Student Satisfaction Data for Work Based Learners

Rosie Borup and Hanifa Shah

Abstract—This paper aims to describe how student satisfaction is measured for work-based learners as these are non-traditional learners, conducting academic learning in the workplace, typically their curricula have a high degree of negotiation, and whose motivations are directly related to their employers' needs, as well as their own career ambitions. We argue that while increasing WBL participation, and use of SSD are both accepted as being of strategic importance to the HE agenda, the use of WBL SSD is rarely examined, and lessons can be learned from the comparison of SSD from a range of WBL programmes, and increased visibility of this type of data will provide insight into ways to improve and develop this type of delivery. The key themes that emerged from the analysis of the interview data were: learners profiles and needs, employers drivers, academic staff drivers, organizational approach, tools for collecting data and visibility of findings. The paper concludes with observations on best practice in the collection, analysis and use of WBL SSD, thus offering recommendations for both academic managers and practitioners.

Keywords—Student satisfaction data, work based learning, employer engagement, NSS.

I. INTRODUCTION

THIS paper sets out to describe how student satisfaction is measured within one non-traditional type of learner - part time students engaged in work based learning (WBL). Since these students are typically not included in the National Student Survey (NSS), programme managers often devise their own methods for collecting student satisfaction data (SSD). While this provides individual programme managers with valuable information, there is rarely opportunity to cross reference feedback across the institution. WBL student numbers are increasing, for many reasons. As traditional student numbers decline for financial and demographic reasons, WBL students offer an alternative market, one which brings the Higher Education Institution (HEI) benefits of employer engagement, knowledge sharing, innovative practice and mutually rewarding collaboration. As this new body of work emerges, it is important that student feedback is used to shape the future development of WBL, and that this is done in an effective and appropriate manner.

There is a substantial body of literature on the subject of SS. The main themes have been focused on establishing the reasons for collecting SSD [1], [2], tools and techniques for collecting SSD [3], [4], Statistical methods for analysing SSD,

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Factors influencing SS [5], [6], [7], Assessing the effectiveness of the NSS, and case studies on SS data sets [8]. There have also been reflective studies on how the culture of SSD collection has impacted on University staff and management [9].

While the 'culture' of measuring SS for external presentation is now firmly embedded in HE, and there is a nationally recognized tool in the internal form of the NSS, the measurement and use of SSD for use is less homogenous, and shows wide variation in the format, timing and analysis of such information. Few studies so far have investigated the collection, analysis and use of SS data from students from WBL students, i.e. those students engaged with academic learning in the workplace, whose curricula have a high degree of negotiation, and whose motivations are directly related to their employers' needs, and linked to supporting their career aspirations.

II. STUDENT SATISFACTION DATA

A. Feedback

For anyone with any connection to the world of Higher Education in the UK it is a simple observation that there has been a paradigm shift in the way we regards ourselves as institutions. It is now common to find our students referred to as our 'customers', and our institutions as 'service providers', while our courses and awards are our 'products'. As well as borrowing these descriptive labels from the world of commerce, we have also taken on board some of the theories relating to the value of feedback from customers in our decision-making. One primary measure is that of "customer satisfaction". Fisk et al. [2] describe four main reasons for measuring customers' satisfaction:

- To understand customers' needs and wants
- For planning and making improvements to service
- Identifying gaps between expectations and perception
- So that resources may be targeted appropriately.

Applying the same reasoning to higher education, Rowley [1] formed similar reasons for collecting student satisfactions data:

- To provide auditable evidence that students have had the opportunity to pass comment on their courses and that such information is used to bring about improvements;
- To encourage student reflection on their learning;
- To allow institutions to benchmark and to provide indicators that will contribute to the reputation of the university in the marketplace; and
- To provide students with an opportunity to express their

level of satisfaction with their academic experience.

B. Survey and Rankings

In 2005 the UK introduced the National Student Survey (NSS). This on-line survey asks final-year students to reflect on various aspects of their student learning experience, including assessment and feedback, personal development and how well the course is organised, and give an overall rating. From this student satisfaction rating a mean average student score per university is calculated, based on how students as a whole responded. The purpose of this is to contribute to public accountability and help inform the choices of prospective students. The survey takes place annually to build a broader picture and gather data regularly. From these and other statistics, there have been a growing number of league tables, providing a comparison of universities against certain criteria. Four national rankings of universities in the United Kingdom are published annually –

- The Complete University Guide,
- The Guardian,
- The Sunday Times
- The Times.

