



Learning Analytics in UK HE 2017

A HeLF Survey Report

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ABOUT THE HEADS OF E-LEARNING FORUM (HELF)

HeLF was established in 2003 as a UK 'network of senior staff in institutions engaged in promoting, supporting and developing technology enhanced learning' (HeLF, 2017). Each UK Higher Education institution can nominate one representative to HeLF which now has over 130 institutional members.

HeLF has three face-to-face meetings each year on a topical eLearning theme. It also has an active mailing list, which is restricted to HeLF members in order to provide a closed forum for debate on current issues.

HeLF acts as 'an advisory body for national and governmental organisations' such as the UK Higher Education Academy (HEA) and Jisc, on 'issues relating to eLearning institutional strategy and implementation'. It is 'proactive in soliciting responses from such bodies and promoting the views of its membership'.

Enabling collaboration on 'the strategic implications of developing and implementing eLearning', HeLF supports 'the processes by which eLearning strategy can be effectively created, and implemented, including advice, support and co-operation between members' (HeLF, 2017).

More information about HeLF and its activities is available at <http://www.helf.ac.uk/>



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TABLE OF CONTENTS

About the Heads of e-Learning Forum (HeLF)	2
Table of Contents	3
Table of Figures	4
Executive summary	5
Introduction	6
Methodology	6
Results	6
Progression of Learning Analytics implementation	7
Stage of Learning Analytics developments	8
Rate of implementation over the past 2 years	9
Change in level of understanding of senior management	10
Current focus of developments	11
Evidence of return on investment or impact	12
Management of Learning Analytics development	13
Biggest driver	14
Biggest barrier	15
More staff	16
Level of involvement as Head of eLearning	17
Change in this level of involvement	18
Other significant Learning Analytics developments	19
Conclusion	19
References	20

TABLE OF FIGURES

Figure 1: How far has the implementation of Learning Analytics progressed in your university?	7
Figure 2: At which stage are your Learning Analytics developments if you have implemented some Learning Analytics?	8
Figure 3: How has the rate of implementation progressed over the past 2 years?	9
Figure 4: How has the level of understanding of your senior management of the possible benefits and outcomes of implanting Learning Analytics across your institution changed over the past 2 years?.....	10
Figure 5: What is, or do you expect to be, the current focus of developments?	11
Figure 6: Do you have any evidence of return on investment or impact yet?	12
Figure 7: How is the development of Learning Analytics managed?	13
Figure 8: What do you perceive as the biggest driver enabling developments?	14
Figure 9: What do you perceive as the biggest barrier to developments?	15
Figure 10: Have Learning Analytics developments resulted in more staff?	16
Figure 11: What is your level of involvement as Head of eLearning?	17
Figure 12: Would you like more involvement?	18

EXECUTIVE SUMMARY

This report presents the analysis of the Heads of eLearning Forum (HeLF) survey on Learning Analytics in UK Higher Education (HE) in 2017. It is an update on the Learning Analytics survey undertaken 2 years ago in 2015. The key findings from the 53 responses (39% response rate) are:

Implementation

- There has been a rapid change over the past 2 years. Those working towards implementation has nearly doubled from 34% to 66% and partially implemented has increased from 17% to 23%. The percentage that have not implemented at all has dramatically decreased in the past 2 years from 47% to 13% while there is still only 1 university that is fully implemented.
- Nearly a third, 33%, are making quick or steady progress in their rate of implementation but just under half, 46%, are making slow progress.
- The large majority, 83%, has not seen an increase in staff as a result of Learning Analytics developments despite the large increase in those working towards implementation.
- Nearly half, 47%, are at the implementation stage of descriptive – what happened. Just over a quarter, 26%, indicated that they are at the prescriptive stage– how can we make it happen.

Focus

- The focus of developments has changed in the past 2 years towards retention more than learning as it has more than doubled from 17% to 37%. Previously, 59% stated retention and learning were equally important but that has fallen to 37%.

Management

- Over two thirds of universities indicate an improved level of understanding of senior management to the benefits of Learning Analytics. This is encouraging as the 2015 survey found that the majority, 77%, had limited understanding
- Just less than three quarters of responses highlighted that Learning Analytics are managed by a formal project group.

Drivers and barriers

- The key driver enabling developments is leadership, 32%, followed by an increase in knowledge/understanding, 26%
- The key barriers are a lack of knowledge/understanding, 25%, unclear objectives, 21% and lack of funding 19%
- The vast majority, 90%, indicates no evidence of return on investment or impact yet.

Heads of eLearning

- The level of involvement of the Heads of eLearning has remained about the same over the past 2 years. The percentage with some involvement or greatly improved has decreased slightly from 88% to 85%.
- There is an increase to 47% from 40% in 2015 in Heads of eLearning who would like greater involvement with a similar decrease to 51% from 58% in those OK with their level.

INTRODUCTION

This report provides an analysis of the Heads of eLearning Forum (HeLF) survey on the provision, drivers and barriers in the use of Learning Analytics (LA) in UK Higher Education (HE) in 2017. It also considers the impact of LEARNING ANALYTICS on learning and teaching and the role of the Head of eLearning. The report provides a snapshot of current practice and enables an institution to compare itself to the sector. It is aimed at providing an update on the 2015 HeLF survey on Learning Analytics (Newland et al, 2015).

For clarification the definition of Learning Analytics used for the purpose of the survey is the one stated in the 2013 Horizon report as the "field associated with deciphering trends and patterns from educational big data, or huge sets of student-related data, to further the advancement of a personalized, supportive system of higher education." (Johnson, L., et al, 2013)

This report is the seventh in a series of surveys of HeLF members that aim to understand and track the changing use of digital technologies in UK HE and their impact on Heads of eLearning. The reports and presentations of earlier surveys on the Electronic Management of Assessment (EMA) 2011 to 2016, Tablet Technologies in 2014, Learning Analytics in 2015 and Learning Spaces in 2016 are available on the HeLF website at: <http://www.helf.ac.uk>

METHODOLOGY

This research on the UK HE levels of implementation and development of LEARNING ANALYTICS is based upon the perceptions of HeLF members on the situation in their own institution. HeLF members have an overview of eLearning strategy, policy and practice in their institution.

The HeLF membership was surveyed online during May/June 2017. All the data has been held anonymously and securely. The results have been analysed using qualitative and quantitative methods.

RESULTS

There were 53 responses from separate institutions, resulting in a response rate of 39% of the total HeLF membership.

The results to each question are given below.

