SQELT PROJECT

SUSTAINABLE QUALITY ENHANCEMENT IN HIGHER EDUCATION LEARNING AND TEACHING. Integrative Core Dataset and Performance Data Analytics

Co-funded by the Erasmus+ Programme of the European Union

Key Action: **Cooperation for innovation and the exchange of good practices**
Action Type: **Strategic Partnerships for higher education**

Partners: evaluation Agency Baden-Wuerttemberg, UNIVERSIDADE DE AVEIRO, BIRMINGHAM CITY UNIVERSITY, UNIVERSITEIT GENT, UNIWERSYTET JAGIELLONSKI, UNIVERSITÄT FUR WEITERBILDUNG KREMS, UNIVERSITEIT LEIDEN, UNIVERSITÀ DEGLI STUDI DI MILANO, UNIVERSITETET I OSLO, Centro de Investigação de Políticas do Ensino Superior

https://ec.europa.eu/programmes/erasmus-plus/projects/eplus-project-details/#project/b8a93e06-2000-4a82-9fac-90b3bcacadec

https://www.evalag.de/en/research/sqelt/the-project/

Intellectual Output 3:
Baseline Report on Project Partner HEIs' Performance Data Management Models

The Case of Birmingham City University (BCU)

David Kane

James Williams

12th of January, 2019

Table of contents

List of acronyms

HEI – Higher education institution

L&T – Learning and teaching

PDRLA – Personalized data required for Learning Analytics

PI – Performance indicator

QA – Quality assurance

QEI – Quality evaluation instrument

QM – Quality management

TBDE – To be determined by evaluation

Executive summary

This report outlines the findings of case study research conducted at Birmingham City University as part of Output 3 of the SQELT project. This case study engaged with colleagues from around the institution in order to explore attitudes and perceptions of data collected and tools applied in order to measure learning and teaching performance.

General approach and methodology

The research was based on two data gathering tools. Participants were asked to identify from a pre-determined questionnaire, what data is collected at Birmingham City University, what performance issues there are and what quality evaluation instruments are used. Following this, participants were engaged in a discussion about their reflections on issues raised in the questionnaire.

The sample was small, owing to the research period being a particularly busy time of year. In addition, there is currently much change occurring as part of the University's overhaul of data collection and management processes. Sampling was therefore purposive and pragmatic, relying on existing networks for support.

Key themes emerging

Overall, the research has highlighted that stakeholders have different perceptions of the value of core data, performance monitoring and evaluation tools depending on their role at the University. The research has also highlighted that participants have varying awareness of whether data is collected, whether performance is monitored or evaluation tools are applied at the University.

Of particular interest was that different stakeholders had differing awareness about what data was collected, what performance processes were monitored and what evaluation tools were applied.

The majority of the items in the list were regarded as indispensable or at least useful. A notable number were, however, regarded as useless, particularly by colleagues without senior management roles.

There was variety in the value attached to items by the different stakeholders. In the case of lecturers with no management role, this variety may relate to awareness of wider strategic issues.

The value of data varies according to context and situation. In particular, disciplinary differences are often significant. Issues that are important to staff and students in one discipline may not be of concern to another.

Whilst quantitative data and measurements were generally regarded as useful, participants felt uneasy at giving too much emphasis to them. They argued that the context is that educational achievement is primarily about qualitative experience.

Quantitative data is viewed as only indicative of wider issues and in itself seldom proves anything. There are often underpinning discussions to be engaged with behind each simple number.

The collection of quantitative data can lead to a tendency to generalise about individual students and cause staff to make assumptions about them.

1.0 Introduction

In this report, we outline the key findings of research at Birmingham City University conducted as part of Output 3 of the *Sustaining Quality in Higher Education Learning and Teaching* (SQELT) project. This is a case study to explore perceptions and attitudes towards core data, performance indicators and evaluation tools for learning and teaching. The aim was to identify which items were regarded as useful and which were not, as well as to identify which data was thought to be collected, which indicators to be monitored and which tools were applied at BCU.

Of particular interest was to explore colleagues' perceptions of such data, indicators and tools. The study highlighted not only whether items were important but also the problematic nature of much data and its value to an institution and its staff. It highlighted differences between disciplines: some data may be of use to some disciplines but not to others. It highlighted the need for care to be taken in giving too much emphasis on collecting and measuring quantifiable data. In the context of higher education, much that is important is not quantifiable.

The structure of the report hereafter follows a logical pattern. A brief section on the methodology is followed by results sections that are based on the pattern of the questionnaire. Hence, it begins with an exploration of the responses to the first section of the questionnaire which focuses on core data and its collection. The report goes on to explore responses to the second section of the questionnaire, exploring perceptions of performance indicators. The report then explores responses to the third section on evaluation tools that are applied at the University. The report then reflects on the fourth section of the questionnaire, which explores participants' perceptions of learning analytics. The report ends with conclusions and recommendations.

2.0 Methodology: Sample, time schedule and data types of the baseline case study

The report is drawn from research conducted as part of a case study of Birmingham City University. As such, we engaged with participants through purposive sampling. Participants were invited to take part on the basis of their expertise and through existing networks. Hence, we invited colleagues who were involved with learning and teaching through being quality managers, involved in the oversight of quality processes or as lecturers. We approached colleagues from different faculties in order to ensure that we engaged with different disciplinary traditions and cultures.

The study was undertaken over a period of about four months and two types of data were collected. First, participants were asked to complete a questionnaire which asked about their perceptions of what data is collected at Birmingham City University, what performance issues there are, what quality evaluation instruments are used and what role learning analytics has at the University. Second, participants were asked, in an interview or focus group setting, about issues emerging from the questionnaire. The questionnaire was thus intended to stimulate discussion rather than as a way of gathering statistically reliable data.

2.1 The questionnaire

The questionnaire was based on previous work undertaken by Leiber (DATE) and provides a list of identified data, performance indicators and evaluation tools. Although the tool is designed as a questionnaire, it effectively provides the basis of a comprehensive list of performance indicators and performance capacity indicators.

The first section of the questionnaire focused on university 'core data' that can be collected for quality monitoring and improvement in learning and teaching (L&T). The items of data were categorised within four sections:

Section 1. learning and teaching environment;

Section 2. teaching competence and processes;

Section 3. learning competences and processes;

Section 4. learning outcomes and learning gain and their assessment.

Participants were asked to rate 25 items of quantitative data ('core data') as *indispensable*, *useful* or *useless* and also state whether they were *regularly collected*, *occasionally collected* or *not collected* in the institution. Respondents also had the choice of answering 'do not know'. Respondents also had an option to give open answers and add any comments or make further suggestions.

The second section focused on university performance indicators (PIs) that can be reported for quality monitoring and improvement in L&T. Participants were asked to rate the whether the 31 listed items were 'indispensable', 'useful' or 'useless' as well as whether they were 'regularly monitored', 'occasionally monitored' or 'not monitored'. Respondents also had the choice of answering 'do not know'. Respondents also had an option to give open answers and make further comments or suggestions.

