OfLA Project
2018-1-UK01-KA203-048090

O6 – Evaluation of First Year Studies

A summary of the current situation, strengths, and challenges at the partner institutions

RESPONSIBLE PARTNER:
NOTTINGHAM TRENT UNIVERSITY

PARTICIPATING PARTNERS:
UMC UTRECHT
ARTEVELDEHOGESCHOOL

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Strategic Partnership: 2018-1-UK01-KA203-048090

Output 6 – Evaluation of First Year Studies

A1. The project team will work with schools/faculties/departments prior to the start of the project to agree the approach.

A2. The project team will work alongside the learning analytics providers (whether internal IT departments or external vendors) to ensure that the resources are stable and can reliably deliver the prompts as required.

A3. Throughout 2018-19, the project team will work alongside course teams. Where possible, we will embed the researchers into the schools/faculties/departments. Each researcher will map the existing advice-giving process: including prompts, communication and support.

- They will conduct interviews with staff to understand how they use data and learning analytics to carry out interventions. They will also carry out interviews with both students who attended and those who did not. They will investigate options for transcribing discussions and analysing the interviews with students and staff.
- Where students and staff grant permission, they will also review communication sent and notes made. The researchers will produce a systems map showing the process of alerts/ early warnings being triggered, communications sent and interventions carried out.

A.4 At the end of the year we will produce reports into the process of giving support based on learning analytics. These reports will include key findings and recommendations for the next year of activity. NTU will take overall responsibility for editing the reports.

This output is a result of the European Erasmus+ project OfLA (2018-1-UK01-KA203-048090)

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1. Executive Summary

This report reflects the research conducted during the 2018-19 academic year to understand the practice of supporting students identified as 'at-risk', predominantly through our learning analytics platform (the NTU Student Dashboard) at Nottingham Trent University (NTU). This process follows three key stages; prompt (or trigger), communication, and support (or intervention). There were three distinct steps taken in order to understand current supportive practice; reviewing existing policy with additional feedback from management staff, reflections of tutoring staff collected in the form of one-to-one interviews, and feedback from students about their experiences of support.

Our review of existing policy illustrates varying practice between the 8 schools at NTU, and interviews with 7 management staff involved in developing policy highlighted some existing strengths and weaknesses. Interviews with 12 tutors regarding their recent experience of supporting students are discussed in depth within this report. A single prompt from the NTU Student Dashboard was commonly received by tutors who had experienced other 'triggers' about a student, and this was more likely to prompt staff action than the other triggers. Communication with an at-risk student is often unsuccessful, however staff have developed strategies for communication through their lived experience, which could inform future policy. The ability to hold a successful intervention with a student varied due to the issue raised, and tutors reflected on the nature of issues changing in recent years, with mental health being a more frequently occurring factor. Findings from student surveys highlighted the importance of tutors taking a personal and supportive approach in motivating them, and changing behaviour for success. Reflections on the interactions that take place between tutor and student are explored, and suggestions are made by students on how to improve the process.

As a result of this research, 8 distinct recommendations are made; from improving the prompt, refining communication, strengthening supportive practice, and ensuring a sustainability of the process overall.

2. Current Processes

2.1 Institutional Context

Nottingham Trent University (NTU) is mainly based in three sites in and around the City of Nottingham, in the East Midlands region of the United Kingdom. It is one of the largest universities in the UK with approximately 26,000 students studying a range of undergraduate and postgraduate courses in a wide range of disciplines. The University's mission is to 'deliver education and research that shape lives and society'.

The University has eight academic schools spread across three main campuses: Animal, Rural & Environmental Sciences, Architecture Design & the Built Environment, Art & Design, Arts & Humanities, Education, Nottingham Business School, Nottingham Law School, Social Sciences and Science & Technology. The University also has an additional campus, the Confetti Institute of Creative Technologies. The academic year is divided into three terms (rather than semesters), and the third term usually has significantly fewer teaching hours, with many student having exams during this term.

UK students currently pay approximately £9,000 per year in tuition fees, paid for in most instances by students taking out loans from the Government. UK students commence their courses through two main routes. They firstly apply through the University & Colleges Admissions Scheme (UCAS). Each university sets a tariff for their courses and in order to be accepted onto that course the university assesses whether or not the student is likely to achieve that tariff based on feedback from the student and their teachers. Because students make their applications before they know their college results, the offers are conditional on them achieving the necessary qualifications. This situation creates the second route, known as clearing. As the students may not achieve the grades that their teachers expect; they may fail or do considerably better than expected, there is a second process that takes place in the third week of August. Here students can apply to universities who still have spaces on their courses. Student tuition fees, paid annually, mean a financial benefit to higher education institutions to attract and retain students. Universities within England are expected to regularly report to the Office for Students on their plans to improve opportunities for student groups that are underrepresented in Higher Education, and are measured against these as well as their provision of a high quality academic experience, value for money, and student outcomes beyond university (employment and further study). It is worth noting that regardless of grade or quality of application, the University will select the successful applicants, rather than grant a place to every single individual that meets specific criteria.

There is no single model of personal tutoring across the University for two reasons: firstly, responsibility is delegated to the faculties, and secondly the courses within each faculty often differ significantly. The personal tutor role is therefore filled by a personal tutor, year tutor or, on small courses, the course leader. In the majority of cases, a tutor is also a member of academic teaching staff. A less common situation is where students may have a designated academic tutor (sometimes also called a mentor) that has not also got a teaching role within the school. Students may meet their tutors individually or in small groups depending on their course. In addition, all teaching staff are expected to provide office hours where students can speak to their tutor about problems with their studies. Where students face more complex challenges, they are referred onwards to specialist help, usually Student Support Services or the Library.

The NTU Student Dashboard is a learning analytics resource that has been developed to support the student experience: to enhance student retention, to improve students' sense of belonging to their course, and to provide students with tools to enhance their academic engagement[1].

The Dashboard generates 'engagement' data for each individual student based on their activities within the University using the already available electronic measures of: attendance, Library loans, Log-ins to NOW (the University's Virtual Learning Environment), Accessing NOW Learning Rooms, Card swipes to NTU buildings, use of E-Resources, and coursework submissions (through the NOW dropbox). Using these measures, the Dashboard algorithm provides an engagement rating for each student for each day of the year based on their

[1] STELA Project Case Study Zero: NTU Student Dashboard.

activity levels: the more a student engages with the resources the higher their engagement rating. The engagement rating can be one of five ratings: High (H), Good (G), Partial (P), Low (L), or Very Low (V).

2.1.1 Dashboard alerts

The engagement data provided by the Dashboard has consistently been shown to be an effective indicator of student progression and attainment within NTU. In 2016-17, for example, 95% of students with High engagement for the first year progressed to the second year, whereas less than 16% of students with Very Low engagement progressed[2]. The Dashboard therefore provides a unique way to identify students that may be at risk of withdrawing from their studies, and this information can be used in different ways by tutors.