The Daily Telegraph and the Financial Times have also produced rankings in the past.

The primary aim of the rankings is to inform potential undergraduate applicants about UK universities based on a range of criteria, including entry standards, student satisfaction, staff/student ratio, academic services and facilities expenditure per student, research quality, proportion of Firsts and 2:1s, completion rates and student destinations. All of the league tables also rank universities on their strength in individual subjects.

C. Impacts

Lawson et al. [9] make several observations about how the culture of league tables impacts on HEI staff and HEI organisations, notably:

- Student expectations need to be managed if they are to be fair in their views
- It is difficult for feedback to give a consistently accurate picture as every interaction between service employee and customer is unique,
- It is possible for course and programme managers to make decisions based on skewed results.
- There is potential to focus on the data – rather than on the underlying causes

In their words "we may be finding solutions to problems that do not exist and ignoring real problems because the satisfaction scores look reasonable..."

III. METHODOLOGY

The methods used for this research included in depth semi-structured interviews and focus groups comprised of academic staff in four different faculties within one UK University. Each faculty has substantial numbers of WBL students. The academic staff selected to participate in this study had responsibility for collecting, analysing and using SSD from

WBLs. Although there were different forms of WBL in the faculties, (UG, PG, short courses, full awards etc.), there were also **common features** of all types of WBL that differentiated them from other 'traditional students', i.e. they were mature students, in employment, studying part time, taking work related courses with the primary aims of enhancing their individual career prospects while at the same time meeting the strategic needs of their employers. The subject areas represented are Business, Arts Media and Design, Health and Computing. A senior manager from the HEI was also interviewed for the executive view of SSD and its contribution to strategic planning. Each of the Faculties also provided one sample of student satisfaction feedback. The means by which student satisfaction feedback is collected was critically compared and the interview data were analysed. The results are discussed in the next section.

IV. FINDINGS

A. Student Satisfaction Data Collection Approaches

An analysis of the student's satisfaction feedback collection approaches was conducted based on a number of criteria as shown in Table 1. There is a wide variation in the method used for collection of SSD, including minuted meetings, face-to-face surveys, and on-line surveys. Three of the four faculties collect SSD while the module is running, the fourth faculty collected SSD at the module end. Most samples are from all students, while one is from student representatives. The number of questions varies between 5 and 40. All samples included questions relating to Teaching, Learning and Assessment, and Learning Resources, Materials. Only two of the faculties asked questions relating to Venue (buildings, equipment etc.) – these being for WBL courses where student attendance was compulsory. Only one sample included questions relating to disability. There was emphasis in all the samples on questions relating to 'what are we doing well' and 'what can we do better', although the precise wording of the questions varied. All surveys allowed the students to express issues of their own, either though AOB, or free text answers.

B. Key Themes

The key themes that emerged from the analysis of the interview data were:

- Learners profiles and needs
- Employers drivers
- Academic staff drivers
- Organizational approach
- Tools for collecting data
- Visibility of findings

The findings are discussed using these themes.

Learner's Profiles and Needs

WBL students are considered to have different profiles to traditional students, and require separate SSD collection. The reasons given for their collection of SSD included ensuring student engagement, making sure there were no barriers to learning, and to acquire confirmation that the course meets the

learners' needs and expectations, "...as a faculty we need to make sure what is delivered meets the needs of the students... for their professional registration..."

Employers' Drivers

It was also mentioned that in some cases the student sponsor (the employer) requires feedback "... to demonstrate the value of the course.."