PROGRESSION OF LEARNING ANALYTICS IMPLEMENTATION

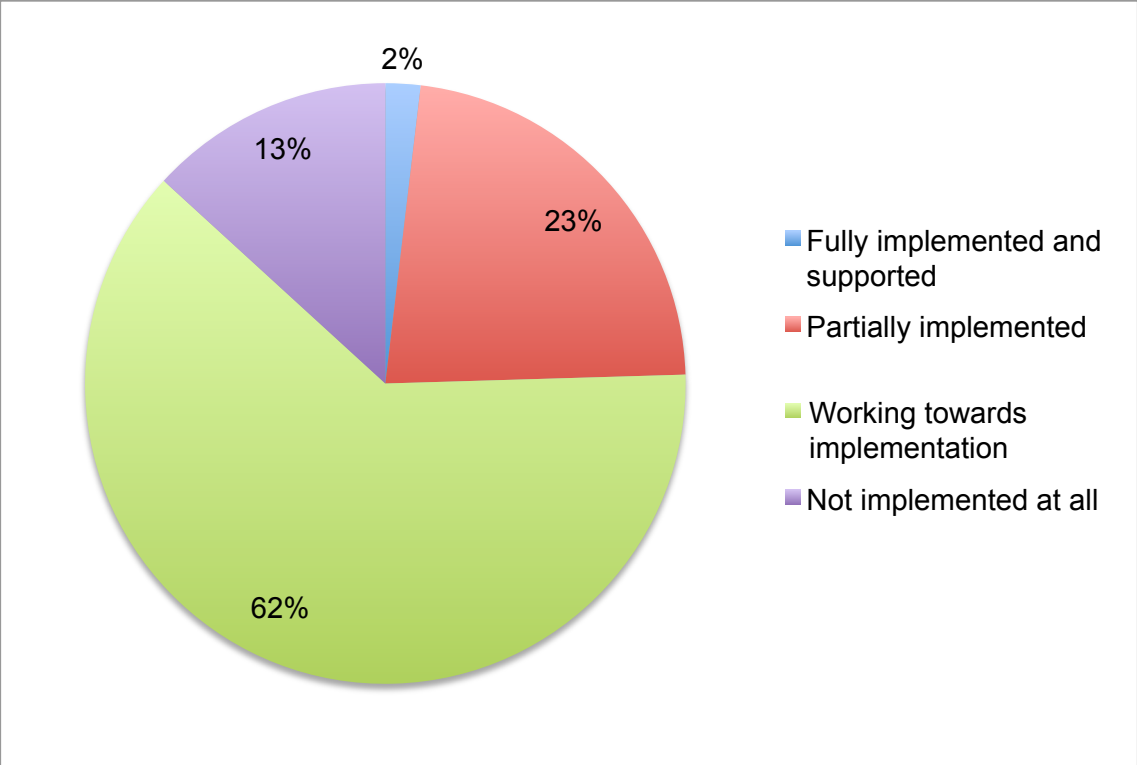


Figure 1: How far has the implementation of Learning Analytics progressed in your university?

	Response – Percentage	Response - Count
Fully implemented and supported	1.9%	1
Partially implemented	22.6%	12
Working towards implementation	66.3%	33
Not implemented at all	13.2%	7
Answered question		53

Just under two thirds of universities are currently working towards implementation of Learning Analytics, 66.3% while 13.2% have not implemented at all. Notably only 1.9% have fully implemented learning analytic solutions with less than a quarter partially implemented. The percentage that have not implemented at all has dramatically decreased in the past 2 years from 47% to 13% while there is still only 1 university that is fully implemented. Those working towards implementation has nearly doubled from 34% to 66% and partially implemented has increased from 17% to 23%.

From additional comments a number of universities appear to be in early pilot phases of implementation. A range of responses referred to working closing with Jisc on their analytic solutions and reference was additionally made to the increased need for metrics relating to TEF.

STAGE OF LEARNING ANALYTICS DEVELOPMENTS

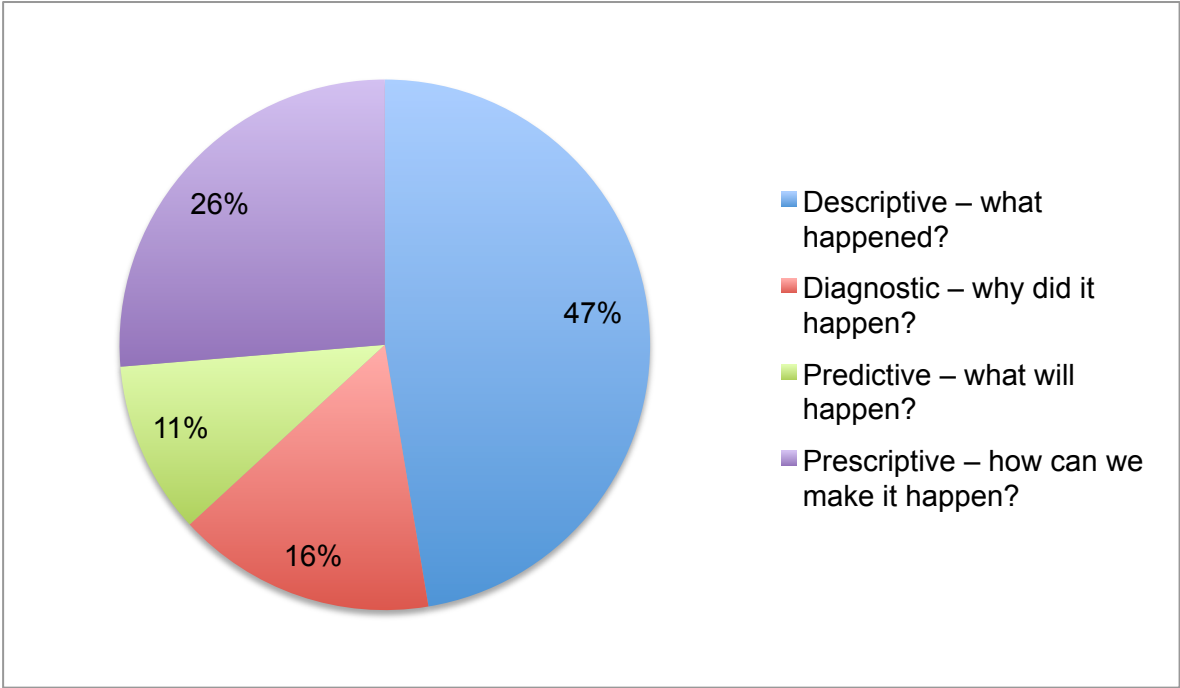


Figure 2: At which stage are your Learning Analytics developments if you have implemented some Learning Analytics?

