the five activities and give each one a star rating and comment on what they liked and disliked about it. It also asked them which activity they would recommend for future use. Students liked the short and simple questions they were asked. Interestingly, one student liked it because it was done on paper. A very interesting comment said that mistakes made the paper look messy. This activity had a response rate of 88%, which is higher than other activities, for reasons explained above. Anonymity was compromised for the purpose of bonus mark allocation. Although familiar to all students, this was the least popular technique.

Table 5. Summary of traditional questionnaire

Traditional questionnaire (paper-based)		
From	Arguments for	Arguments against

students	<ul style="list-style-type: none"> • Anonymity • Quick and easy to do, especially if open questions are kept to a minimum • Add anything you like 	<ul style="list-style-type: none"> • Boring (to some) • Having to write the answers, rather than type them • Mistakes cannot be amended without making a mess on the questionnaire
From tutors	<ul style="list-style-type: none"> • Any type of question can be used • Gives the option to ask for further detail on an answer • Low-tech, requiring no special equipment 	<ul style="list-style-type: none"> • Manual analysis of results • Preparation needs to include bulk-printing time

Overall findings

This section summarizes the results of the data on the star ratings of each activity, as allocated by the students, and the one feedback technique they would recommend for future use. Table 6 shows the star rating percentages received by each activity, while Table 7 shows the recommended activities in decreasing order of popularity. Clickers are the clear winners in each case, with VLE survey as the second best.

Table 6. Star rating of each activity, in percentages (%)

Activity	*	**	***	****	*****
Clickers	0	4	7	26	63
Structured interview	0	12	38	19	31
AnonyMail	0	7	33	19	41
VLE	0	4	17	44	35
Traditional questionnaire	3	14	24	32	27

Table 7. Ranking of activities

Activity	Recommended	Ranking
Clickers	11	1 st
VLE	7	2 nd
Structured Interviews	5	3 rd
AnonyMail	5	3 rd
Traditional Questionnaire	3	4 th

Each activity, regardless of its star rating or popularity, did generate useful feedback on the module delivery, some of which was acted on by the tutors during the academic session. In this respect, the short-term aims of the project were fulfilled. Also, from the tutors' perspective, carrying out these activities seemed to reduce communication barriers, which is interpreted as fulfilling the medium-term aims of the project. So, 'success' is the overall verdict on this pilot study.

Discussion points

- Students prefer online methods to paper-based ones. Peer-to-peer was found to be enjoyable by some but all found the writing tedious.
- Students like expressing their views, especially if they think it will help future cohorts. This was contrary to the project expectation, which was that students would want to see improvements to their own cohort without regard to future students.
- Students like anonymity. They like to express their views but not necessarily want to be held responsible for them. Engagement is higher when anonymity is maintained. More importantly, students need to be reassured of anonymity, which was obvious in clickers but not in the VLE questionnaire.
- Ease of access improves participation
- Ease of completion seems to improve student engagement with the activity; i.e., the less writing they have to do, the better.
- Linking feedback to other classroom activities achieves high participation rates, whereas feedback completed outside of class time has low participation rates.
- No one activity suited all students equally; although most students preferred clickers, a small minority disliked them. Similarly, students identified no one activity as being exceptionally distasteful to them.

Recommendations

It is too early to make firm recommendations. There is more research to be done. However, the following could be a good start:

- Most students appreciate an element of fun or novelty. To improve engagement, consider how to incorporate fun into any feedback activity. Vary activities to maintain interest.
- Maintain anonymity and, crucially, demonstrate it.
- Show students that their feedback leads to action.

Further work

The next stage of the project will be conducted during the next academic year. The intention is to widen participation, by including all the HND/BSc Computing second-year modules of a similar nature. Changes being considered are:

- Replacing the two paper-based activities (structured interview and traditional questionnaire) with other activities

- Enhancing the functionality of AnonyMail to avoid the cut-and-paste requirement
- Evaluating other online techniques, like 'traffic lights' and electronic Post-Its

As this pilot study has identified several disparate factors affecting participation and quality of results, further study is expected to isolate single factors to identify the effect of each. Some students confused their thoughts/feelings about the activities with the idea of giving feedback on the module. So, instead of commenting on what they thought about a particular activity, they commented on giving feedback in general. The questions will be refined or reworded to prevent this next year.

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A reflection on Burrow, Clarkson and Esendal's Student voice, by Dr Tracy Harwood and Professor Richard Hall

Student voice: how best to hear it?

The paper highlights the many potential roles of 'student voice', and identifies a range of methods that may be used to capture it, and the pros and cons of their use during module delivery. The paper begins by attempting to define what 'student voice' is and usefully notes that this is largely about contextualisation and its intended use. The paper then moves on to discuss methods of collecting the 'student voice' in a range of contexts: the classroom, the library, more generally. It then specifically ties the voice to a very practical application of generating insight related to NSS and the learner experience, with an ultimate aim being to develop some online mechanism that enables effective 'capture' of the student voice.

Through the paper, the authors attempt to compare and show links between the methods when used in a practical, action-based research project. This highlights a set of tensions for pedagogic research, in developing a valid and justifiable action research methodology and balancing that methodology with the pragmatic aim to develop and implement interventions during the data collection period. One challenge is in developing a meaningful, theoretical framework for interpreting any findings, whilst a second is the interrelationship between the evaluation of pedagogic innovation projects and their relationship to more formal, institutional, module assessment processes.

One of the crucial ways in which the sector has begun to engage with the idea of student voice is through a theoretical development of what this means, alongside a meaningful, participative action research methodology. In this way, institutions are increasingly focused upon understanding the relationship between curriculum enhancements and learning analytics. In particular, institutions are seeking to differentiate between the capture of 'student voice' about students' learning experiences (in particular related to specific pedagogic innovations) and the need to generate module feedback for insight into an NSS cycle.

This also drives the implicit need to demonstrate to students that their feedback is being listened to by active improvements to module delivery during their experience of it. However, often it is not clear how or why these two things should or can be related in the research of different methods for capturing 'student voice'. Indeed, they can be a techno-determinist tendency to focus less on the role of 'student voice' and to prioritise the practical implications of the techniques for data collection 'in module'. In this way, this paper is useful as a practical guide to others, in demonstrating 'shared practice'.

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