None of the staff interviewed used the NSS, as they were in agreement that it was not an appropriate tool for their students, and did not provide the information they required. One member of staff used the PTES (a HEFCE tool for Post Graduate Taught Courses), which is described here: http://www.heacademy.ac.uk/assets/documents/postgraduate/ What_is_PTES_2013.pdf

TABLE I
COMPARATIVE ANALYSIS OF STUDENT FEEDBACK

Sample:	Faculty 1	Faculty 2	Faculty 3	Faculty 4
Method	Minuted meeting	Hard copy hand-out	Qualtrics survey	Qualtrics survey
Timing	Mid semester	Every workshop	Mid module	End of module
Proportion of students	Student reps only	All	All	All
Electronic/ hard copy	Hard	Hard	Electronic	Electronic
Face to face collection	Yes	Yes	No	No
Type of questions	Guided discussion with notes taken	Mix - free text and Likert Scale	Mostly Likert Scale 0 – 7, highly granular with free text questions	Mostly Likert Scale 0 – 5, with 2 free text questions
Number of questions	5 items for discussion, plus AOB	14	40, over 6 sections	12
Questions relating to Teaching, Learning and Assessment	Yes,	Yes	Yes	Yes
Questions relating to Learning Resources, Materials,	Yes,	Yes	Yes	Yes
Questions relating to Venue (buildings, equipment etc.)	Yes, But no comments recorded	Yes	No	No
Questions relating to Disability	Yes	No	No	No
Questions relating to Student Support & Guidance	Yes, But no comments recorded	No	No	No – but several questions aimed at employer support, benefits to work etc.
Freely raised issues (AOB)	Yes	No – but free text in likes and dislikes	No – but free text in 'best aspects' and 'ways to improve'	No – but free text in 'positive aspects' and 'require improvement'
Overall satisfaction rating?	No	No	Yes – scored 0-7	No

There was also the strong impression that the NSS represents 'institutional level' data, while their focus was on much more granular information on specific courses.

".... the NSS, it is symptomatic of 'generic' stuff... WBL never fits in. It is the same with Thesis and other University systems. ..."

Only one faculty indicated that there was a possibility of SSD coming via an employer. In this instance the employer was sponsoring a large number of employees engaged in WBL, and had an interest in monitoring SS through regular meetings in the place of employment. Other faculties did not reflect this.

".... very occasionally the employer is conduit for student feedback mostly when a student is not happy with a grade he has been given, then his/her boss might call..."

"... sometimes when dealing with one employer, HR may be closely involved – then dialogue might occur. This is less likely when dealing with single employees..."

"... I have never had an employer call. I would feel this was 'failure' on the part of the tutor..."

Academic Staff Drivers

The NSS survey is considered to be an inappropriate tool for award leaders, being aimed at a 'pre-selection' audience. None of the interviewees accepted the 'standard' survey delivered to 'traditional' students via the VLE as acceptable for WBL students, and consequently had all invested time and effort in creating their own 'tailored' versions. The analysis showed that there is a great deal of commonality in the reasons why academic staff undertake SSD collection with WBL students, and that the main objective they share is to collect information which will help them as award leaders to continually monitor and improve the curriculum content and delivery of the WBL courses they are responsible for.

Responsibility for the collection and analysis of SSD was felt to be the responsibility of the module tutor, but each of the faculty award leaders felt that any issues identified would be 'passed on' to them. The minimum formal requirement from module leaders is the End of Module Survey (EMS), but

"... module leaders also do their own 'off the cuff'"... everyone has a different way of evaluating their courses, this might be verbally or in written form....".

In certain faculties, responsibility is shared between the module leader, award leader, and award management team, which may include cross faculty members, (eg science and law). The delivery tutors collect the SSD, but pass this on to the award leader for analysis

Organizational Approach

It is also apparent is that while there is a great deal of overlap in the objectives, the methods used for the collection of SSD vary considerably, with some being more complex than might be considered necessary. There is a lack of a common approach across faculties. Reasons for collecting SSD are essentially similar, and primarily focussed on course improvement, either for the current delivery, future cohorts, or both. Responsibility for the collection of SSD lies with module tutors. Analysis of SSD is left to individuals. While no formal (statistical) analysis takes place, attention is primarily focussed on identifying recommendations for improvements, which are then assessed by the award leader as to whether action follows. There is enough similarity between the faculties to warrant the development of a common approach, which would encourage cross faculty sharing of best practice. None of the faculties include any formal statistical analysis, apart from the default analysis offered by the on-line survey tool, indeed the primary form of analysis seemed essentially the identification of negative comments – as the basis on which the award leader might consider corrective actions. No trend analysis takes place, and there is no cross faculty referencing.