	Response – Percentage	Response - Count
Descriptive – what happened?	47.4%	18
Diagnostic – why did it happen?	15.8%	6
Predictive – what will happen?	10.5%	4
Prescriptive – how can we make it happen?	26.3%	10
Answered question		38

Nearly half of universities currently using Learning Analytics are at the implementation stage of descriptive – what happened. However, 26.3% of responses indicated that they are at the prescriptive stage – how can we make it happen. From additional comments received there appears to be an emphasis on descriptive/diagnostic categories but other comments interestingly raised the following:

“We regard these as choices rather than developmental stages. The University Directorate is adamant that we only develop descriptive analytics.”

RATE OF IMPLEMENTATION OVER THE PAST 2 YEARS

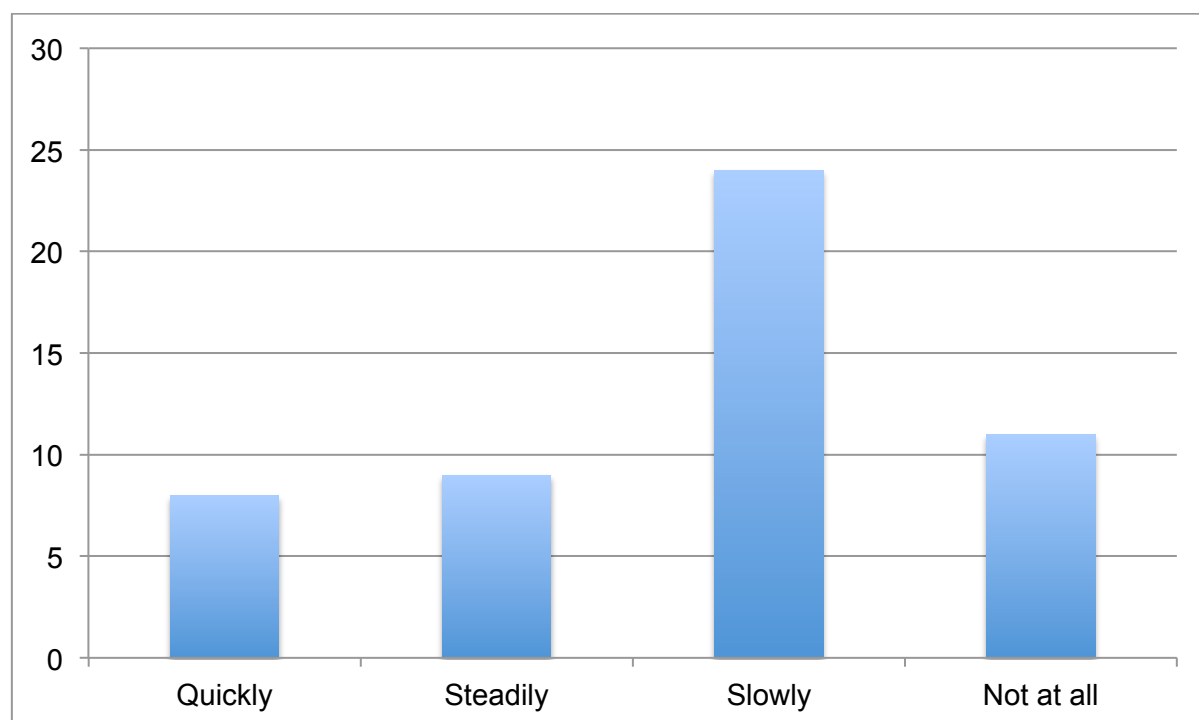


Figure 3: How has the rate of implementation progressed over the past 2 years?

	Response – Percentage	Response - Count
Quickly	15.4%	8
Steadily	17.3%	9
Slowly	46.2%	24
Not at all	21.2%	11
Answered question		52

The majority of responses show a slow implementation of Learning Analytics, 46.2%. In comparison 32.7% are making either quick or steady progress. Learning Analytics appears to be a low priority in only 21.3% of universities. Additional comments appear to indicate a trend towards the need for Learning Analytic solutions:

“Nothing in the past 5 years and suddenly moved to the top of the agenda.”

CHANGE IN LEVEL OF UNDERSTANDING OF SENIOR MANGAGEMENT

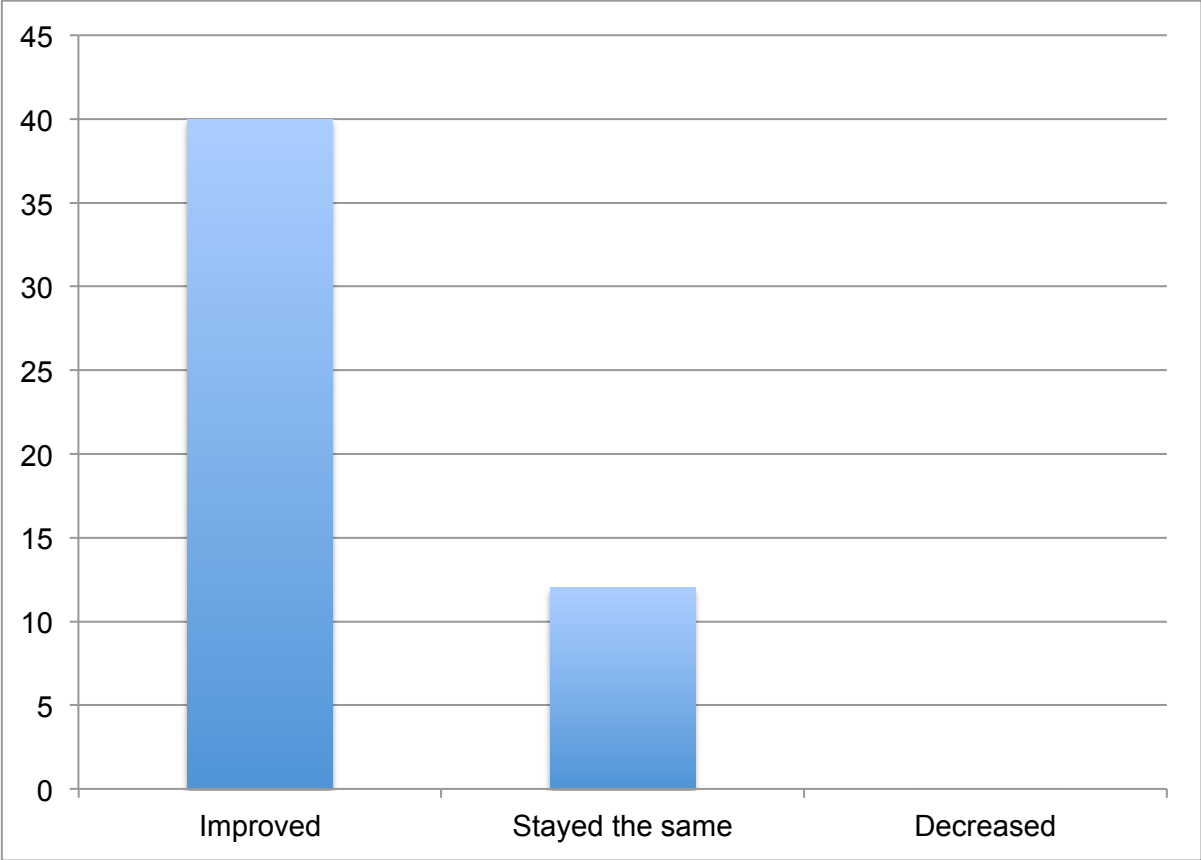


Figure 4: How has the level of understanding of your senior management of the possible benefits and outcomes of implanting Learning Analytics across your institution changed over the past 2 years?