The third section focused on quality evaluation instruments (QEI) that can be used for quality monitoring and improvement in L&T. Participants were asked which of the following features apply to the 15 presented QEIs which are listed in Table 3: 'indispensable', 'useful' and 'useless' as well as 'regularly applied in my HEI', 'occasionally applied in my HEI' and 'not applied in my HEI'. Respondents also had the choice of answering 'do not know'. Respondents also had an option to give open answers and add any comments or make further suggestions.

2.2 Interviews and focus groups

Participants were invited to take part in brief interviews or focus groups in order to discuss further their perceptions of performance indicators in learning and teaching. The tools were chosen pragmatically to suit the participants concerned. In the event, one focus group was held with three lecturers from Faculty B but it proved more convenient for other participants to meet them individually in the setting of an interview. Interviews were held with lecturers, senior managers and quality managers.

The most effective approach was to simply ask participants to highlight any issues that emerged from the questionnaire rather than to use a rigid question structure. Where participants raised an issue, this was probed in more detail as appropriate.

2.3 Sample

A range of colleagues at the University were approached to complete the questionnaire and to engage in unstructured interviews in order to explore experiences and perceptions of performance indicators, core data, evaluation tools and learning analytics. A very small number of colleagues agreed to participate, presumably because of the growing workload of staff at the University. Hence, a pragmatic approach was needed, one that involved using existing contacts and good will.

Although the approach was pragmatic, colleagues were approached for tactical reasons. One colleague was felt, as the lead member of the University's learning and teaching development team, who has been in post for many years, to have a useful overview of learning and teaching environment at the University. The head of the University's programme planning office, was approached as a quality manager and, whilst unable to complete the questionnaire, offered some useful advice relating to learning analytics at the University. Associate deans for learning and teaching at the University's four faculties were approached, along with programme directors in different faculties, and several newer lecturers who have limited management roles but are engaged in front-line teaching activities.

Analysis

The data that was collected has been reviewed and analysed in a similarly pragmatic fashion. The responses to the questionnaire have been compared and points of interest highlighted. In particular, these include areas where participants have responded in similar or different ways; which items are regarded as indispensable or useless; which data is not collected, performance not monitored and evaluation tools not applied. In addition, participants' comments about the items on the questionnaire are included and thematised.

The basic pattern of the analysis is similar for the sections on the core data, performance monitoring and evaluation tools. In these sections, we begin with an overall review of the quantitative data and then follow this with an in-depth analysis of the responses for each stakeholder group that participated. Where relevant, we use participant comments to provide further insights into learning analytics at Birmingham City University.

3.0 Stakeholders' assessment of core data

3.1 Overall

Lecturers and senior management participated in this part of the survey. The lecturers were: a programme director in the School of English, a new lecturer in the Department of Psychology and a group of Criminology lecturers. There were three members of senior management: two Associate Deans responsible for overseeing learning and teaching quality within their faculties; and senior manager in the learning and teaching development and support department.

3.1.1 Opinions on the usefulness of data

Stakeholders had a range of opinions about the usefulness of the core data items listed in the questionnaire. Lecturers had a more diverse range of opinions of the value of the data whilst the senior managers viewed most of these items as either indispensable or useful (see Table 1 below).

Table 1: Perceptions of the usefulness of core data

Participant	Indispensable	Useful	Useless	Not completed	Total
New Lecturer (Psychology)	11	8	6	0	25
Lecturers (Criminology)	13	4	3	5	25
Programme director (English)	0	9	16	0	25
Senior Manager (Learning and Teaching development)	8	13	4	0	25
Senior Manager (Learning and Teaching quality, Faculty A)	16	7	2	0	25
Senior Manager (Learning and Teaching quality, Faculty B)	15	8	0	2	25

Only two items of data were regarded by all participants in the survey as indispensable. The first item, the *Number & duration of student interactions with course activities (e.g. solution of exercises, watching videos, listening to lecture, participation in working groups, etc.) (e.g. via the HEI's LMS)*, relates to basic learning and teaching activities. The second item, *Number of Bachelor graduates who within a period of time [TBD] after graduation are unemployed*, is an issue relating to employability, a current concern for universities in the United Kingdom.

There were no items that were regarded by all participants as useless. There are two items that the senior manager in learning and teaching development and two lecturers regarded as useless (the criminology lecturers did not complete this):

- *Number of Bachelor degree theses made in cooperation with industry/external organisations*;
- *Number of Master degree theses made in cooperation with industry/external organisations*.

The participants from senior management regarded these items only as useful, whereas they regarded most items as indispensable (see below, section 3.3.1). Clearly, the element of student projects being developed in collaboration with external organisation was not regarded as being of particular value, or indeed of any particular relevance, at BCU.

3.1.2 Opinions on whether core data items are collected

There were varied opinions about whether the data listed in the questionnaire was collected or not, suggesting a lack of knowledge amongst lecturers. However, senior managers appear to have been generally more consistent (see Table 2 below).

Table 2: Collection of core data

Participant	Regularly collected	Occasionally collected	Never collected	Not completed	Total
New Lecturer (Psychology)	15	5	3	2	25
Lecturers (Criminology)	15	2	2	6	25
Programme director (English)	13	7	4	1	25
Senior Manager (Learning and Teaching development)	22	3	0	0	25
Senior Manager (Learning and Teaching quality, Faculty A)	16	7	2	0	25
Senior Manager (Learning and Teaching quality, Faculty B)	15	8	0	2	25

All participants were agreed that the six items of data listed below are regularly collected:

- *Number of teaching staff who participated in formal pedagogical training*;
- *Number of Bachelor graduates who within a period of time [TBD] after graduation are enrolled in further study*;
- *Number of Master graduates who within a period of time [TBD] after graduation are unemployed*;
- *Number of Master graduates who within a period of time [TBD] after graduation are enrolled in further study*;
- *Number of doctorate graduates who within a period of time [TBD] after doctorate are unemployed*;
- *Number of doctorate graduates who within a period of time [TBD] after doctorate are enrolled in further study*.

3.2 Teachers' assessment of core data

3.2.1 Usefulness of core data

Lecturers viewed the items listed as 'core data' as being of varied usefulness. The programme director from the School of English regarded the majority of the items as useless and no items as indispensable whereas the lecturers in Psychology and Criminology (Social Sciences) regarded most items as useful or indispensable.