Firstly, staff can see an overview of the previous day's engagement of the students that they have access to displayed as a graphic (see Appendix 1) and can easily explore this data further. The 'My Students' page of the Dashboard (Appendix 2) provides staff with further information about each of the students that they have access to such as enrolment status, course year, and the number of notes and alerts recorded. A useful function here is the 'filter' that allows tutors to search for students by, for example, engagement, year, and enrolment status (Appendix 3). Once a student is selected, further information is provided about that student such as name, course, photograph, engagement ratings over a customisable period of time, and attendance for the last 28 days (Appendix 4).

Secondly, if a student has not engaged with any of the resources (as measured by the Dashboard) for 14 days during term time an alert is automatically generated and sent as an email to the student's personal tutor or academic mentor. This is designed to support personal tutors to identify and act upon potentially 'at risk' behaviours of students who may not be engaging with their studies. In 2018-19, 1408 alerts were generated by the Dashboard for 902 students, with just under half of these students (654) generating only one alert (Appendix 5).

2.1.2 Supporting the intervention

Research within the University and across the sector has highlighted the importance of an early relationship with students, of "feeling known" (Thomas, 2012; Foster et al., 2011), to student retention and success. The Dashboard supports the quality of the staff/student relationship by making it easier for personal tutors to know more about their students (and vice-versa) prior to a meeting:

"It gives a focus to one-to-one personal tutor sessions and an easier and broader understanding of student history" (NTU Staff member)

When meeting with an individual student, tutors can add notes to the Dashboard to record any discussions or agreed actions with the student. These are seen by both staff and student, and both can add comments to these notes (Appendix 6). In 2018-19 there were 44,686 staff log ins and 24,258 notes made by staff (see Appendices 6 and 7 for more info) With the consent of students, staff can also make referrals to NTU's Student Support Services directly through the Dashboard, where appropriate.

2.1.3 Students as change agents

On the Dashboard students can see their own engagement activity plotted on a graph alongside the course average engagement data, providing an indication of their engagement against their peers. Students can also see an overview of their attendance, a breakdown of their use of the individual resources that contribute to their engagement calculation, and all assessments and feedback submitted through the NOW Dropbox. In 2018-19, 31,483 students logged in to the Dashboard with a collective total of 390,748 times (see Appendix 7).

[2] NTU Student Dashboard User Guide.

2.1.4 Supporting students

The Dashboard also provides students with information about how to contact their personal tutor or academic tutor, and where to find further support such as personal, academic and technical support. In the Notes pages of the Dashboard, students can see when their tutor has added notes that may be helpful to them, such as actions agreed with their tutor in tutorials. Where tutors have referred students to Support Services through the Dashboard, this can also be seen by the student here.

2.2 Understanding Existing Policy and Guidance

2.2.1 Background and methodology

During the first year of this project, we aim to understand the lived experience for staff and students of using data to identify students who may be 'at-risk' of failure or withdrawal. Before speaking to staff and students directly in order to explore this lived experience, we must first establish what policy framework(s) exist, and what current processes are to be followed.

Our initial work was to review the current policies in place, which is discussed in section 2.2.2. Following this analysis, we aimed to interview a member of 'management staff' from each of the 8 schools, in order to provide more context for each school policy and to understand from this point of view how effective the policies are in shaping practice.

Interviews with 7 of the 8 management staff were conducted, with one school manager being unavailable to speak to. For anonymity purposes, the job titles for these staff members will not be shared, however these staff members have had some input in designing these processes, or are linked to the management of the process and monitoring how it is used in their respective schools. These interviews took place between December 2018 and March 2019, and each interview lasted approximately half an hour.

It is important to note that these interviews were recorded in interviewer note form only. The questions used as part of the structured interviews were designed to understand how tutors are guided to interact with the three stages of the support process (prompt/alert – communication – action/intervention) and to subsequently review the process as a whole. The script was designed collaboratively with the OfLA project team, and was used as a basis for interviews at each institution. A copy of the full interview script can be found in Appendix 9, part 1.

A discussion of policy is found in section 2.2.3, following a review of each school policy, and taking feedback from the management interviews.

2.2.2 Use of the Dashboard across the institution and school specific policies

A policy framework drives the interventions and support given to students, in particular:

- 14 Learning and Teaching: 5 Personal tutoring and tutorials
- 14 Learning and Teaching: 8 Use of learning analytics to support student success
- 14 Learning and Teaching: 7 Student Attendance
- Supplement 14A Attendance Policy Guidance

There is no one central policy for combined attendance and engagement, however there are policies listed above which are 'central' even if not low level. Guidance is that high expectations of student attendance and engagement should be transmitted to students, and that students should be helped to understand the importance of attendance and engagement, and how to manage their own engagement effectively. Each school has developed their own policy for attendance and engagement, and identifying students at risk.

A full breakdown for each of these policies can be found as a table in Appendix 8.

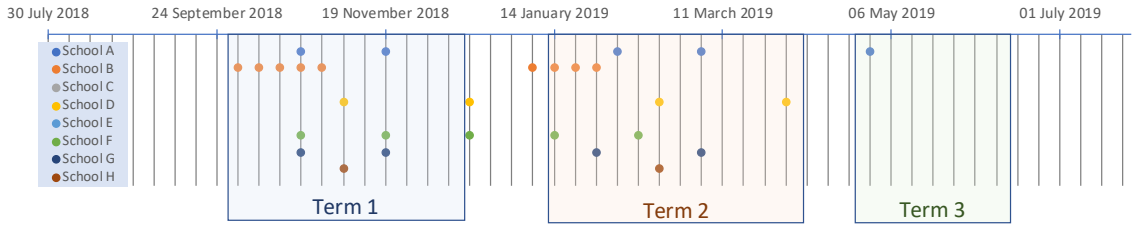
2.2.3 Policy Discussion

This research analysed each of these policies and covers the following areas:

- Considering data sources, most (but not all) schools have focused on attendance.
- Considering trigger levels, four schools have identified a trigger level (such as less than 80% attendance), with some other schools also using other triggers such as engagement and engagement alerts on Dashboard.
- All schools stated an escalation in actions if students did not respond to initial contact. Often the initial contact was with a tutor, and then involved more senior members within the school if students did not respond to the tutor contact.
- Each school has identified who is tasked with looking at the data, and this is often tutors and course leaders.
- The majority of schools first contact students identified as potentially 'at risk' by email, and where there is an escalation of the intervention this is usually by letter.
- Many of the schools state specific times throughout the academic year when they will review data for those students potentially 'at risk'.

Most school policies included a reference to a periodic 'review' (sometimes referred to as a 'mid-term review'). Where this happens, figure 1 below illustrates how these 'review dates' from each school attendance/engagement policy fall across a term, which may clarify further whether there is a consistent pattern of review periods between schools. It should be noted that the third term has significantly fewer contact hours in comparison to the other two terms.

Figure 1: Mid-term review dates, illustrated across the 2018-19 academic year:



No clear pattern is found when comparing review dates between schools; it would appear each school has allocated a review period that works independently to the wider university structure and for that school only. We can however look to improve the content and structure of those reviews. Informal interviews with management staff highlighted that for some schools the mid-term review process could be labour intensive, however, the need for such a process outweighed the issues around staff resource to complete the practice. There is a need for streamlining this process in some schools, to ensure that mid-term review periods can be more efficient and effective for staff.