The timing and 'granularity' of the SSD was seen to be crucial to its usefulness. The SSD needed to be not only about the award, but identifiable against modules, and even to individual delivery and individual sessions. The Business faculty regarded feedback from every student encounter as appropriate, while other faculties considered informal feedback during module delivery, followed by formal collection of SSD at the end of modules a more standard approach. This might include the standardised EMS delivered to all students via the VLE. In Health study days were always an opportunity for collecting SSD:

"... I like hard copy... any feedback must have immediacy, while the student motivation is high... we expect to get 100% completion because we get it on the day... after the event is no good...",

"...we collect information relevant to the award and the module, but smaller scale as well, on individual workshops... module and award feedback is after the event, and not in time to do anything about it. Mid delivery is important..."

Tools for Collecting Data

On-line tools are considered very efficient, but ineffective due to poor response rates. The annual monitoring report that is produced is seen as having limited value as a tool for course improvement.

The frequency and method of collection of SSD varied considerable. Only two of the 4 faculties used an on-line survey tool (Qualtrics), but both agreed that the response rate

tended to be low. All 4 faculties used hard copy feedback sheets, given out to individuals. This pre-supposes that at some time in their studies these WBL students have some face-to-face encounter with staff, and it was confirmed that although these WBL students are in employment, the 'blended' style of delivery included varying levels of attendance in the HEI, or HEI staff visiting the place of employment. Some WBL students attended the HEI for all their taught sessions, while others attended only for 'module launch sessions", and a third mode of attendance was for "study days" at intervals during the award. In each case this represented an opportunity for the collection of SSD, either through formal or informal means. All 4 faculties commented on the importance of informal feedback.

"... we are now finding that the most valuable feedback is from informal tutor contact...formal sessions are timetabled, but attendance is not compulsory..."

"...we have some formal feedback, but most comes from informal chats – telephone, email face to face..."

The analysis of the SSD consisted mainly of the identification of any negative comments, which supports the statement that the main aim of collecting SSD was 'ensuring student engagement' and 'identifying barriers to learning'. However it was also noted that negative comments were not always acted upon – there was a degree of interpretation by the award leader.

"... identifying 'bad' or negative feedback can be dangerous – some students can just be difficult..."

Little or no emphasis was placed on statistical analysis, and apart from the statistics provided with the on-line tool, quantitative data was not analysed in any formal way.

"... all our data is qualitative. We are looking for what we do well... it helps anticipating student expectations, and adjusting delivery to suit. Our data is used to change and alter things for next time, but also within one cohort...."

Module leaders are required by the HEI to produce annual Module Monitoring Reports (MMRs) and it is anticipated that SSD will feed into these. One function of the award leader is to collate the MMRs and produce an award specific Annual Monitoring Report (AMR), intended for strategic use at faculty level. It can be seen that in the progressive reporting, dilution of the original data will occur, reducing the value to the individual award leaders.

"..AMR can be seen as box ticking exercise...."

"..I would like to see the actions at end of the AM process... we never get feedback on the feedback we give... but we don't want to end up with another AM process!"

None of the faculties indicated that the SSD was used to compare trends, for example year on year, indicating that this was seen as something that might occur at AM.

".. we are more interested in employer needs trends, not (trends in SS) scores. What changes is what is hot out in industry, what do managers want..."

"... you need to have a Teflon coat with WBLs, they can be very demanding..."

This notwithstanding, all faculties were able to give examples where SSD had had a direct **impact** on service

delivery for the current cohort. Two examples given involved the re-allocation of (staff) resources, where the SSD had shown there was a 'mismatch' in the expectation of the students and the approach to delivery. Other examples involved putting on extra sessions to support student learning, altering assessment details in response to student comments, and changing the way students are given feedback on their assessments. Other examples indicated that SSD was fed into future delivery, for example through changing induction plans, improving communications to manage expectations, clarifying departmental policies etc:

"... we are always changing in response to what the students tell us...!"

"... it is the number one reason for doing it (collecting SSD)..."

When discussing possible improvements to the SSD process, the interviewees suggested that there were considerable similarities in the aims and objectives of the 4 faculties, and that some common approach might save 're-inventing the wheel':

"...an institutional tool relevant to WBL would be awesome..."