This masks some differences between the participants' views. Notably, lecturers from Social Sciences regarded the seven items listed below as indispensable whilst the programme director from English regarded them as useless:

- *Number & duration of student interactions with student information system* (learning and teaching environment section);
- *Number of Bachelor graduates who within a period of time [TBD] after graduation are unemployed* (Employability section);
- *Number of Bachelor graduates who found their first job (after graduation) in the region where the HEI is located* (Employability section);
- *Number of Bachelor graduates who within a period of time [TBD] after graduation are enrolled in further study* (Employability section);

- *Number of Master graduates who within a period of time [TBD] after graduation are unemployed* (Employability section);
- *Number of Master graduates who within a period of time [TBD] after graduation are enrolled in further study* (Employability section);
- *Number of doctorate graduates who within a period of time [TBD] after doctorate are unemployed* (Employability section).

Six of these items relate to employability. For the University, graduate employability is a core concern. However, for the programme director, in a discipline in the creative arts, data on job destinations is not of particular interest as the focus of the subject is on individual creativity.

3.2.2 Collection of core data

The lecturers had broadly similar views about whether the listed data is collected are similar. However, several specific cases outlined below indicate varied awareness of some lecturers about the situation.

1. The new lecturer and the programme director in English thought that the *Number & duration of student interactions with students (e.g. via the HEI's learning management system - LMS)* was never collected whilst the Criminology lecturers thought it was regularly collected.
2. The new lecturer thought that the *Number of master students who graduated at another institution* and the *Number of doctorate students who graduated at another institution* was collected whilst the Criminology lecturers and the programme director in English thought that they were not collected.
3. The programme director in English thought that the items of data *Number & duration of student interactions with student information system (SIS)* and the *Number of doctorate graduates who found their first job (after doctorate) in the region where the HEI is located* were never collected whilst the lecturers in Social Sciences thought that they are regularly collected.
4. The programme director in English and the new lecturer thought that the item of data *Number & duration of student interactions with students (e.g. via the HEI's learning management system - LMS)* was never collected whilst the lecturers in Criminology thought it is regularly collected.
5. The programme director in English thought that the item of data *Number of Bachelor graduates who found their first job (after graduation) in the region where the HEI is located* was never collected whilst the lecturers in Social Sciences stated that they did not know whether it is collected.

3.3 Leadership assessment of core data

3.3.1 Usefulness of core data

There was some similarity between the views of the two participants from senior management from the two faculties on items in this section of the questionnaire The faculty participants viewed most of the data listed as indispensable whereas the participant from Learning and Teaching Development regarded only a relatively small number as indispensable. The participants all agreed that only four items of data were indispensable:

- *Number of teaching staff who participated in formal pedagogical training* (Quality of teaching staff);
- *Number & duration of student interactions with course activities (e.g. solution of exercises, watching videos, listening to lecture, participation in working groups, etc.) (e.g. via the HEI's LMS)* (Quality learning & student engagement)
- *Number & duration of student interactions with course contents (e.g. via the HEI's LMS)* (Quality learning & student engagement);

- *Number of Bachelor graduates who within a period of time [TBD] after graduation are unemployed* (Employability).

Two of these, which relate to student learning activity and the number of graduates who are unemployed are shared with the lecturers but they are also concerned with the training and skills of lecturers as well as the course content.

There was little difference between the views of the senior management participants from the faculties as to the usefulness of specific data listed. Both participants regarded the following thirteen of the items of data as indispensable:

- *Number of teaching staff who participated in formal pedagogical training (Quality of teaching staff)*;
- *Number & duration of student interactions with course activities (e.g. solution of exercises, watching videos, listening to lecture, participation in working groups, etc.) (e.g. via the HEI's LMS) (Quality learning & student engagement)*;
- *Number & duration of student interactions with course contents (e.g. via the HEI's LMS) (Quality learning & student engagement)*;
- *Number of repetitive visits to learning contents (e.g. during online learning) (Quality learning & student engagement)*;
- *Percentage of credits given in service-learning activities (e.g. students in community service activities & social work), in relation to total number of credits (Assessment of learning outcomes)*;
- *Number of Bachelor graduates who within a period of time [TBD] after graduation are unemployed (Employability)*;
- *Number of Bachelor graduates who found their first job (after graduation) in the region where the HEI is located (Employability)*;
- *Number of Bachelor graduates who within a period of time [TBD] after graduation are enrolled in further study (Employability)*;
- *Number of Master graduates who within a period of time [TBD] after graduation are unemployed (Employability)*;
- *Number of Master graduates who found their first job (after graduation) in the region where the HEI is located (Employability)*;
- *Number of Master graduates who within a period of time [TBD] after graduation are enrolled in further study (Employability)*;
- *Number of doctorate graduates who within a period of time [TBD] after doctorate are unemployed (Employability)*;
- *Number of doctorate graduates who found their first job (after doctorate) in the region where the HEI is located (Employability)*.

Of these, it is noticeable that the majority are from the employability sub-section.

The senior management participant from Faculty A regarded the following two items as indispensable but the participant from Faculty B regarded them only as useful:

- *Number & duration of student interactions with student information system (SIS)*;
- *Number of doctorate graduates who within a period of time [TBD] after doctorate are enrolled in further study*.

The senior management participant from Faculty B regarded the following two items as indispensable whilst the participant from Faculty A regarded them only as useful:

- *Number of refereed publications during a certain period of time [TBD] per full time equivalent members of teaching staff:*
- *Number of papers or reports presented at academic conferences during a certain period of time [TBD] per full time equivalent members of teaching staff*

Only a relatively few items were regarded as useless by any of the participants. The items regarded by the senior management participant from Faculty A as useless are:

- *Number of master students who graduated at another institution*;
- *Number of doctorate students who graduated at another institution.*

However, the other senior managers both regarded these items as useful.

The senior manager in learning and teaching development regarded the following four items of data as useless:

- *Percentage of credits given in service-learning activities (e.g. students in community service activities & social work), in relation to total number of credits*;
- *Number of Bachelor degree theses made in cooperation with industry/external organisations*;
- *Number of Master degree theses made in cooperation with industry/external organisations*;
- *Ratio of female to male students who complete a doctorate*.

However, these were regarded as indispensable or useful by the other participants from senior management.

3.2.2 Collection of data

The participants from senior management generally thought that most of the data was collected at BCU, with little variation between them. The participants agreed that six items of data were regularly collected whilst the two participants from the faculties thought that thirteen items were regularly collected.
The participant from senior management in Faculty A thought that two items of data were never collected whilst the participant in Faculty B thought they were occasionally collected:

- *Number of master students who graduated at another institution;*
- *Number of doctorate students who graduated at another institution.*

3.3 Additional assessments by active SQELT project participants

In addition to the items above, a further set of items of data were assessed by the senior manager of Learning and Teaching development.

Table 3 below shows the following items were regarded as indispensable.