Comparing school policies also raised further inconsistencies between schools. For example, the length and complexity varied wildly between schools, as did the prescriptive nature of the policies. Some policies acted as guidelines for how a tutor may wish to respond to an alert, while other policies gave step-by-step instruction on how a staff member must proceed if an alert is raised about a student. Those policies that were less prescriptive often resulted in tutors reporting that they were unsure of how to proceed, ultimately leading to less action.

The interviews with management staff from schools with policies that included detailed stages and prescribed actions revealed a confidence within the process that staff with less complex policies lacked. There were however some frustrations that were common in these schools, as staff were less able to use their experience to provide more nuanced support to students.

Schools with complex processes were more likely to highlight the supportive nature of the policy, and reflected on how important this was for a successful intervention. There was however a disadvantage in these cases, in that the lack of a sanction or punitive action made the process much harder to enforce or implement.

In detailing methods of communication, most school policies suggested contact via email to the students university email address. Interviews with the management staff revealed that for some schools, this policy is born not out of preference of contact method, but out of the available data at hand. Some staff reflected how further contact details such as personal email address, phone numbers, or address, would provide staff more options for action that is otherwise unavailable to them.

Finally, whilst most management reflected on their respective policies in a positive sense, many commented that there were few ways to evaluate the effectiveness of the process. Most staff considered the development of more customisable alerts, ability to leave more complicated notes with varying permissions, and additional methods of communication, to be logical next steps in improving their policies. There was a recognition however that discussions with tutors who use the process would need to take place before any firm conclusions for improving policy could be drawn. As part of our research, we have done exactly this, as discussed in section 3.

3. Findings from staff

3.1 Background and Methodology

3.1.1 The NTU Student Dashboard Alerts

The NTU Student Dashboard allows staff to better understand their students primarily through student 'engagement' ratings; produced via an algorithm that processes several distinct proxies for engagement. There are multiple ways in which the University can use engagement data, however teaching staff (referenced as 'tutors' going forward) use this platform primarily for two reasons. Firstly, as this provides a more developed understanding of individual student performance. Secondly, as this detects students who may be 'at risk' of failure or withdrawal, with an 'alert' identifying individual students who have not engaged with their studies over a specific time period. An alert is directed to the tutor, with the aim of informing the tutor of a student being identified as at risk, and prompting action to support this student. When one is received, tutors are encouraged to act on this alert, however details on this process are limited. For further information see ABLE Case Study 08: Case Study 6 Staff Survey.

Interviews were conducted with tutors in order to understand how they react to a specific alert, communicate with that identified 'at risk' student, and what actions are subsequently taken as a result of receiving the alert. During these conversations, staff reflected on their wider practice of supporting students, and gave insight into how these Dashboard alerts fit in with the tutors wider understanding of how that student is performing. Often, the student was known to the tutor as being potentially at risk, and this is discussed in the interviews, along with how the broader tutoring responsibilities and resources available may be beneficial or detrimental to the process of supporting that student.

3.1.2 Interview Methodology

In addition to the 7 'management staff' interviews that contributed to our understanding of the current processes, 12 'tutor' interviews were conducted in order to understand current practice. Whilst we understand what 'should' occur due to the policies in place, interviews with tutors are designed to give us an insight into the lived experience of tutors supporting students.

Tutors were contacted to be interviewed based on alerts generated during two timeframes (19th March 2019, and 1st-3rd April 2019). This was during the second term of the academic year 2018-2019, and all students who had a Dashboard alert generated during this timeframe were identified. Once those students were identified, their tutor was contacted 2-3 weeks after the alert was generated, in order to arrange an interview. This allowed time for the alert to be generated, the tutor to react to the alert, and in some cases, contact and interventions to be attempted with the student.

All interviews were conducted throughout April 2019, and took between 14 and 30 minutes, with an average length of approximately 22 minutes. 9 interviews were recorded and transcribed, with 3 of the interviews being recorded via interviewer notes only. 2 of these 3 interviews were not recorded as the tutor wished to give feedback but were not comfortable with an audio recording of the interview. The third of these interviews was not recorded due to technical difficulties with the recording device.

Tutors participated in interviews on a voluntary basis, without incentive or requirement. Interviews were conducted with the understanding that feedback given would remain anonymous, and staff were given an overview of the OfLA project prior to the interview being conducted.

The questions used as part of the structured interviews were designed to understand how tutors interacted with the three stages of the support process (prompt/alert – communication – action/intervention) for the specific alert that the tutor was contacted about initially. Tutors were then asked more widely about their previous experience in supporting students. Due to examples where certain answers may negate future questions, a flow chart for the questions was designed, and this can be found in appendix 9.

3.2 Alerts

3.2.1 A trigger for action

When discussing the alert, 5 of the 12 staff (Participant 2, 3, 7, 9, 10) highlighted how that alert had prompted an action for them to engage with students they know have had problems. For most tutors (Participant 2, 3, 4, 5, 6, 7, 8, 10, 11) , the student was already known to them as being at risk, and previous contact had at least been attempted. Despite this, a further attempt at contact had still been made as a direct result of the alert, if it had not been made in the very recent past.

Although there were several positive examples of alerts prompting action, 4 of the tutors interviewed (participant 4, 6, 8, 11) explained how they would take no action despite receiving an alert. In these cases, the decision to take no further action was for two main reasons. Firstly, because action had very recently been taken, or attempts at contact had already been made with that student, and therefore the tutor believed that the situation was already being dealt with.

The second reason for no action was in situations where the student had withdrawn from the course but had not made the staff aware of this. In these situations, tutors describe how the alert had been generated several months after the student had disengaged from the course, not attended for an extended period of time, or was believed to be in no position to be able to catch up on learning.

[on taking action after receiving an alert] "No, the horse has [had] completely bolted at that point" – Participant 9

3.2.2 A trigger to inform

For all but one of the participants, the alert did not highlight a student as being 'at-risk' that they were not previously aware of (participant 10 was the exception). As illustrated in the comment below, staff believe that it should be clear and obvious to them in their standard practice if a student had not attended or engaged with their studies before an alert was generated.

"… If an email like that dropped into my inbox and I had no idea that that student had poor engagement, I'd be thinking that I wasn't doing a particularly very good job as [a tutor] for them because I should know about it if they're not going to engage for two weeks." – Participant 8

During a discussion of a student who had an alert generated due to no engagement as a result of a health condition, one tutor described dealing with another student who had a similar hidden health condition. In that particular example, the alert would have been informative and useful as they did not have regular or frequent scheduled teaching with that student, and therefore could not rely on observable behaviour or the personal relationship with the student.