	Response – Percentage	Response - Count
Improved	76.9%	40
Stayed the same	23.1%	12
Decreased	0.0%	0
Answered question		52

Over two thirds of universities indicate an improved level of understanding of senior management to the benefits of Learning Analytics. This is encouraging as the 2015 survey found that the majority, 77%, had limited understanding. Interestingly no responses indicated a decrease in understanding, which could have occurred with a change in senior management. Additional comments included:

“This is very high on the agenda.”

“TEF is starting to focus minds”

CURRENT FOCUS OF DEVELOPMENTS

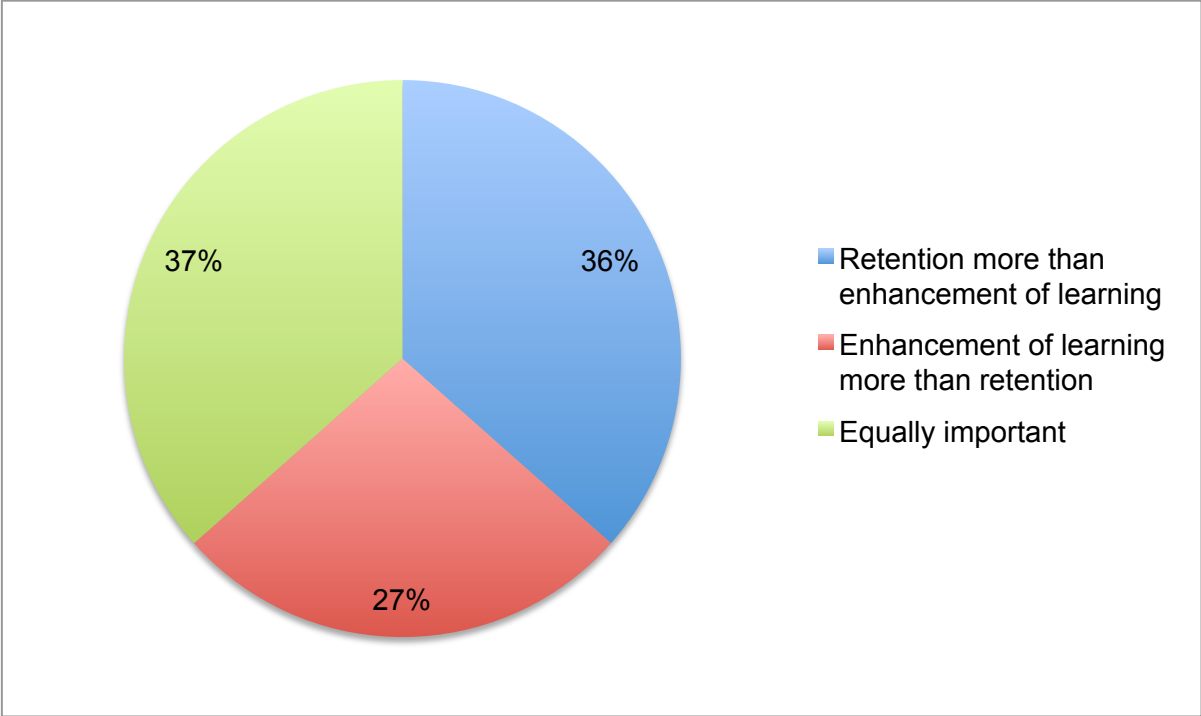


Figure 5: What is, or do you expect to be, the current focus of developments?

	Response – Percentage	Response - Count
Retention more than enhancement of learning	36.5%	19
Enhancement of learning more than retention	26.9%	14
Equally important	36.5%	19
Answered question		52

Although 36.5% of responses relate to LEARNING ANALYTICS to support retention a further 36.5% indicated that LEARNING ANALYTICS to support enhancement of learning was equally important. The focus has changed in the past 2 years towards retention, which has more than doubled, from 17% to 37%. Previously, 59% stated retention and learning were equally important but that has fallen to 37%. The enhancement of learning more than retention has remained nearly the same with 25% in 2015 and 27% now.

Additional observations relating to the question:

“The focus of development is on a personal tutor dashboard to inform conversations with students on an individual basis - whether retention or achievement.”