Table 3: Further items regarded as indispensable

Teaching resources	Ratio of teaching staff number to student number
	Number of teaching staff with verified teaching qualifications
Financial income & investment	Percentage of total institutional expenditure dedicated to L&T activities (core education expenditure)
Supportive environment	Number of students who need special access offerings (e.g. because of physical handicaps, dyslexia, autism, visual deficits, …) (personalized data required for Learning Analytics)
	Number of students who use official HEI network options for linking to community/collaborating with the wold of work (e.g. internships)
Quality of incoming students	Grades of student entrance score/secondary school grades

	Grades of university admission tests
	Grades of introductory courses/examinations (e.g. in mathematics)
Quality of teaching staff	Number of teaching staff who participated in support activities for their adaptation of technology-enhanced L&T
	Number of teaching staff who participated in peer support systems for teaching staff/teaching observation
Student success	Coursework marks
	Number of students who do not complete the program modules they had started
	Number of students who do not successfully complete the first year of study
	Number of students who do not successfully complete undergraduate programs (Bachelor graduation)
	Number of students who do not successfully complete undergraduate programs within the planned program duration (Bachelor graduation on time)
	Number of students who do not successfully complete graduate programs (Master graduation)
	Number of students who do not successfully complete graduate programs within the planned program duration (Master graduation on time)
	Number of students who do not successfully complete their long first degree (long first degree graduation)
	Number of students who do not successfully complete their long first degree within the planned program duration (long first degree graduation on time)
	Number of students who do not successfully complete postgraduate programs (postgraduate graduation)
	Number of students who do not successfully complete postgraduate programs within the planned program duration (postgraduate graduation on time)
	Number of students who exit HEI per year
	Number of students who exit HEI per year to change to another HEI
Assessment of learning outcomes	Examination marks
	Grades of students' final examinations
	Number of Bachelor degrees awarded
	Number of Master degrees awarded
	Number of doctorate degrees (PhD or equivalent) awarded

The following items in Table 4 below were regarded as useful:

Table 4: Further core data items regarded as useful

Teaching resources	Number of female teaching staff
	Number of teaching staff with foreign citizenship
	Number of teaching staff participating in professional development activities

Facilities & equipment	Total institutional expenditure (per full-time student) on ICT for L&T
	Accessible internet bandwidth per student user
	Total institutional expenditure on laboratory resources
	Ratio of students to administrative staff
Financial income & investment	Percentage of total institutional expenditure dedicated to the provision of student services (other than accommodation & student allowance)
Student composition & special support	Number of international students
	Number of international incoming exchange student
	Number of international outgoing exchange students
	Number of students with certain social origins [TBD[3]]
Contact with work environment	Number of Bachelor students actually doing an internship
	Number of Master students actually doing an internship
	Number of Bachelor teaching practitioners from outside the HEI departments
	Number of Master teaching practitioners from outside the HEI departments
Employability	Number of Master graduates who within a period of time [TBD] after their long first degree graduation are unemployed
	Number of Master graduates who within a period of time [TBD] after their long first degree graduation are enrolled in further study

The following items in Table 5 were regarded as useless

Table 5: Further items of core data regarded as useless

Learning resources	Number of book titles held in library
	Number of periodical print subscriptions held in library
	Number of periodical online subscriptions held in library
	Number of student workplaces held in library
	Number & duration of student interactions with library
	Average processing time of a library orders
Teaching resources	Number of Bachelor programs offered
	Number of Bachelor programs that are offered in a foreign language
	Number of joint/dual degree Bachelor programs
	Number of Master programs offered
	Number of Master programs that are offered in a foreign language
	Number of joint/dual degree Master programs
	Number of teaching staff with verified doctorate qualifications (PhD or equivalent)
	Number of broad educational subject fields (ISCED97/2011) in which students have graduated in the latest year (disciplinary diversity)[1]
	Number of beds available for teaching in university hospital & affiliated hospitals per 100 students (medicine)[2]
Facilities & equipment	Number of students allowed to enrol in a subject/subject field
Financial income & investment	Percentage of total institutional expenditure dedicated to student accommodation & allowance
	Amount of third party funding/extra funding income in L&T per student (e.g. funded research projects for the advancement of L&T)
	Number of Bachelor students enrolled

Student composition & special support	Number of Master students enrolled
	Number of female (& male) Bachelor students enrolled
	Number of female (& male) Master students enrolled
	Number of female postgraduate students
	Number of male postgraduate students
	Number of full-time students
	Number of part-time students
	Number of students in international joint degree programmes
	Number of students who need support for minorities
Assessment of learning outcomes	Percentage of examinations (e.g. in medical doctor training programmes) which use innovative forms of assessment (e.g. assessment of practical work by faculty & structured clinical cases)[5]
	Number of doctorate degrees that are awarded to international doctorate candidates

4.0 Stakeholders' assessment of performance indicators

4.1 Overall

Lecturers and senior management participated in this part of the survey. The lecturers were: a programme director in the School of English and a new lecturer in the Department of Psychology. There were two members of senior management: one Associate Dean responsible for overseeing learning and teaching quality in a faculty; and a senior manager in the learning and teaching development and support department.

4.1.1 Perceptions of usefulness of performance indicators

Participants had varied perceptions of the usefulness of the performance indicators that were listed in the questionnaire (see Table 6 below). The teachers had different opinions about what is useful. The programme director did not regard any items listed as indispensable and regarded a substantial proportion as useless. The new lecturer, in contrast, was much more positive about the value of these items, regarding most as indispensable and none as useless. The participant from senior management was much more positive about the value of items, regarding most as indispensable and none were regarded as useless.

Table 6: Perceptions of the usefulness of performance monitoring

Participant	Indispensable	Useful	Useless	Not completed	Total
Programme director (English)	0	17	10	4	31
New lecturer (Psychology)	20	11	0	0	31
Senior manager (learning and teaching development)	15	14	0	2	31
Senior manager (learning and teaching quality) Faculty A	25	6	0	0	31

All the items that the programme director regarded as useless were regarded as either indispensable or useful by the new lecturer. The participant from senior management in Faculty A regarded all these items as indispensable. Of these, the following items were regarded as indispensable by the new lecturer but useless by the programme director:

- *Student interactions with academic advisors;*
- *Student learning gain in subject-matter competences (e.g. by comparison of knowledge & skills before & after learning phases);*
- *Student learning gain in methodological competences (e.g. by comparison of knowledge & skills before & after learning phases);*
- *Student learning gain in learning strategies (e.g. by comparison of knowledge & skills before & after learning phases);*
- *Student learning gain in self-competences (e.g. self-determination; capability of decision & learning; flexibility of action; ability to reflect; sovereignty) (e.g. by comparison of knowledge & skills before & after learning phases)*.

The following items were regarded as indispensable by the participant from senior management, useful by the new lecturer and useless by the programme director:

- *Student interactions with faculty (e.g. communication, work) outside of class & coursework;*
- *Freshman satisfaction with study experience;*

- *Student learning gain in social competences (e.g. team, communication & leadership; competences; empathy; ability to cooperate; ability to solve conflicts) (e.g. by comparison of knowledge & skills before & after learning phases);*
- *Possibility of inclusion of work experience & elements related to work practice;*
- *Employer satisfaction with graduates*.