"…I wouldn't necessarily know if they'd not attended anything for 14 days. I wouldn't be checking kind of thing. It's a good nudge for me as a tutor, as a supervisor to contact them and drop them an email and basically just check if they're okay." – Participant 3, on the alert

For the most part however, the experience of the 12 interviewed suggested only hypothetical situations in which a Dashboard alert provides new information to staff. These included situations where the staff had very limited contact with the students, or towards the start of the year, when tutors of large cohorts had not yet established relationships with their students. When considering the lived experience of receiving an alert, staff made comparisons between the Dashboard generated alert and the observed behaviour, and even interpreted this based on their subjective belief of student engagement.

3.2.3 Comparisons to other triggers

Despite the accuracy of the data, some of our staff (participant 1, 4, 9) revealed a distrust of the objective Dashboard data, in comparison to their own observable behaviour. In these cases, tutors felt that their own

observable behaviour in the classroom and their personal interactions with a student, were a truer reflection of how the student is engaging with their studies, than an engagement rating.

For those that do trust the data however, the alert does then become justification for action. It acts as independent confirmation of what they believe to be true. In particular cases where the Dashboard data is seen as being strongly accurate, an alert can carry an 'authority', that some staff reflected in their experience.

"…but of course, his lack of engagement has flagged up which sort of I think secures it really, doesn't it? It makes it sort of official…" – Participant 7

Overall, tutors expressed a preference for, and often a greater reliance on observable or more subjective triggers for action, than those generated automatically from Dashboard data. Some tutors however appeared to use multiple data sources as triggers to construct a more accurate picture of engagement. This view reflects the complex nature of engagement, and wished to gather as much information as possible to come to an accurate conclusion. The belief is that a tutor is better able to identify to what extent the student is engaging with their studies by personally observing behaviour, and considering this alongside Dashboard data, rather than relying solely on the Dashboard as a trigger.

[on accurately understanding student behaviour] "I probably do have a process but I haven't actually written it down. It's not necessarily consistent across all mentors. I think it's a combination of lots of bits of information..." – Participant 11

3.3 Communication

3.3.1 Data as an external arbiter

As discussed previously, staff use many methods for identifying students 'at-risk' such as observable and subjective triggers as well as data generated by the Dashboard system. The strength of this learning analytics data is perhaps because of its nature as an independent metric. Some tutors reflected that alerts generated about a student confirm their subjective interpretation of observable behaviours that suggest a need to intervene.

Five tutors (participant 3, 6, 7, 8,12) use the data not only to inform them of student behaviour, but as an impartial arbiter during a support session. Being able to point to an independent metric as a reason for an intervention changes the conversation, and means the tutor is no longer the 'adversary' but the 'advocate' for the student.

"…we just say, almost apologetically to students, this flagged up. It's not anything about you. We're required to offer you support…" –Participant 7

This particular aspect of communicating the alert is a small but important part of a wider strategic approach that the tutoring staff need to take; the chosen communication style taken with the student.

3.3.2 Language method and style

When reflecting on how the tutors communicated with the student, all tutors that made contact did so by emailing the student at their NTU email address. Whilst this is not the only method used, it is the standard or default medium for engaging with students. This is the most efficient method of communication, and presents the fewest barriers in terms of data protection, however can also be the cause for non-response, as students who have disengaged from University are less likely to check their student email.

Whilst the medium of communication may be limited, there is a greater ability to vary the style of the message. When attempting to communicate with a student identified as at-risk, tutor feedback highlighted two distinct approaches in terms of communication style; the supportive restorative style communication, and the punitive approach to communication. These two approaches could be seen as two ends of a spectrum.

The first approach is to be entirely supportive of the student and engaging the student in order to provide help and guidance as directed by the student themselves. Through this approach, staff make little requirement for the student to contact and avoid sanctioning the student in order to change behaviour.

A supportive approach appears to be favoured by the majority of the staff (participant 2, 3, 6, 7, 8, 11, 12) we interviewed as part of this project, as it is felt that this is the best way in which issues can be raised and subsequently addressed. Using a restorative approach in the first instance of contact establishes the kind of support that the student can expect going forward, and some staff highlighted how important it is to convey this initially.

Whilst the supportive approach appears more likely to be favoured by our staff, some did highlight that a more punitive approach, or at least the danger of punitive action, is needed (participant 1, 4, 6, 5, 9, 10). In one interview, a staff member reflected that warning the student that they may be required to meet more senior members of staff is more likely to elicit a response.

"The first email can quite often go by the wayside. I think when he gets to the second email and there's the threat almost of a meeting, that sparks them into life a little bit." – Participant 6

One consistent theme found throughout all of the communication made was a call to action. When a trigger is received, regardless of what that alert might be, staff are communicating with students asking them to return the contact and/or to attend a meeting. This is a key distinction in staff communication with a student who has generated an 'at-risk' alert and staff communication with one student, or indeed a group of students, who could be defined as potentially 'at-risk' of failure but has not generated a Dashboard alert for action.

"That one was sent to the Trent email address and their personal email address as well. The last bit, the signoff was please get in touch with us. Come in for a meeting or let's set up an action plan but just get in touch, please". – Participant 8

During the interviews, tutors made it clear that the objective of the communication was for the student to communicate with them in order to explain why they have not engaged with their studies. The biggest challenge here may not be in having a student receive the message, but in having the student act on it.

3.3.3 Lack of response

As discussed, one of the main barriers that tutors face when supporting students overall is a lack of response to their contact; a theme that runs throughout most of our interviews, and findings at our partner institutions too. Indeed, every tutor during interviews highlighted a lack of response as the main reason for not being able to support students at risk.

The reasons for a high level of unresponsiveness to tutor contact is unclear; some tutors believe that the method of communication is limiting (participant 2, 5, 8, 9, 11), others believe the type of message is a factor in eliciting responses (participant 1, 6, 7). It could be argued that a lack of response occurs when the student is further down the path of disengagement, suggesting there is a greater need for earlier alerting.

"At this point, if I've already followed through with everything I can do, multiple communications, escalating it on to course leaders, checking with administrators, trying to call them with no response, the point that the alert comes, if I've done all of that stuff already chances are I'm not going to then respond to the alert because I already know that student isn't engaging." – Participant 11

Many issues causing disengagement also relate to mental health issues (as will be discussed further), and self-isolation can be a factor in this. Future work must address this problem, perhaps trialling different methods of communication, including altering timeframes (which will be explored further in Output O9) to improve effectiveness at this stage.

Despite the real difficulties in communicating with students who are 'at-risk', we are still presented with examples of successful contact in our limited interviews. One example (below) highlights how successful contact was made with a student as a result of an accurate alert; this could have been as a result of any

number of the factors discussed in this section, and likely all aspects of communication in some way played their part.

"I mean, we've seen him I've lost count how many times really, with support tutorials in the last couple years or so. And he's had many opportunities to come and talk to us and just doesn't turn up... …I don't know whether it triggered things from your end as well to him, but he seemed to be a bit more responsive to this particular one." – Participant 10

3.4 Intervention

3.4.1 Student responsibility

When discussing the change in behaviour, five tutors framed 'what' they did with their wider view of students' role within the process (participants 1, 2, 4, 6, 7, 9. For these tutors, the nature of the process means that the key part of the responsibility of the support process lies with the student. These tutors suggest that the key to a successful intervention lies with the student, and therefore an unsuccessful intervention perhaps is not as a result of a failure on the part of staff.