EVIDENCE OF RETURN ON INVESTMENT OR IMPACT

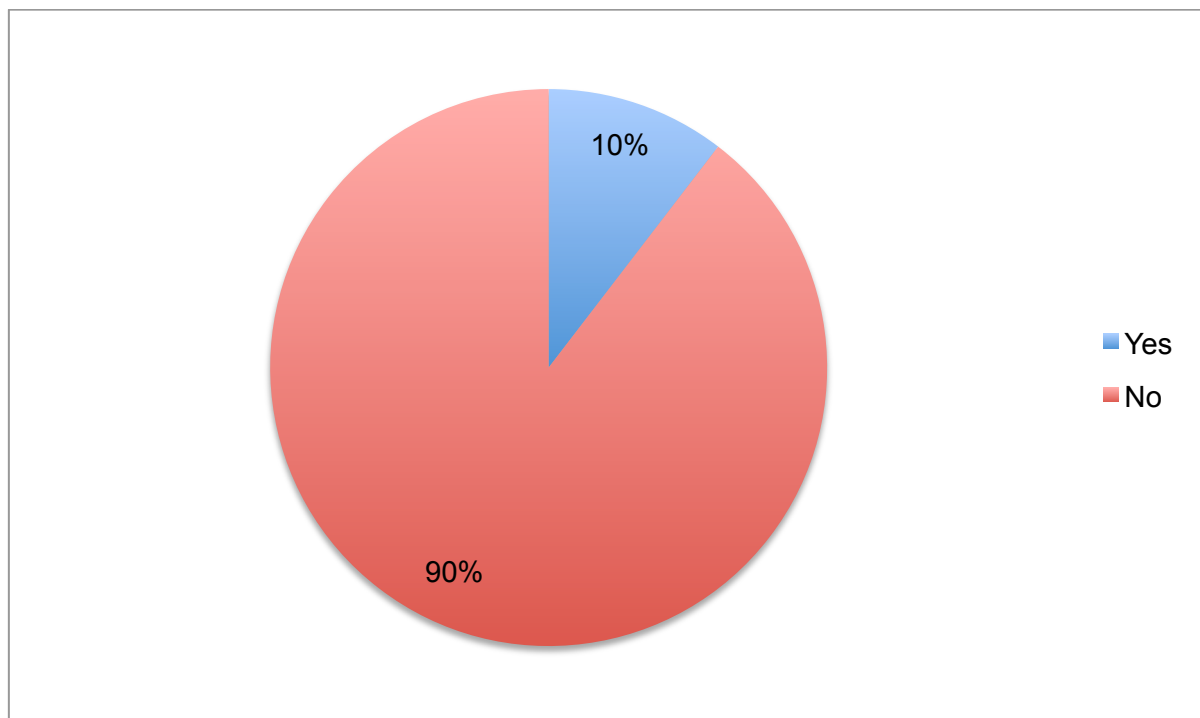


Figure 6: Do you have any evidence of return on investment or impact yet?

	Response – Percentage	Response - Count
Yes	10.4%	5
No	89.6%	43
	Answered question	48

The vast majority of responses indicate no evidence of return on investment or impact yet. Additional comments provided highlighted that a lot of universities are still in pilot stages of Learning Analytic projects/solutions, which would obviously impact on the response to this question.

MANAGEMENT OF LEARNING ANALYTICS DEVELOPMENT

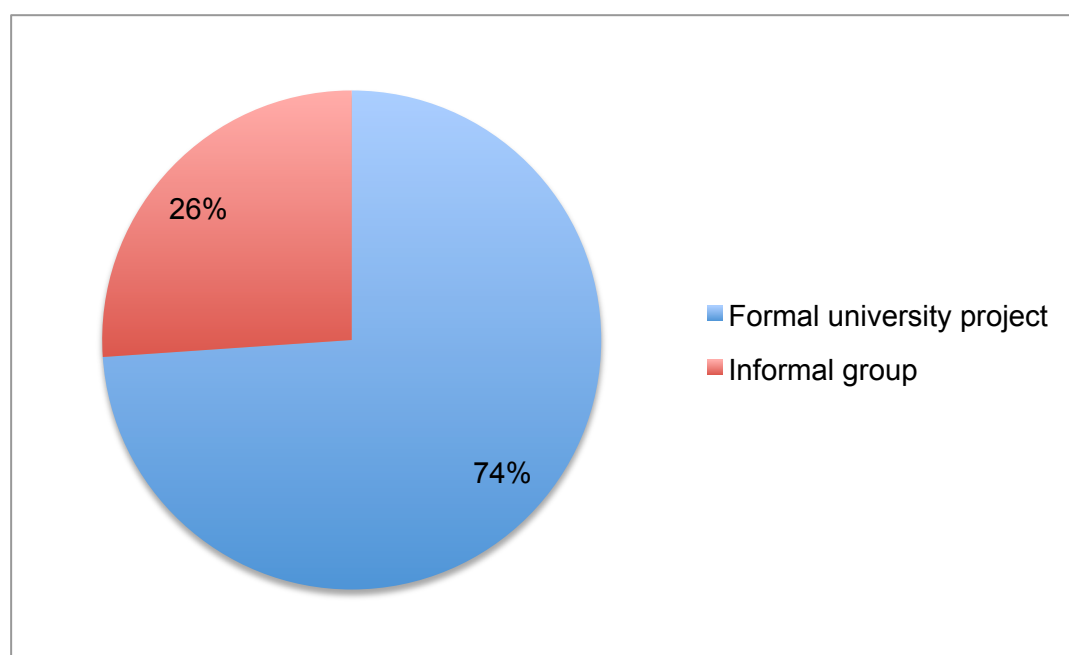


Figure 7: How is the development of Learning Analytics managed?

	Response – Percentage	Response - Count
Formal university project	73.9%	34
Informal group	26.1%	12
Answered question		46

Just less than three quarters of responses highlighted that Learning Analytics are managed by a formal project group. Additional observation can be made from additional comments provided:

“Formal project led by Learning Enhancement and Development with cross-institution representation from other key service areas and academics.”

Learning Analytic project management may be focused at a specific level i.e. EMA or module evaluation.

“Not centrally joined up. Pursued at different levels by different people.”