4.1.2 Perceptions of whether performance is monitored

Participants had varied awareness of whether data on performance indicators is actually collected at BCU (see Table 7 below).

Table 7: Awareness of whether monitoring is applied

Participant	Regularly collected	Occasionally collected	Never collected	Not completed	Total
Programme director (English)	17	2	12	0	31
New lecturer (Psychology)	12	14	5	0	31
Senior manager (learning and teaching development)	14	5	8	4	31
Senior manager (learning and teaching quality) Faculty A	11	12	8	0	31

4.2 Teachers

Lecturers had different views on the usefulness of performance monitoring. For the new lecturer, only the following items were regarded as indispensable were thought to be applied regularly:

- *Learning diversity offered with respect to course structures to do justice to different learner types & learning processes;*
- *Student interactions with academic advisors;*
- *Teaching staff feedback to students (e.g. on work in progress, test, completed assignments);*
- *Student workload;*
- *Provision of training in study skills & self-regulated learning techniques;*
- *Design & adjustment of teaching & assessments/examinations to defined intended learning outcomes;*
- *Student learning gain in methodological competences (e.g. by comparison of knowledge & skills before & after learning phases).*

For the new lecturer, four items are regarded as indispensable but not thought to be applied:

- *Teaching staff methodological competences;*
- *Teaching staff encouraging students' autonomous thinking & acting;*
- *Fostering sustainability values (social, ecological, economical);*
- *Quality personal (bespoke) learning*.

One item of data, *Employer satisfaction with graduates*, was regarded as useful but not thought to be collected.

The programme director regarded the following items of data as being useful but thought they were not collected:

- *Fostering sustainability values (social, ecological, economical);*

- *Quality flexible learning (flexibility in the requirements, time & location of study, teaching, assessment & certification);*
- *Quality mobile learning (learning across multiple contexts, through social & content interactions, using personal electronic devices);*
- *Quality personal (bespoke) learning;*
- *Alumni satisfaction with study experience/student life cycle.*

Both lecturers regarded the item *Quality personal (bespoke) learning* as indispensable or useful but not data that was collected.

4.4 Senior management

4.4.1 Usefulness of monitoring

There are differences in the perceptions of the usefulness of performance monitoring between the participants from senior management. The senior manager from learning and teaching development regarded most items as either indispensable or useful in equal measure whilst the senior manager from Faculty A regarded the majority of items as indispensable.

4.4.2 Awareness of monitoring

There are differences between the awareness of participants from senior management as to whether monitoring is applied. The senior manager from Faculty A thought that twelve items were monitored whereas the senior manager from learning and teaching development thought that only five were monitored.

The senior management participant regarded two items of data as indispensable but never collected:

- *Teaching staff subject-matter competences;*
- *Student learning gain in self-competences (e.g. self-determination; capability of decision & learning; flexibility of action; ability to reflect; sovereignty) (e.g. by comparison of knowledge & skills before & after learning phases)*.

This participant regarded six items of data as useful but never collected:

- *Compatibility of studies & work (e.g. flexible models for adapting study times to working hours);*
- *Recognition of non-academic achievements;*
- *Fostering sustainability values (social, ecological, economical);*
- *Quality mobile learning (learning across multiple contexts, through social & content interactions, using personal electronic devices)*;
- *Quality personal (bespoke) learning;*
- *Alumni satisfaction with study experience/student life cycle.*

4.5 Additional assessments by active SQELT project participants

A set of further items was reviewed by the senior manager in Learning and Teaching Development.

Table 8: Items regarded as indispensable

Learning resources	Diversity of courses offered (with respect to topics, class options & sizes, time, place, lecturers, etc.) to guarantee that the study programs can be completed within the regular time period

Facilities & equipment	Quality of IT services
	Quality of laboratory facilities
Supportive environment	Provision of student support to succeed academically
	Quality of learning support services (e.g. tutoring services, writing centre, student exchange centre, learning management system) (PDRLA)
	Measures of encouraging contact among students from different backgrounds (social, ethnic, religious, etc.)
	Provision of opportunities for students to be involved socially
	Provision of student support for managing non-academic responsibilities (e.g. work, family, etc.)
	Equity student support
	Institutional recognition of teaching
Student interactions	Student interactions with student services staff (e.g. career services, student activities, housing, etc.)
Stakeholder participation in L&T quality development & evaluation	Student participation in student evaluations of courses & teaching (SECT)
	Student participation in decision-making related to student evaluations of courses & teaching
Teaching staff workload	Teaching workload of teaching staff
Quality teaching & teaching staff engagement	Teaching quality in general
	Quality organization of course sessions
	Teaching staff respect & interest for students
	Teaching staff pedagogical knowledge & skills (e.g. knowledge of teaching models & learning processes)
	Teaching staff sensitivity to class level & progress
	Teaching staff social competences (e.g. team, communication & leadership competences)
	Bedside teaching (medicine) (e.g. concerning mentoring, suitability of rooms & variety of diagnostic techniques applied)[14]
	Integration of pre-clinical/theoretical & clinical courses (medicine)[15]
	Quality skills labs & training centers (e.g. maintenance, accessibility, technical facilities, mentoring) (medicine)
	Teaching staff satisfaction with teaching quality
Quality learning & student engagement	Course quality
	Student experience of learning quality in general
	Integration of practical experience with patient contact into the study program (medicine)
	Student engagement in general
Constructive alignment of programs/ courses	Clearly formulated intended learning outcomes (e.g. goals of study modules & courses)
	Teaching staff awareness of existing intended learning outcomes

Assessment quality	Fairness of assessments/examinations
	Timeliness of assessments/examinations
Employability	Academic & career counselling for students

Table 9: Items regarded as useful

Learning resources	Quality organization of study programs (e.g. transparency of entrance requirements/admission regulations, access to classes, average class size, completeness of courses offered compared to the study guide, transparency of the examination system)
	Opportunity offers for studying abroad
Teaching resources	Possibility of inclusion of Bachelor study periods abroad
	Possibility of inclusion of Master study periods abroad
Facilities & equipment	Quality of lecture halls & seminar rooms
Supportive environment	Provision of student support for overall well-being (e.g. recreation, health care, sports, counselling, etc.)
	Quality offer of campus activities & events for students (e.g. performing arts, sports events, etc.)
	Quality offer for students to attend events that address important social, economic, sustainability, or political issues
Student interactions	Student interactions with students
	Student interactions with other administrative staff & offices (e.g. registrar, financial aid, etc.)
	Student experience in discussions with diverse others
Quality learning & student engagement	Development of student competences of self-learning
	Teaching staff assistance in organising peer learning activities
Learning gain	Student learning gain in higher-order learning[16] (e.g. by comparison of knowledge & skills before & after learning phases)
	Student learning gain in reflective & integrative learning (e.g. by comparison of knowledge & skills before & after learning phases)
	Student learning gain in quantitative reasoning (e.g. by comparison of knowledge & skills before & after learning phases)
	Student learning gain in collaborative learning[20] (e.g. by comparison of knowledge & skills before & after learning phases)
	Student learning gain in interdisciplinarity (e.g. by comparison of knowledge & skills before & after learning phases)
	Student learning gain in transdisciplinarity (e.g. by comparison of knowledge & skills before & after learning phases)
Assessment quality	Quality of assessment/examination formats
Contact with work environment	Possibility of inclusion of internships/ phases of practical experience or external projects in the Bachelor curriculum
	Possibility of inclusion of internships/ phases of practical experience or external projects in the Master curriculum