Often linked to this view, is a consideration for the unique situation found within the university environment; that students are young people who are currently, or have very recently, transitioned into adulthood. Although this may seem like an obvious point, three tutors in particular (participant 1, 4, 9) noted this issue. One described how the traditional student had been guided as a child throughout education. Now they are attending university, students are supported as adults, which means that a much larger amount of personal responsibility lies with the student when issues arise.

"Again, there's a limit to how much chasing you can do for an adult in a learning environment that is for adults. And people I think need to take some responsibility for their own teaching and learning." – Participant 4

Tutors (participant 1, 2, 3, 9, 10) referred to instances whereby students avoid discussions with tutors, or promise action without the intention of following through. Two tutors (participants 1, 9) even suggested that students attempt to manipulate the engagement in order to avoid being identified by staff.

"I think some of them are quite good at playing the game and they know they need to card swipe every now and then to just prove that they're active." – Participant 9

Regardless of how much responsibility falls on the student to seek support, tutors interviewed reflected on the need for students to have a responsibility in part to shape what the outcome of the support might be. This is not only in what the changes need to be in order to ensure success, but even what the desired outcome may be. Although the UK University sector may see deferrals or even withdrawal as an undesirable outcome, our tutors have reflected that the student outcome must be dictated by the student, and their responsibility is only to support that choice, rather than to shape the students decisions themselves.

3.4.2 Resistance to structured guidelines

During the interviews, discussions in part focused on not only the practice of tutors, but also on what may facilitate this practice.

The interviews highlighted that actual practice of an intervention varies distinctly between tutors. One approach is a structured logical approach of identifying the issue and troubleshooting a solution. Another approach was for the tutor to simply talking through the problem with the student, providing emotional support for the student, and allowing them to not only raise the issue, but begin to address the issue from a personal perspective. In this instance, the support provided is allowing the student to discuss the issue, and that was viewed as an intervention in itself.

Some of our tutors believe that it is their responsibility to become somewhat heavily involved in ongoing support and working with the student to overcome the problem (participant 2, 7, 8), whilst others more strongly believed that their skills were not suitable for support, and therefore their responsibility lied in

correctly signposting the student to more appropriate teams to help address the issues raised (participant 1, 4, 10). This is particularly strongly linked to situations in which non-academic issues have been raised, and particularly those involving a mental health concern that, as will be discussed, are particularly common. Clearly more work is needed to understand best practice with regards to specific examples of successful interventions, and this is investigated further in a subsequent OfLA report, O9.

"When someone actually asks you how you are and genuinely cares, that's when they break down. That's happened a few times..." – Participant 11

3.4.3 Non-academic issues

As mentioned previously, the issues raised by students during support sessions as a cause for low or no engagement with study are often varied in nature and severity. It is clear that there is not a single or small number of reasons why a student may disengage, and indeed 10 out of 12 tutors (participant 1, 2, 3, 4, 6, 7, 8, 10, 11, 12) reflected that multiple issues, often personal or mental health related in nature, can collectively lead to a student eventually withdrawing, rather than a singular issue creating a barrier to success. The following quote, for example, details what one tutor believes are the most frequent causes for students to become 'at-risk' of failure or withdrawal during their time at University.

"Honestly, it's quite a wide range. We do see more mental health things now. And I think a lot of it is that students just aren't prepared for life at university. I think they're not maybe prepared for it being difficult. It's probably the first time they've been really challenged. And you compound that with things like living alone for probably the first time, or living away from home for the first time..." – Participant 6

One common theme was found, however, when reflecting on student issues, and that was poor student mental health becoming a significant contributing factor to disengaging with studies. Throughout nine tutor interviews (participant 1, 2, 4, 5, 6, 7, 8, 11, 12), the subject of mental health, with anxiety and depression specifically noted, was a recurring issue that students had raised. These staff reflected that not only was this a large problem within the student body, but that this problem has been increasing over time, and now believe it to be the most frequently occurring factor in student withdrawal. As noted, this may not be the only cause for students to become disengaged with study, but is often the problem raised by the student with the tutor.

3.5 Sustaining the practice

We have discussed how staff work within existing frameworks to support students, and the tutor experience following our three-stage model. But how can the process be sustained or even improved, particularly when considering the changing landscape of the higher education sector?

3.5.1 Customising Dashboard alerts

Half of the tutors (Participant 1, 2, 3, 10, 11, 12) we interviewed recognised the value of the current alerting system that is embedded within the Student Dashboard, in its own right. Suggestions for improving the alerting system did not just focus on the need for more data sources, but being able to make use of the existing data sources to create other automatically generated alerts. One tutor for example made a suggestion for an 'attendance' alert that is generated specifically for students who have not attended any scheduled teaching over a specific time period. Although this may be similar to the current system, this particular tutor felt that an additional alert could provide more specific information for the tutor to act on, based on their particular teaching practice.

Three tutors (participant 6, 8, 9) specifically discussed the possibility of manipulating the timeframe of the existing alert. Certain students, for example first year students, may be more of a concern if there is a period of no engagement, rather than a final year student who is encouraged to work independently and may not be expected to generate as much engagement data. This particular point will be addressed in the second year of this research project, and the results of this are explored in Output O9.

3.5.2 Under-resourced staff

When reflecting on their experiences of supporting students, one tutor describes how even the shortest intervention would become difficult to deliver to a group of students who may need them.

"Most of us pull a 50-hour week plus in term time. And it's not terribly different to being a school teacher in many ways, although we get bit a more time at a desk. But desk time is a commodity. There's a lot of time away from it and squeezing in seeing 20 odd students on top of everything else, it basically takes up about four or five hours to see everybody. That's seeing them for five-minute conversations and a three minute write up." – Participant 10

The issues around lacking time and resources to support students is clearly not limited to just this process of identifying students, establishing contact, and delivering interventions. There is a wider context of administration, teaching, research work, and providing feedback that tutors must factor into their workload, which can in turn negatively affect the support process. Tutors will often find the simplest task, such as making a referral for a student who has been successfully identified, contacted, and met with, can become an arduous undertaking.

Lacking time and resource was a complaint for many of our interview participants (participants 1, 2, 3, 4, 5, 7, 8, 10, 11), and supporting students in particular through this process requires a significant added time constraint to the tutor. Often issues required more than a single intervention, but a sustained and extensive programme of interventions in order to have the impact required for behaviour change.

3.5.3 The Change Management Process

There is an assumption that introducing a new technology or presenting more data to a staff member would mean the staff member would likely make use of the extra information. In practical terms, staff question the data they receive, and are often resistant to changing their current processes without a justifiable reason. Issues with data accuracy, even if they are temporary failures of the system or only perceived inaccuracies, create a sense for some staff that the whole system is at fault, and therefore cannot be relied upon.