BIGGEST DRIVER

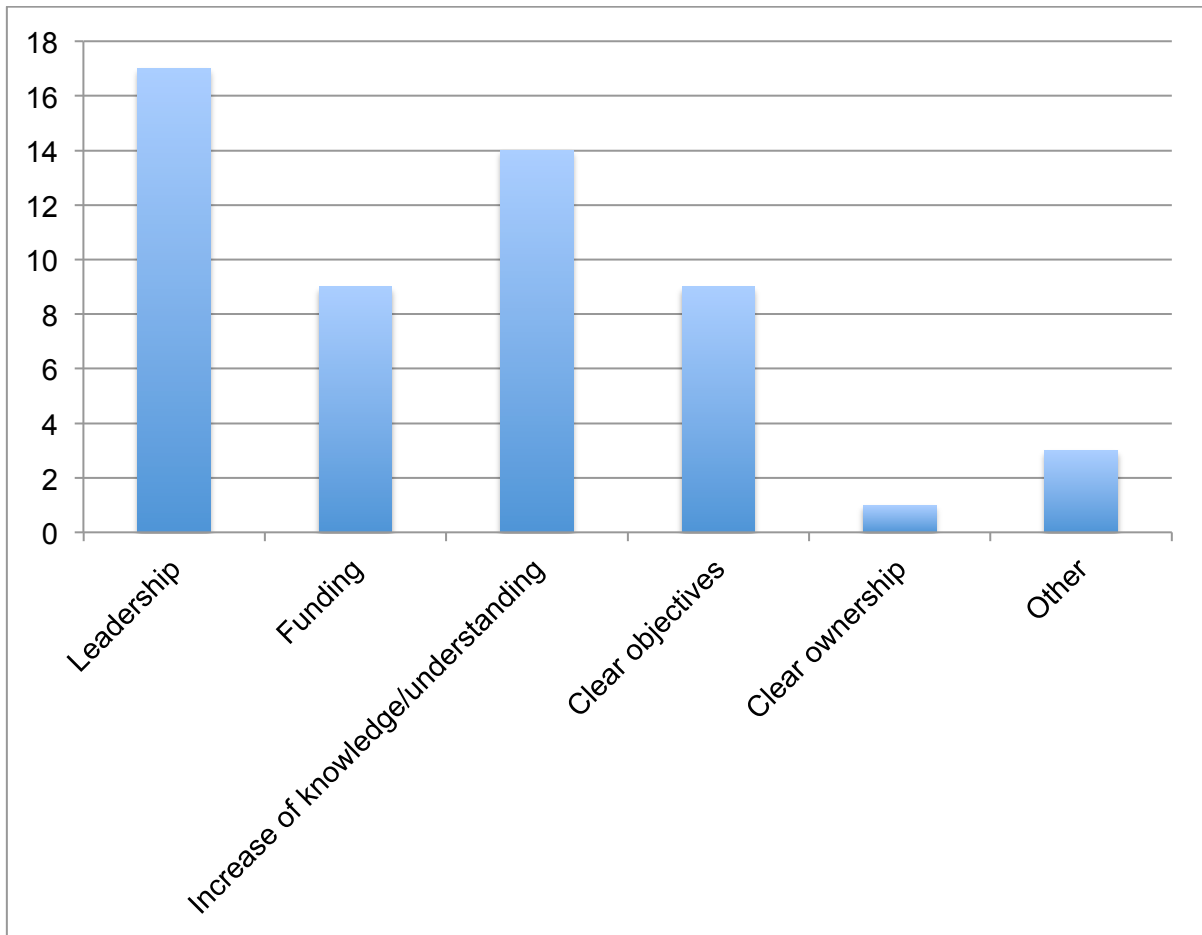


Figure 8: What do you perceive as the biggest driver enabling developments?

	Response – Percentage	Response - Count
Leadership	32.1%	17
Funding	17.0%	9
Increase of knowledge/understanding	26.4%	14
Clear objectives	17.0%	9
Clear ownership	2.0%	1
Other	5.7%	3
Answered question		53

Responses indicate that leadership is the key driving factor in enabling of Learning Analytic developments with a further 26.4% expressing a general need for better knowledge/understanding within the university. Additional comments:

“Student experience demands. Everyone else is doing it.”

There is an assumption that everyone is doing Learning Analytics which drives further demand.

BIGGEST BARRIER

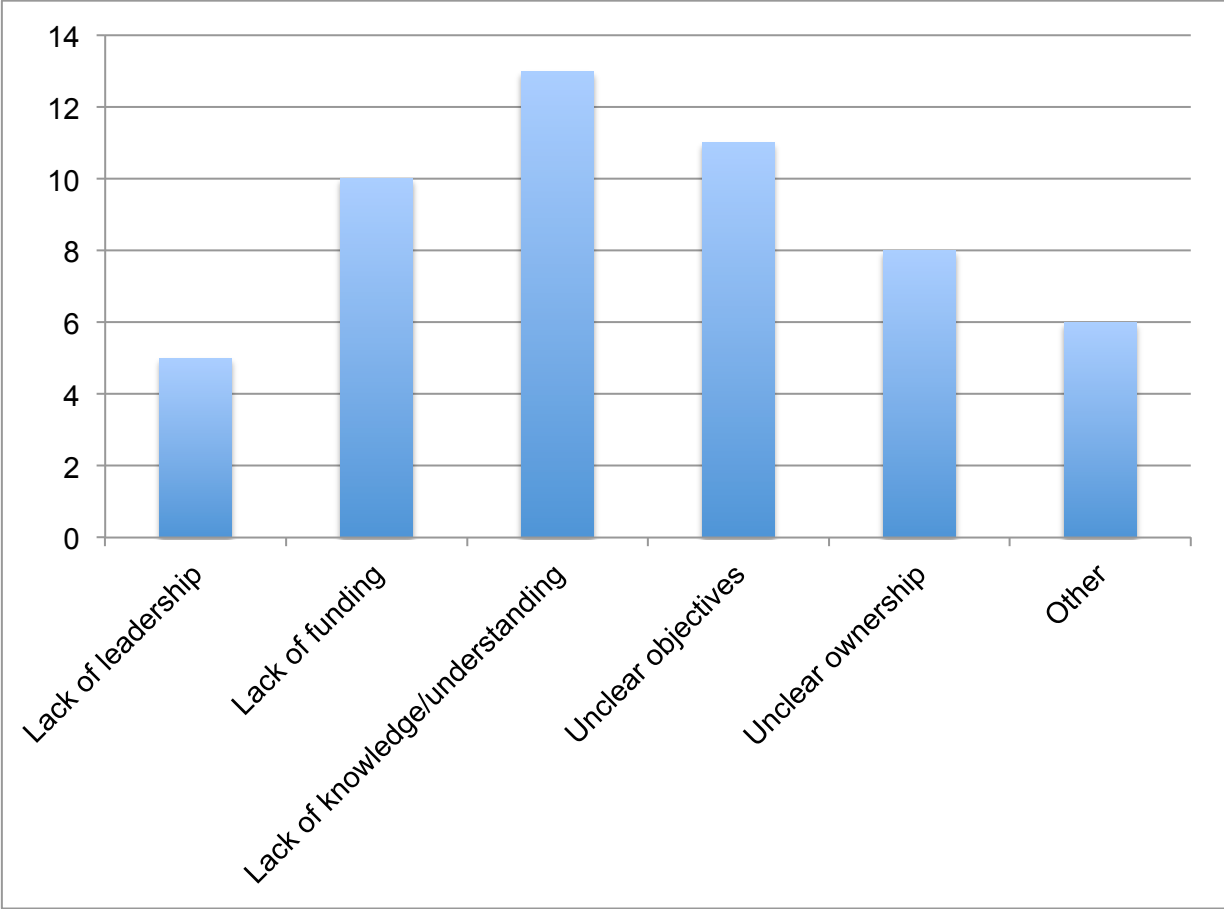


Figure 9: What do you perceive as the biggest barrier to developments?

	Response – Percentage	Response - Count
Lack of leadership	9.4%	5
Lack of funding	18.9%	10
Lack of knowledge/understanding	24.5%	13
Unclear objectives	20.7%	11
Unclear ownership	15.1%	8
Other	11.3%	6
Answered question		53

Lack of knowledge/understanding (24.5%) and unclear objectives (20.7%) are the key perceived barriers to developing Learning Analytic solutions. Lack of full understanding of the potential of Learning Analytic solutions may be leading to unclear objectives.

Additionally, response comments highlighted resource constraints and the complexity of Learning Analytics in general:

“Having the resource to match ambition within the organisation.”

“Complexity of the whole area.”