Table 10: Items regarded as useless

Further education & lifelong learning	Mediation of motivation for lifelong learning
Stakeholder participation in L&T quality development & evaluation	Teaching staff participation in student evaluations of courses & teaching
	Teaching staff participation in decision-making related to student evaluations of courses & teaching

5.0 Stakeholders' assessment of quality evaluation instruments

This section of the questionnaire focused on three main areas: teaching and learning competences and processes; learning outcomes, learning gain and their assessment.

5.1 Perceptions of Quality Evaluation tools

5.1.2 Usefulness of evaluation tools

Lecturers and senior managers had different opinions on the use of quality evaluation tools applied at BCU (see Table 11 below). The programme director thought that almost half of the items listed were useless, with only four items being indispensable and four being useful. The new lecturer thought that more items were indispensable or useful but that there were some (four) that were useless. In contrast, the participant from senior management thought that most (eleven) items were indispensable and none were regarded as useless.

Table 11: Perceptions of the use of evaluation tools

Participant	Indispensable	Useful	Useless	Not completed	Total
Programme director (English)	4	4	7	0	15
New lecturer (Psychology)	6	5	4	0	15
Senior manager (learning and teaching development)	7	7	1	0	15
Senior manager (learning and teaching quality) Faculty A	11	4	0	0	15

This data masks differences between the participants' responses and there are three points of particular note. First, only one of the listed tools, *Institutional accreditation (external) of QMS in L&T (program accreditation carried out by HEIs themselves)*, was regarded by all participants as indispensable. Second, of the eleven listed tools that were regarded by the participant from senior management as indispensable, three were regarded as useless by the programme director:

- *Reports generated from Learning Analytics tools such as BlackBoard, Moodle, Desire2Learn (e.g. individual user tracking, course based);*
- *Predictive models for student performance;*
- *Predictive models for student attrition.*

However, the new lecturer regarded all these as indispensable. The new lecturer, in contrast, regarded the item *Learning content interaction generated from Learning Analytics tools such as LOCO-Analyst (e.g. providing insight into individual & group interactions with the learning content)* as useless whereas the programme director regarded it as useful.

Third, the three tools that were regarded by both lecturers as useless were also amongst the four tools regarded by the participant from senior management as being merely useful:

- *Social network analysis generated from Learning Analytics tools such as SNAPP (Social Networks Adapting Pedagogical Practice) (e.g. visualization of student relationships established through participation in LMS discussions);*

- *Individual & group monitoring generated from Learning Analytics tools such as GLASS (Gradient's Learning Analytics System) (e.g. visualization of student & group online event activity);*
- *Discourse analysis generated from Learning Analytics tools such as COHERE (e.g. visualization of social & conceptual networks & connections).*

There was some difference in views as to whether tools listed were applied. The new lecturer believed that more items were applied than did either the programme director or the participants from senior management (see Table 12 below).

Table 12: Perceptions on the application of evaluation tools

Participant	Regularly applied	Occasionally applied	Never applied	Not completed	Total
Programme director (English)	3	4	8	0	15
New lecturer (Psychology)	7	2	6	0	15
Senior manager (learning and teaching development)	7	7	1	0	15
Senior manager (learning and teaching quality) Faculty A	3	5	7	0	15

5.2 Teachers' assessment

The lecturers regarded fewer of the listed evaluation tools as useful and more of them as useless than the participant from senior management.

There was only one evaluation tool that both lecturers viewed as indispensable: *Institutional accreditation (external) of QMS in L&T (program accreditation carried out by HEIs themselves)*.

In addition, both lecturers viewed the following tools as indispensable or useful:

- *Quality procedures of teaching staff recruitment (e.g. responsibilities; recruitment & selection process) for lecturers & associate professors;*
- *Quality procedures of teaching staff recruitment (e.g. responsibilities; recruitment & selection process) for full professors;*
- *Teaching staff peer review or participating observation of courses;*
- *Student self-reports on their dispositions, values & attitudes towards learning, i.e. collection of learner data & pedagogical descriptors (e.g. students' ability in deactivating negative learning emotions, students' learning strategies);*
- *Student dashboards & monitoring generated from Learning Analytics tools such as Student Activity Meter (e.g. visualization of student activity for promotion of self-regulated learning processes);*
- *Learning content interaction generated from Learning Analytics tools such as LOCO-Analyst (e.g. providing insight into individual & group interactions with the learning content);*
- *Student evaluation of assessments/examinations (peer grading).*

Only one item, *Learning content interaction generated from Learning Analytics tools such as LOCO-Analyst (e.g. providing insight into individual & group interactions with the learning content)*, was regarded as useless by the new lecturer and useful by the programme director.

However, there was some difference in the usefulness between the lecturers.

The new lecturer regarded as indispensable the evaluation tool *Student dashboards & monitoring generated from Learning Analytics tools such as Student Activity Meter (e.g. visualization of student activity for promotion of self-regulated learning processes)* and the programme director regarded it as useful.

The new lecturer in Psychology regarded six evaluation tools as indispensable and of these, the programme director regarded most as useless

- *Reports generated from Learning Analytics tools such as BlackBoard, Moodle, Desire2Learn (e.g. individual user tracking, course based)*;
- *Predictive models for student performance*;
- *Predictive models for student attrition*;
- *Accreditation (external) of study programs*;

5.3 Leadership's assessment

Six of the evaluation tools listed were regarded as indispensable by both participants from senior management:

- *Quality procedures of teaching staff recruitment (e.g. responsibilities; recruitment & selection process) for lecturers & associate professors;*
- *Quality procedures of teaching staff recruitment (e.g. responsibilities; recruitment & selection process) for full professors;*
- *Teaching staff peer review or participating observation of courses;*
- *Student self-reports on their dispositions, values & attitudes towards learning, i.e. collection of learner data & pedagogical descriptors (e.g. students' ability in deactivating negative learning emotions, students' learning strategies);*
- *Student evaluation of assessments/examinations (peer grading);*
- *Institutional accreditation (external) of QMS in L&T (program accreditation carried out by HEIs themselves).*

The senior manager from Learning and Teaching Development regarded one item as useless: *Social network analysis generated from Learning Analytics tools such as SNAPP (Social Networks Adapting Pedagogical Practice) (e.g. visualization of student relationships established through participation in LMS discussions)*. This was regarded as merely useful by the senior manager from Faculty A.