Whilst we have had some temporary and minor issues with the Dashboard system over the last few years, for some tutoring staff, trust in the data has been broken. We have clear evidence that the Dashboard system provides useable data, that shows daily engagement ratings that provide a good indication of future success or failure for that student. This evidence was most reliable and robust in the 2018-19 academic year, however is a trend seen over multiple academic years. The benefits of this system therefore are assumed to be clear for tutoring staff. However, even when the benefits of new data are apparent to most, difficulty in interpreting the data or the added time needed to access and understand a new data source creates a barrier for use

Part of the change management process is not only introducing a new system, but ensuring sustainable practice going forward. There is evidence from our interviews and from our reviews of School Attendance and/or Engagement Policy itself that some tutors are still confused or unsure as to how to use the system itself. For example, one staff member reflects using the Dashboard to identify students, separate from the alerts system, and are unsure about when to act with a student.

"I can see at a glance where students are at and if I got a dashboard alert for a student that wasn't on my radar and had been attending fine say, all of term one and then suddenly hadn't had any engagement at all for 14 days, then yes I'd act upon it immediately. But there's no set process that we've been advised to follow." – Participant 11

Despite difficulties with the system, existing policy, or staff simply not having the time or resource to fully engage with the Dashboard, most tutors interviewed did reflect positively on the Dashboard system. When considering the alerts, these were seen as not only useful, but critical to their supportive practice. Throughout this discussion of staff feedback, we see numerous successful examples of students being identified as at risk, staff establishing contact with those students, and subsequently being able to support these students to solve the issues raised to ensure student success. When staff are fully supported, and are data literate, we can see positive work with the system. In these cases, the trigger for an intervention can be complex, detailed in

signifying an issue, and effective in suggesting next actions to the tutor. Working with staff to become more data literate can lead to tutors having a powerful insight into the student experience, as the following quote demonstrates.

"I use it quite a lot actually. Just to keep an eye on students who I think might be at risk. Just to keep an eye on what their attendance is, how they're engaging, and what they're engaging with. So, if I click on just a student, there's the resources section in there. And that's quite useful, because you can see what it is they're doing. And if I can see that they're active in the learning rooms and things like that, then that gives me a good idea that they are engaging and they do know where to find things." – Participant 6

4. Findings from Students

4.1 Background and Methodology

NTU has conducted a Student Transition Survey (STS) with first year students since 2009. The survey is administered by the market research team from the last week of February to the first week of March each year. In previous years, response rates have varied between 7 & 11% of the first-year cohort. Students are offered a prize draw incentive to complete the survey, and are asked a range of questions about belonging, doubting (considering leaving early) and NTU initiatives such as personal tutoring or the Student Dashboard. Respondents are typically more engaged than the student population at large and more likely to be female compared to the whole cohort.

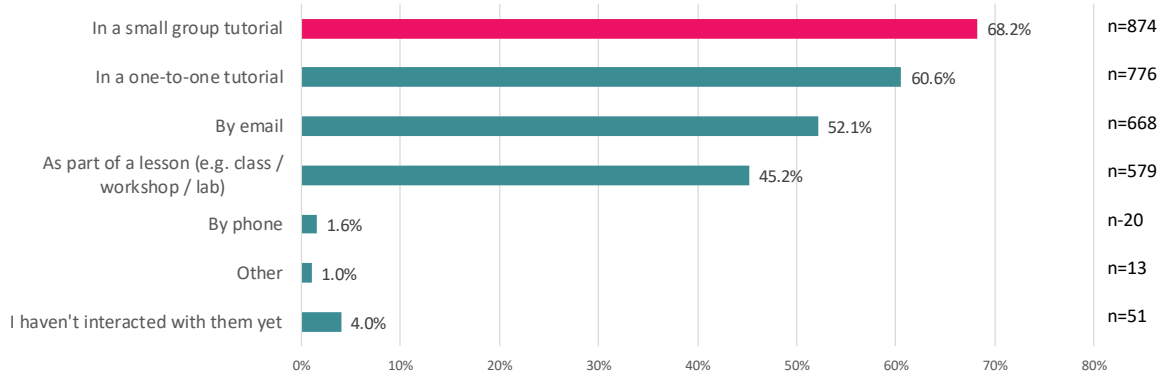
Between February and March 2019 1,401 first year students (representing 16% response rate) completed the STS. The STS aims to understand the experience of these students, including the transition into University, experience of personal tutoring, whether they have considered withdrawing and what they may do in this situation. We have explored the support offered to students identified as 'at-risk' from a staff perspective, however the STS gives us an opportunity to understand this from the perspective of our students.

The sample contained a broad range of demographic groups, including 12% reporting a disability, 14% being international students, 27% identifying as Black and Minority Ethnic (BME), one-quarter commuting students, and two thirds female.

4.2 Interactions with Tutors

Participants who knew who their personal tutor was, were asked how they had interacted with their tutor, with the option to select multiple answers. Ninety-six percent of students had interacted with their personal tutor in some way.

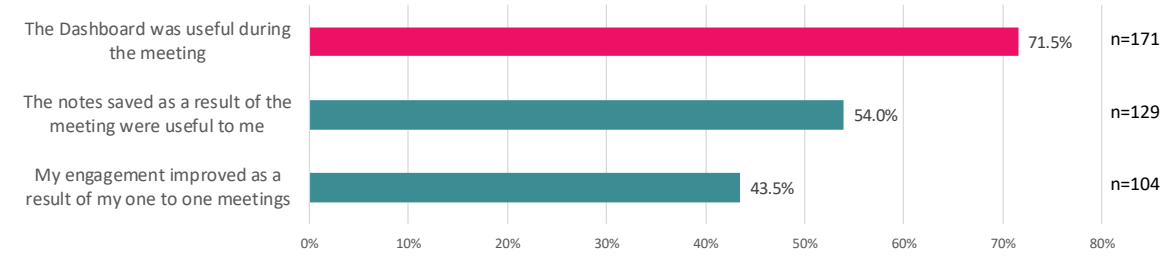
Figure 2: How students have interacted with their tutor during the year (n=1281):



Of those 776 students who reported having a one-to-one tutorial, 31% (239) reported that the tutor used the Dashboard as part of the meeting, which is an increase of 3% from last year.

Those participants who responded that the Dashboard was used were then subsequently asked to what extent they agreed with three statements regarding their tutorial meetings, with the agreement percentage ("Definitely Agree" and "Agree" responses).