MORE STAFF

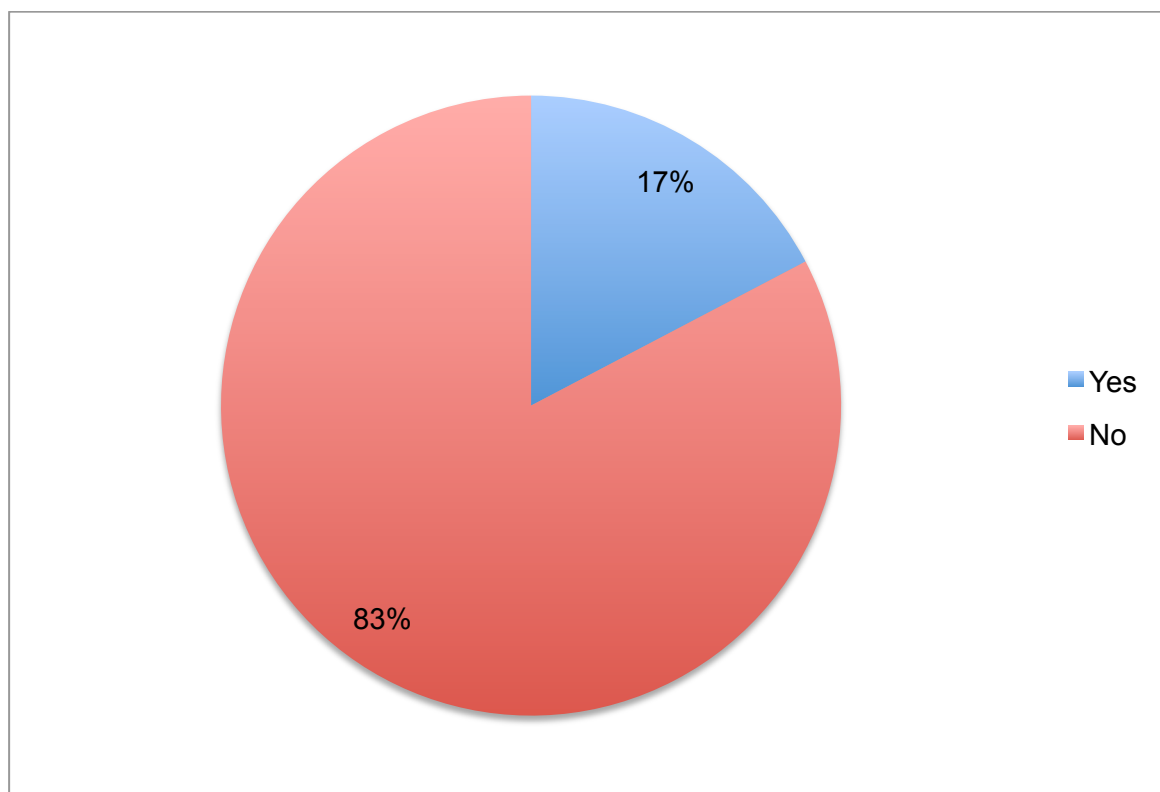


Figure 10: Have Learning Analytics developments resulted in more staff?

	Response – Percentage	Response - Count
Yes	17.3%	9
No	82.7%	43
	Answered question	52

Although two thirds of Learning Analytic activity appears to have formal project groups; 82.7% of responses indicate that they have not seen more staff employed to implement Learning Analytic developments. Comments:

“Not yet but we acknowledge this may be necessary for reporting and analysis.”

“The project is in the early stages - project manager in place and likely to be more staff in the future.”

LEVEL OF INVOLVEMENT AS HEAD OF ELEARNING

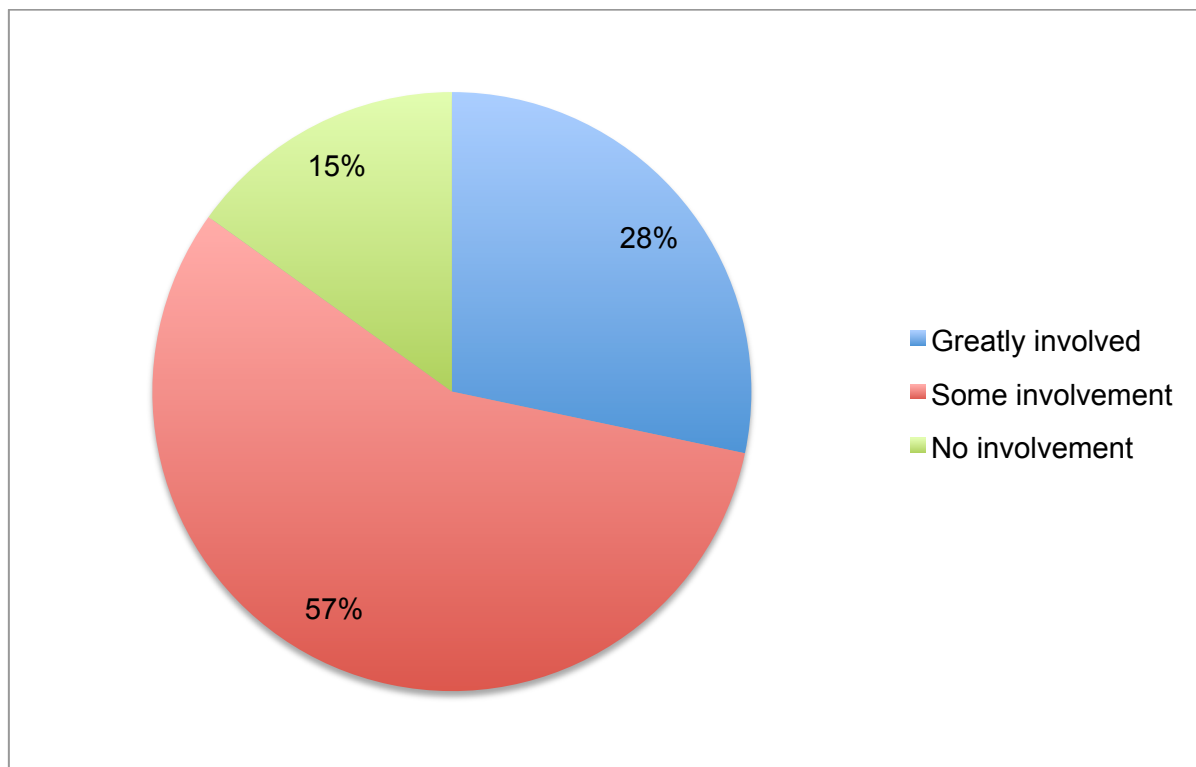


Figure 11: What is your level of involvement as Head of eLearning?

	Response – Percentage	Response - Count
Greatly involved	28.3%	15
Some involvement	56.6%	30
No involvement	15.1%	8
	Answered question	53

84.9% of Heads of eLearning have some involvement or are greatly involved with Learning Analytics in their university. Although a high response rate, additional comments provide a greater insight:

“Involved where VLE data is discussed.”
“I have had very limited involvement, less than I would like.”
“We provide TEL systems data re uptake by staff and students”

The level of involvement of the Heads of eLearning has remained about the same over the past 2 years. The percentage with some involvement or greatly improved has decreased slightly from 88% to 85%.