5.4 Additional performance indicators

The senior manager in Learning and Teaching Development reviewed a range of further items.

Table 13: Items were regarded

Assessment quality	Peer review or participating observation of student assessments/examinations
	Peer evaluation of assessment/examination protocols

6.0 Stakeholders' assessment of Learning Analytics

6.1 Structured survey about Learning Analytics

Respondents, focus group and interview participants were presented the commonly used definition that 'learning analytics is the measurement, collection, analysis and reporting of data about learners and their contexts, for purposes of understanding and optimizing learning and the environment in which it occurs' (Siemens 2011a; HEC 2016, p. 4).

Respondents were then asked whether learning analytics is put into practice in their HEI. The answer options were 'Yes', 'No', and 'Cannot answer, because …'

Further questions about learning analytics only were addressed by those respondents who answered the question in the affirmative whether Learning Analytics is put into practice in their HEI. The approached stakeholders (students, teaching staff, QM staff, and HEI leadership) were asked to discuss in focus groups and/or fill in a questionnaire about certain items relating to learning analytics, which are depicted in Table 4. The question was 'Which of the listed functions of learning analytics are realized in your HEI?' Respondents were also asked to give some information and detail about their answer.

6.2 Implementation of Learning Analytics at BCU

Asked if learning analytics are implemented at the University, there were various responses, but most agreed that data was collected and used in order to inform learning and teaching activity. The new lecturer in Psychology observed that it is 'unclear – ambiguous. It is difficult to assess whether we as an institution collect the data. It's obvious that some data is collected but bypasses me as an individual'. The programme director in English similarly observed: '[I] cannot answer, because not consistent across departments, Schools and Faculties'.

The senior manager in Learning and Teaching Development highlighted the range of work undertaken within the University to enhance aspects of the student experience. These are largely supported by external organisations such as HEFCE and the HEA. For this participant, learning analytics is about supporting improvements to the student experience rather than specifically learning and teaching.

There is clearly a vast array of data collected but the representative of the office for planning argued against making simplistic judgements or comparisons on the basis the data. Learning analytics was much more complex than making simple judgements about individuals from existing data, for example, the use of the library or student attendance. Of particular concern, he noted was a tendency to make judgements about ethnicity, commuter students and student progress: he felt that ethnicity masked a range of issues that were more likely to be related to socio-economic background.

Several issues were listed relating to the current collection of data at the University.

> We collect data but not in one place – different parts of the university collect data. For example, student attendance is separate. (Senior manager, Faculty B)
>
> We have a system called 'MySRS Portal' from the Registry. This has lots of details about the students – A-level results, etc. However, it does not include student attendance, usage of Moodle. The data is simple records. (Senior manager, Faculty B)

6.2.1 Surveyed functions of Learning Analytics

Supporting the quality improvement of courses:

Rigorous QA processes in place. (New Lecturer, Psychology)

Supporting the improvement of course design:

More consideration given to off-campus learning and 'commuter students' (Programme Director, English)

Multiple sources of support for course design, input from various stakeholders. (New Lecturer, Psychology)

Supporting the monitoring of students learning progress (stages):

Monitoring student progression and retention (Programme Director, English)

We don't make use of the data we collect on students. (Senior manager, Faculty B)

Supporting the prediction of student learning effectiveness/success:

Monitoring the relationship between A-level grades and student progression and retention (Programme Director, English)

Supporting the identification of students' failures of study:

Trying to identify patterns in failures of progression and retention (Programme Director, English)

Supporting the identification of deficits in learning support for students:

Identifying what, if anything, might be holding back achievement levels in certain groups eg. BAME (Black, Asian and Mixed Ethnic) students (Programme Director, English)

Supporting the targeted counselling of individual students:

Monitoring attendance at classes, which is regularly linked to achievement levels (Programme Director, English)

The use of learning analytics is for individual students – what are the needs of the individual student? If, for example, a student has a problem with maths, how can this be addressed in a way tailored to that student? Personalisation of the student's learning journey. (Senior manager, Faculty B)

In which ways could/can you participate in the development of Learning Analytics?

In development of appropriate measures and indicators, and in evaluating LAs in practice. (New Lecturer, Psychology)

Through departmental meetings, course validation, te tutorial system (both pastoral and academic) and the Course leadership structures (Programme Director, English)

Who actually inputs the data? It's often administrators with no understanding of wider needs of the data. [Systems created with no engagement of academic staff.] (Senior manager, Faculty B)

Which ethical framework or policy for Learning Analytics is available at your HEI?

> GDPR with reference to data held (Programme Director, English)

How are appropriate data access controls ensured for different stakeholders?

> Via job descriptions and the resultant access to various databases and via training courses (Programme Director, English)

6.2 SWOT analysis

Finally, the respondents were asked, which strengths, weaknesses, threats and opportunities (SWOTs) they see for Learning Analytics, and how the they would strategically deal with them. Particularly, they were asked the questions listed in Table 14.

Table 14: Preliminary SWOT analysis questionnaire for Learning Analytics

What are, in your view, strengths of Learning Analytics?
What are, in your view, weaknesses of Learning Analytics?
What are, in your view, opportunities & threats of Learning Analytics?
What are, in your view, threats of Learning Analytics?
What ideas do you have using the strengths to overcome the weaknesses?
What ideas do you have using the strengths to exploit the opportunities?
What ideas do you have using the strengths to avoid the threats?

The responses were as follows:

Strengths

The participants suggested several strengths of learning analytics:

> Learning analytics can be ‘useful in understanding patterns, trends and developments’. (New Lecturer, Psychology)
>
> Learning analytics ‘can give some insights into patterns that can help in planning and organising learning and teaching’ (Programme Director, English)
>
> Learning analytics ‘provides intelligence to support early and more accurately targeted interventions in the interests of retention and student success’ (Senior Manager, Faculty A).