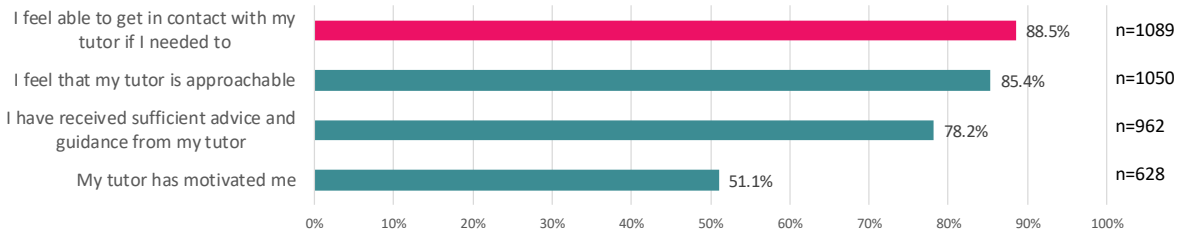
Figure 3: Agreement with statements relating to meetings with tutors (n=239):



The final statement in the above figure is of particular interest, as this arguably shows a positive impact of an intervention in the form of a one-to-one meeting. It is worth noting that many of these meetings will not have been conducted as the result of a trigger, but due to standard practice of that tutor. It should also be considered that this is the self-reported improvement from students, rather than actual engagement ratings taken from those students. Regardless, there is a perception from almost half of respondents to the question above, that one-to-one meetings have led to an increased engagement score. The reasons for this increase is explored in section 4.4.

Participants were subsequently asked to what extent they agreed with statements relating to their general interactions with tutors, with these results being illustrated below in figure 4.

Figure 4.: Agreement with statements relating to general interaction with tutors (n=1230):

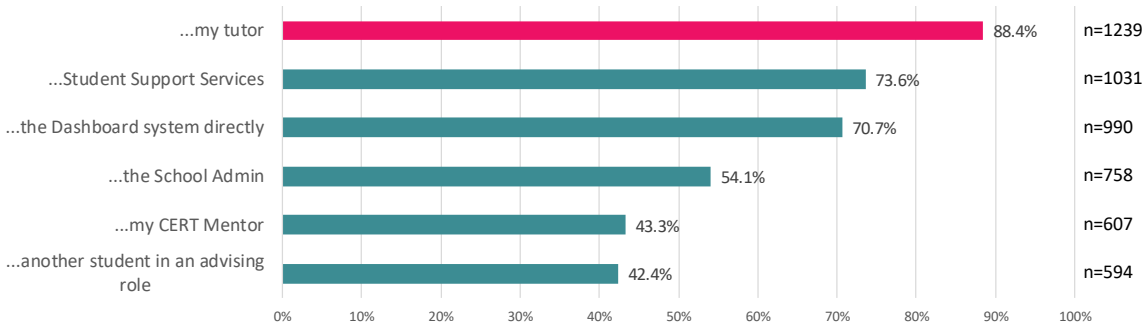


Whilst most felt their tutor was approachable and able to provide sufficient advice and guidance, only just over half of participants fed back that their tutor has motivated them. This issue is explored further in section 4.4.

4.3 Perceptions of Tutors

Using the STS, we wished to better understand how students may feel about changing the alerting process. For example, we wished to test students' reactions to automatic alerts or alerts from other sources (for example a call centre model). Figure 5 below details how students surveyed felt about an alert generated about them being received by various other individuals who could provide them with support.

Figure 5: Agreement with "If I was to have an alert, I would be happy to be contacted by…" (n=1401):

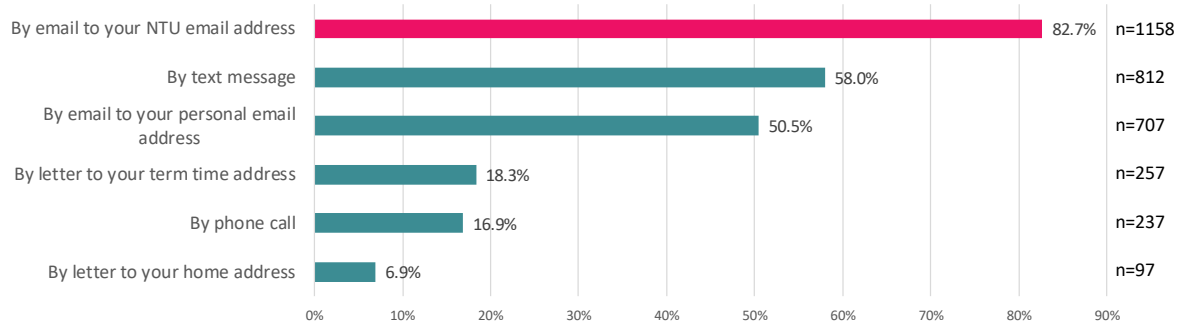


To clarify, a CERT Student Mentor is a fellow student on the same course as the first-year student, but in their second or final year. The role of a CERT mentor is to help the student to settle in and to answer any questions that the first year may have about their course and life at university.

Students reported that tutors are the people they would most like to contact them, which we believe reflects our current system. It is also apparent from the data illustrated in the above graph, that students have less of a preference for communication from fellow students.

Students were also asked how they would want to be contacted, should an alert be generated for them, with several contact methods listed. Results to this question are illustrated below in figure 6.

Figure 6: Agreement with "If an alert was generated for you, how would you want to be contacted?":



Notably students were most likely to want to be contacted by email to their NTU email address. Given the high apparent incidences of ignoring emails, this is interesting. We suspect that it is due to the fact that students can control when they respond to emails. Whilst this again perhaps does not allow us to change the alert system drastically, it does give the option for the alert to also be automatically sent to the student as well as the tutor, which could present the opportunity for a pilot in future years of this study, as discussed in Output O9.

4.4 Reflections on Motivating Students

In our Student Transition Survey 2019, we asked students to describe what their tutor has done to motivate them during their time so far at University. Over 400 responses were collated and analysed, in order to understand the themes from the categories.

Analysing the answers shows the majority of the responses highlighted the emotional aspects of support. It could be argued that we asked a question from that has links to emotion (motivation), and so perhaps it is unsurprising that this is reflected in the feedback. These 'emotionally driven' supporting factors suggests that tutors who are 'positive', 'encouraging', 'friendly', 'kind', 'gentle' are reportedly more successful in motivating their students than those that take a firm or seemingly negative view.

"Friendly cheery outlook on studies and helping you with any problems that arise" – student, from STS

When considering potential outcomes, students discuss this from the perspective of how they can succeed, rather than how they may fail without the corrective action. Again, there is a link here between the positive and motivation, rather than negative or even purely objective support. It could be suggested that there is some insight here into how we may further need to present the data to students (either directly to the student, or through the medium of the tutor); by presenting objective data in an emotionally engaging way. Further work is also potentially required to understand how data is included in the conversation as Figure 2 shows that while having the data involved in tutorials is useful, it is not clear as to why.

Some tutors motivated their students simply by expressing passion and enthusiasm for the course. Many of the comments highlighted how the tutor expressing their own passion and knowledge around a subject subsequently had a motivating impact, and inspired the student to emulate this behaviour.

"His positive attitude towards answering course related questions, his enthusiasm about the discipline and during lectures." – student, from STS

The personal link between tutor and student is highlighted throughout these comments, and some cases of how tutors act as role models for students were given. Several students cited examples of when a tutor had motivated them by describing how they once were in the same position as the student, dealing with the same issues, and how students use the tutor as an example of what they could achieve if they continue to engage with their course.