"... cross faculty sharing of best practice would be good. It seems we are all doing the same thing by different means..."

However this view was contested:

"... but we tailor each (SSD exercise)... maybe a toolbox, so that we can draw from it as we need to, but enough commonality so we can compare our findings (across faculties)..."

Visibility of Findings

The visibility of the SSD was restricted primarily to the award leader, although the main findings might be shared with academic teams. Only one faculty regularly shared feedback with the sponsoring employer – which they considered to be an essential component of a 'tri-partite' approach to WBL curriculum development. Feeding SSD into the annual monitoring process was seen to be a 'one-way process' and of little value to staff at the operational level. In fact, there appears a significant difference between the executive view of SSD and the academic staff view of SSD. The executive view seems, understandably, to be primarily concerned with the external facing data, such as that represented by the NSS, which is targeted at a 'pre-selection' audience, and may therefore have significant impact on league tables and in turn be a significant factor in student recruitment. The academic staff view of SSD seems to be very much inward facing, for internal digestion, and as a tool for identifying current issues, which require immediate action, and for directing changes for continuous course improvement.

The visibility of the SSD was limited to the award leaders in all but one faculty.

".. data is shared with the Award /management Team (AMT) but no students or employers. No-one else sees it, but we draw out extracts for the Annual Monitoring report – and others see this..."

".. employers are not particularly interested in seeing SS

data, they want ROI, impact assessment. Students are focused on themselves, not on the course... as long as they are getting what they want they don't care about anything else.."

However in one faculty the award leader shared the analysis with the employers, generally accompanied with an account of the award leader response to the comments identified. This was felt to be an important communication point in a tri-partite approach to course improvement.

C. Improving Practice

An approach that may be of use in addressing the issues identified in the themes is the Small Group Instructional Diagnosis (SGID):

"..A procedure for student evaluation and feedback on faculty instruction ... developed at the University of Washington. The system involved the use of faculty members as facilitators in conducting Small Group Instructional Diagnosis (SGID) to generate student feedback to instructors about the courses' strengths, areas needing improvement, and suggestions for bringing about these improvements " [10].

The essential components of the SSIG have been described as:

- The use of a facilitator (other than the instructor)
- Classroom 'workshops' to ascertain student opinions
- A feedback session between facilitator and instructor
- Instructor review of the SGID with the class, and
- A follow-up session between the facilitator and instructor.

The students are asked to respond to three questions only:

1. What aspects of this course/instruction enhance your learning?
2. What aspects of this course/instruction could be improved?
3. What could you – as a student – do to make the course better for yourself, your classmates, and the lecturer?

While Clark and Redmond studies involved 'traditional' full time students, more recent studies have shown that the process can also be usefully applied to distance students [11] and classes delivered using audio-conferencing [12].

Diamond [13] conducted an extensive programme of SGID across one University, and concluded:

"..participating lecturers revealed that this procedure increased their understanding of how students respond to their instructional methods. As a result, lecturers refined grading procedures, implemented new approaches to conducting classes, clarified their expectations of students, and refocused content emphasis. They also indicated that they intended to amend the way they teach future courses in an effort to increase effectiveness" [13].

V. CONCLUSION

This paper has sought to describe how student satisfaction is collected, analysed and used with one non-traditional type of learner - part time students engaged in work based learning (WBL), in four faculties in one UK University. The investigation has shown that award leaders regard SSD as an essential tool for improving curriculum content and delivery.

By fostering high levels of SS, it is anticipated that these mature students will become our 'ambassadors' for the expansion of education in the workplace, and will assist in our efforts to engage with more learners, in more employment contexts, thus fostering the ambition to make learning a lifelong journey.

There is the potential to save both time and effort for the academic staff by designing a **common 'vehicle'** for the collection of WBL SSD, such as the SGID described above. **Staff development** should be undertaken, to improve understanding of SSD and the processes involved. The focus of the SSD should be 'sharpened' to **focus** only on what is used. SSD collection should be **mid-delivery** where possible, since it has greater value if immediately applicable. The **visibility** of SSD should be re-considered, and where a tri-partite approach is taken, then **employer involvement** should be considered. There is no doubt that our efforts in this respect can be the subject of continual review and improvement, and it is suggested that further studies may involve the application of the recommendations above to this end.

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