Weaknesses

Several weaknesses were highlighted:

> The data is ‘often too complex to interpret’ (New Lecturer, Psychology)
>
> ‘Statistical analysis is only one - usually excessively privileged - form of analysis and the danger is that a statistics driven system becomes blinkered to qualitative analysis and judgement, as opposed to merely quantitative measures.. Another danger is that academics being held responsible for things beyond their control. And being micro managed by external agencies’ (Programme Director, English).
>
> Learning analytics are ‘often marred by poor data quality, i.e. rubbish in, rubbish out!’ (Senior Manager, Faculty A)

We collect data but not in one place – different parts of the university collect data. For example, student attendance is separate. (Senior manager, Faculty B)

Opportunities

Two opportunities were highlighted by participants:

> [There needs to be] more accessible presentation of results for greater uptake. (New Lecturer, Psychology)
>
> Improvements in retention and completion rates as a result of evidence based tutoring (Senior Manager, Faculty A)

Threats

Two main threats were highlighted:

> [There is a] lack of staff engagement because of a) complexities and a lack of understanding, and b) a lack of time in order to develop understanding, implement and use. (New Lecturer, Psychology)
>
> data quality (Senior Manager, Faculty A)
>
> With learning analytics, there is the danger of monitoring and Big Brother. There are benefits and drawbacks and it's part of the wider crisis in HE. HE is in a crisis – it is a question of who we are and what we do. (Senior manager, Faculty B)
>
> There is a danger with learning analytics of labelling students when they arrive – for example, a student from a particular BAME background is labelled in a particular way. (Senior manager, Faculty B)

In response to these, suggested approaches were as following:

a) To overcome the weaknesses by/through:

   Making LA outputs more accessible. (New Lecturer, Psychology)

   This can only be done by addressing the way people think about data and statistics and the broader questions of who has responsibility for making qualitative judgements and how that responsibility is earned and recognised and applied. (Programme Director, English)

   root and branch reform and updating of student information systems and simplification of regulations and processes (Senior Manager, Faculty A)

b) Exploit the opportunities by/through:

   using target users to guide refinements of presentation methods. (New Lecturer, Psychology)

c) Avoid the threats by/through:

   ensuring where possible protected allocated time for involvement in such activities. (New Lecturer, Psychology)

   providing key staff at all levels with accessible and actionable intelligence on student behaviours in a timely fashion (Senior Manager, Faculty A)

7.0 Conclusions and recommendations

7.1 Conclusions

Firstly, it is necessary to note that this phase of the project has proven problematic at BCU particularly in respect of recruiting participants for the exercise. While a number of colleagues across the University have been invited to take part, take-up has not been as comprehensive as the research team would have liked. We believe there are two main reasons for this: firstly, many colleagues hold the view that data collection of the nature investigated here is undertaken by discrete departments for the purpose of informing management strategic decisions. While colleagues might have a working knowledge of some aspects of the indicators under consideration, they are often unsure whether data is currently collected. This is evidenced by the responses given by participants. Secondly, a number of colleagues who initially expressed interest in taking part withdrew after being sent the questionnaire. Anecdotal evidence leads us to conclude that the perceived complexity of the questionnaire discouraged their involvement. Indeed, even senior members of staff who did agree to participate were surprised by the granular nature of the questionnaire.

The first point above echoes the identification of current weaknesses highlighted in the BCU Baseline Report (Output 1). These weaknesses largely stem from the dispersed nature of data collection throughout the University. BCU has no dedicated Institutional Research office and current practice is characterised by pockets of practice for specific purposes and people, without a wider understanding of how the institution could benefit holistically. A clearly expressed rationale, following a process of consultation with relevant stakeholders, might be one way to address current issues. This is not an issue that is unique to BCU: in general, universities are driven by uniformity and standardisation, which acts to encourage the development of rigid and not always appropriate systems.

It is also evident from participant responses that knowledge of and relationship with the indicators under consideration are influenced both by academic discipline and role. Unsurprisingly, senior managers were more inclined to view indicators as ‘Indispensible’ or ‘Useful’ when compared with lecturing staff. This perhaps is an indication of a more strategic outlook and understanding of institutional priorities. However, we could also argue that there is a tendency for senior managers to identify all indicators as essential without a full understanding of how they can contribute to quality processes.

The responses also reinforce the assertion that there is recognition at management level that current systems are not working as efficiently as they could and that changes are necessary to respond to international, national and local demands. There is a commitment from senior management to address the current situation and to re-think current practices if necessary. This extends to the notion of ensuring that data becomes available to those who can make best use of it, which is something that the institution has not addressed in its practice to date. It is clear that the University needs to circulate this message to all stakeholders to ensure that all staff are aware of current practices and, more importantly, how such practices can work for them.

7.2 Recommendations

As with the above conclusions, the exercise has served to reinforce some of the recommendations made in the Baseline Report (Output 1). In particular, the following:

> There is a need to **review performance indicators** for learning and teaching, especially in the current context of re-building the institution’s data management system. Stimulation and support in this regard are key expectations of BCU from the SQELT project.

It is also clear that along with the above recommendation, the institution needs to engage with its staff at all levels to ensure that there is full understanding of the reasons that underpin the exercise and clear understanding of how this can benefit all.

The exercise also indicated that there is a level of wariness regarding performance data management and what the collected data might be used for. This reinforces the following recommendation from the Baseline Report:

> There is a need for a balance between data requirements for **compliance** and that which is collected to **support change and improvement.** Compliance and improvement should not be separated but considered as having the same goal. The SQELT project will highlight the different experiences of institutions in this regard.

It is evident that some staff need to be reassured and have confidence in any new protocols introduced. A commitment to an open process that allows staff to express their views in this regard might go some way to allaying fears in this respect.

It is clear from our conversations with stakeholders that, for many, he development of performance data indicators and the collection of associated data are something that does not currently form part of their day-to-day working activities. BCU is well placed to ensure that it engages stakeholders in the development process and provides tools that enable easy access to data that is relevant to stakeholders and which can be used and embedded in their professional activities.

References

HEC [Higher Education Commission]. 2016. *From bricks to clicks. The potential of data and analytics in higher education.* London: Policy Connect.

Leiber, Theodor. 2018. 'Impact evaluation of quality management in higher education: A contribution to sustainable quality development in knowledge societies.' *European Journal of Higher Education* 8(3): 235-248. DOI: 10.1080/21568235.2018.1474775. https://www.tandfonline.com/eprint/jTiwRuTgWZArnpGW3Jcq/full; accessed 19 October 2018.

Leiber, Theodor, Børn Stensaker, and Lee Harvey. 2015. 'Impact evaluation of quality assurance in higher education: Methodology and causal designs.' *Quality in Higher Education* 21(3): 288-311. DOI: 10.1080/13538322.2015.1111007

Ramsenthaler, Christina. 2013. 'Was ist ‚Qualitative Inhaltsanalyse'?' In Martin W. Schnell, Christian Schulz, Harald Kolbe, and Christine Dunger (Eds.) *Der Patient am Lebensende. Eine qualitative Inhaltsanalyse* (pp. 23-42). Wiesbaden: VS Verlag für Sozialwissenschaften.

Siemens, Georg. (2011) Call for Papers of the 1st International Conference on Learning Analytics & Knowledge (LAK 2011). Available at: https://tekri.athabascau.ca/analytics/*;* accessed 19 October 2018.

Schnell, Martin W., and Harald Kolbe. 2013. 'Die qualitative Inhaltsanalyse im Licht der Wissenschaftstheorie.' In Martin W. Schnell, Christian Schulz, Harald Kolbe, and Christine Dunger (Eds.) *Der Patient am Lebensende. Eine qualitative Inhaltsanalyse* (pp. 9-22). Wiesbaden: VS Verlag für Sozialwissenschaften.