"His personal experience of uni was seemingly like mine, and to say that he stands where he does now has really motivated me to better myself and keep on top of my studies" – student, from STS

Although we often see tutoring sessions being held in the form of scheduled meetings rather than ad hoc discussions, many students commented that the tutor being available to discuss an issue at the students' discretion was a motivating factor. Taking this further, many students praised the proactivity of some tutors in coming forward to check on them; this not only meant that the student received support and guidance when they needed, but reinforced the belief that the tutor cared about that student as an individual.

It seems that for students, motivation is more likely to be linked to either encouragement based on a belief that they can achieve a target, and on a sum of their current efforts, with suggestions to improve it, rather than a focus on what is lacking in their current behaviour. Although the difference here seems small, it can be argued that recognition of current effort has an important part to play when making suggestions for changing behaviour or motivating the student in increasing their effort further in order to succeed.

"That everything I do is good enough, I deserve a rest at times of need and CAN get through it" – student, from STS

5. Recommendations

5.1 Alerts

Recommendation: "Consideration for alerting on multiple and different triggers."

Specifically discussed by tutors was the need for alerts to be customisable to the needs of the student (section 3.5.1). Whilst the Dashboard does allow for some customisation of the alerting system, research is needed in order to identify how and where to adapt the alerts to make them more effective. Feedback from the tutor interviews highlights the need for a greater reliance on the alerting system for first year students (section 3.2.2). Specific comments were made through the tutor interviews describing how a shorter timeframe for first year students specifically would be useful (section 3.5.1). We are aware of how first year students in particular need more closely monitored support, and therefore reducing the alerting timeframe for first year students specifically would begin to address this issue. Finally, a key theme throughout this report is how triggers for action are based on more than just Dashboard data, and therefore we must consider how we can include and present more relevant data to staff alongside the alerts generated.

Recommendation 2: "Evaluation and development of 'mid-term review' style alerts."

A review of school-specific attendance and/or engagement policy has highlighted significant differences in how schools within a single institution make use of mid-term reviews to identify students at-risk (section 2). It is not clear from our interviews however how effectively these reviews work in comparison to Dashboard alerts. We do know that reviewing student data at the mid-term point leads to action (section 3.2.1) however we do not know how this action compares to contact attempted as the result of a Dashboard alert. Finally, it is clear from our tutor interviews that the most effect practice of identifying students at risk is to use a combination of different data sources (section 3.2.3), however the details in how different data sources are compared in practice is missing. Therefore, further research work is needed to understand this process in particular, in order to develop guidance to support the process.

5.2 Communication

Recommendation 3: "Consideration for language use in student support."

The tutor interviews highlighted a differing approach to student support; from the supportive or restorative, to the more formal, to the punitive. These differences in viewpoints manifest themselves most clearly not in the support offered, but in the language used in communications with students (section 3.4.1). The interviews also highlighted how differences in the language can have an effect on the success of establishing contact with an at-risk student, and framing the discussion and actions going forward (section 3.3.2). Finding a good balance between highlighting the need for changing behaviour and maintaining a positive and supportive tone was seen by tutors as key in successful interventions. This view is also reflected in students' own feedback about what motivates them to change their behaviour (section 4.4). It is recommended therefore that the language used in prompts, emails, templates and resources is examined and reviewed to ensure that the style of language is a consideration going forward.

Recommendation 4: "For alerts to be sent directly to the student in addition to the tutor."

Our tutor interviews highlighted a significant issue in the lack of response from students when attempting to make contact as the result of an alert (section 3.3.3). We also understand that there is some resource difficulties for staff, and tutor time is taken up with administrative tasks such as chasing students for contact (section 3.5.2). A solution to these issues therefore would be to send an alert to both the tutor and the student, rather than simply just to the tutor as is the current process. Through the STS, the majority of students highlighted how they would like to be contacted via the NTU email address should an alert be generated on their behalf (section 4.3). There should be a consideration for the wording of these alerts to students, as both staff and student feedback highlight how the supportive positive communication is not only a more effective way of establishing contact (section 3.3.2), but in motivating students going forward (section 4.4).

5.3 Intervention

Recommendation 5: "Further investigation of intervention practice."

A key aim for our interviews was to understand the specific actions taken by staff when conducting an intervention. What we have found was that many attempts at an intervention with a student identified as at risk failed to reach this stage, due to issues at the alert stage (section 3.2.1), or a lack of response during communication (section 3.3.3). Because of this, few staff were able to reflect on practical experience, and themes for good practice could not be established. We found difference in staff perception of how much action the tutor can take in changing behaviour (section 3.4.1), a variety of issues being raised meaning standardising practice is difficult (section 3.4.3), and a resistance to simply bringing in further forms and guidance without a deep consideration for the issues at hand (section 3.4.2). As noted in section 4.2, most students who had tutorials where the Dashboard were used found this useful, which again could form part of this further investigation. It is recommended therefore that a deeper dive study is conducted specifically into this aspect of the process, in order to be able to produce resources that can support staff.

Recommendation 6: "Further guidance and support for staff and students in understanding mental health issues."

A consistent theme found throughout both the tutor interviews and student feedback was that mental health problems are a frequently occurring issue experienced by students, and one that often leads to students being at risk of failure or withdrawal. When considering issues raised by students, mental health was a key focus of the discussion, with tutors reflecting on how this appears to be a growing issue (section 3.4.3). Tutors reflected however that due to limited time, resource, and lack of specific expertise, they do not have capacity to fully support students with these issues. Communicating with students suffering with stress and anxiety is a further aspect of the support process that requires consideration (section 3.3.2), and this highlights the need for a comprehensive approach to dealing with these problems. It is recommended therefore that an outcome of this project is the production of resources for staff to help ensure correct identification and proper referral for these issues.

5.4 Sustainability of Practice

Recommendation 7: "Improving the data literacy of tutoring staff."

Whilst many of our tutors make good use of Dashboard data as a trigger or to inform them of student behaviour, there are several examples of how a lack of data literacy has created a barrier within this process. Some comments received via the tutor interviews highlights how confusion about the Dashboard data has led to resentment and distrust, which has prevented some staff from utilising the system (section 3.2.3). We also understand how time and resource constraints have meant that tutors do not have time to learn about the system or to interpret data in detail when there is insufficient guidance (section 3.5.2).

Recommendation 8: "Review of school-specific attendance and engagement policy."

Before speaking to tutors or students this year, our first action was to understand the policy in place designed to identify students at risk, and how staff can change the behaviour of these students in order to put them back on track. When reviewing these policies however, we found not only significantly different approaches between schools that could cause confusion, but differences in terminology, and detail, which shows an inconsistent institution-wide approach to using engagement data to support students (section 2). Whilst it is a good approach to consider school-specific policy to meet the specific needs of that cohort, consistency in terms of terminology is needed. Furthermore, these inconsistencies and gaps in policy have resulted some tutors relying on other triggers (section 3.2.3), and a general confusion in the wider process (section 3.5.3). A recommendation therefore is for a review of the policies in place at our institution, in order to ensure a consistent and sufficiently detailed approach to supporting students.

6. References

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