CHANGE IN THIS LEVEL OF INVOLVEMENT

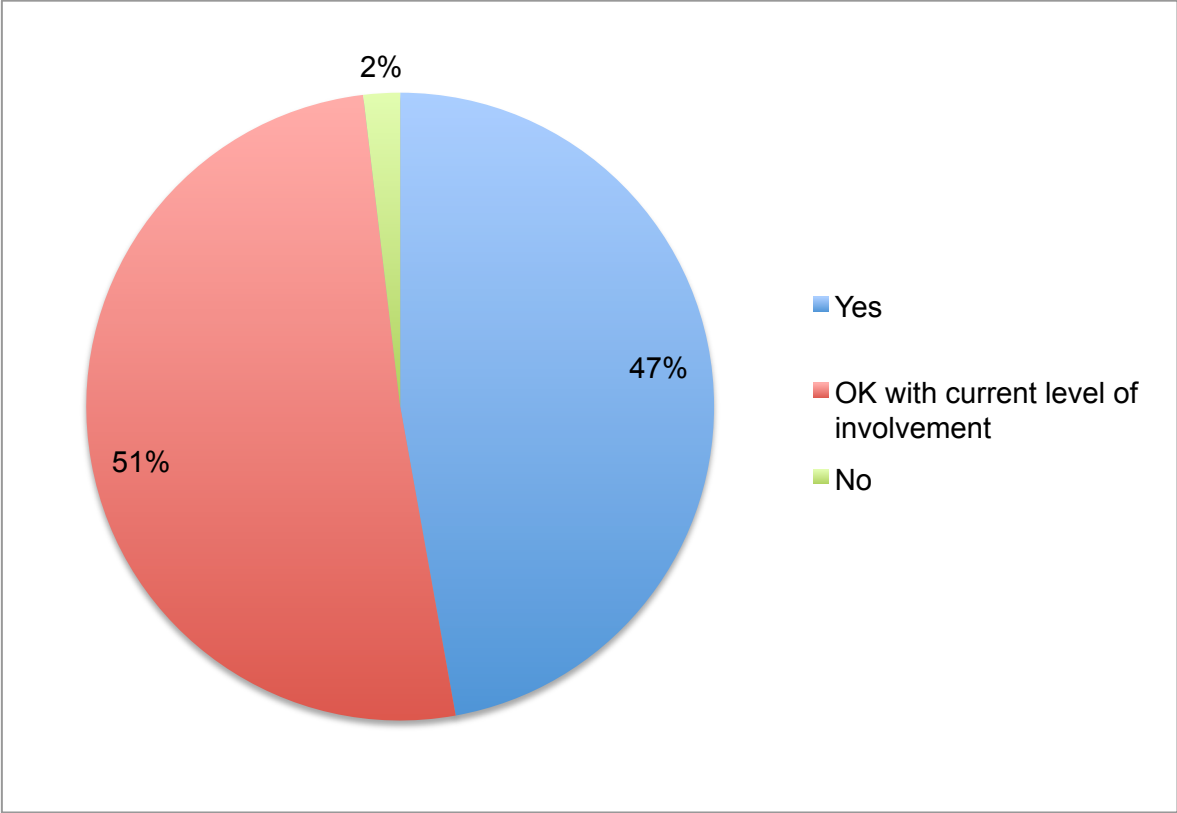


Figure 12: Would you like more involvement?

	Response – Percentage	Response - Count
Yes	47.2%	25
OK with current level of involvement	50.9%	27
No	1.9%	1
Answered question		60

There appears to be a wish for greater involvement, 47.2%, however over half of Heads of eLearning responses indicated that they were OK with the level of involvement in their university. This shows an increase in wanting greater involvement compared to the 40% in 2015 with a similar decrease to those OK with their level of involvement of 58% in 2015.

Comments provided additional insight relating to the question:

“I look forward to a more joined up approach. I do not want academic staff thinking TEL systems are watching and ‘judging’ them. We need TEL to be about helping.”

“What is developed and who ‘owns’ it has become a political issue within my institution - to the detriment of the outcome I feel.”

OTHER SIGNIFICANT LEARNING ANALYTICS DEVELOPMENTS

There were 9 responses that provided further information about other significant Learning Analytics developments that were not included in the survey.

The other most significant development is that some universities are part of the HEFCE funded Catalyst projects looking at Learning Analytics for academics and students. Another university is employing a developer/programmer to collate the analytics and provide a dashboard. One HeLF representative stated that:

“After 2yrs of pushing for LEARNING ANALYTICS there finally seems to be some funding being made available, although now we have been frozen out of discussions and the project has been assigned elsewhere!?”

CONCLUSION

Learning analytics developments have increased rapidly over the past 2 years although they are still in the early stages. A large majority, 89%, of universities has now either partially implemented or is working towards implementation. This situation in the UK is similar to the EDUCAUSE Learning Initiative (ELI) findings which state “Although most colleges and universities have shown interest in Learning Analytics, much of the work remains at an early stage” (ELI, 2017). Despite the increase in developments, nearly half of the Heads of eLearning perceive the rate of progress as slow.

The current implementation stage of LEARNING ANALYTICS developments is on descriptive, - what happened, 47%, and prescriptive – how can we make it happen, 26%. The focus of developments has changed in the past 2 years towards retention more than learning as it has more than doubled from 17% to 37%. Previously, 59% stated retention and learning were equally important but that has fallen to 37%.

There is an increase in respondents who think that senior management understands the benefits of Learning Analytics; however, there appears to be little evidence to support a return on investment in the use of Learning Analytics at the time of this survey. From responses received it appears that projects are still at pilot or early stages of implementation, over time it will be interesting to observe if current perceptions and outcomes change. The majority of universities appear to have formal project groups working on Learning Analytics, however, this has not been reflected in a key increase in staffing to support the activity as yet. This position may change as more Learning Analytic projects reach maturity.

The majority of Heads of eLearning, 85%, is involved with Learning Analytic solutions/projects. Although 51% are OK with their current level of involvement, 47% would like more involvement.

The biggest perceived driver for the use of Learning Analytics appears to be university leadership, 32%, followed by an increase in knowledge/understanding, 26%. Interestingly, the biggest barrier is a lack of knowledge/understanding, 25%, followed by unclear objectives, 21% and lack of funding 19%.

Learning Analytics have become increasingly important over the past 2 years and it is an area that will develop further because of its potential to enhance student learning and for the retention and progression of students.

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