OfLA Project
2018-1-UK01-KA203-048090

O6 – Evaluation of First Year Studies

A summary of the current situation, strengths, and challenges at three European HE Institutions

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.

1. Introduction

This document summaries the context, approach, and findings at each of the three partner institutions for this research output.

Each institution produced a report that documented their work during the 2018-19 academic year, mapping the existing advice-giving process: including prompts, communication, and supportive intervention. This was conducted with a consideration for policy, an overview of learning analytics systems in place at each institution, and feedback from staff and student at each respective institution.

Throughout this document, we have referred to each institution through the following acronyms:

- Nottingham Trent University - NTU
- Artevelde University of Applied Sciences - AHS
- University Medical Centre Utrecht - UMCU

We have referred back to each institution's O6 Output reports in the following format:

- Nottingham Trent University O6 Output report – (NTU O6)
- Artevelde University of Applied Sciences O6 Output report – (AHS O6)
- University Medical Centre Utrecht O6 Output report – (UMCU O6)

Where relevant, references have been made to specific sections of the reports within the same brackets as the report. For example, to reference a finding that is explained in more detail in UMCU O6 Output report, section 2.4.1, the following note has been made: (UMCU O6, 2.4.1).

The supportive process at each institution is understood using a three-stage model that forms the basis of the OfLA project: the prompt/ alert, communication, and support/intervention. These are defined as follows:

1. **Prompt/alert** – The indicator used to show that a student may be at risk of failure, including warnings from learning analytics systems, low attendance or tutor-observed behaviours.
2. **Communication** – The media used to contact identified students including email, formal letters, telephone calls etc.
3. **Support/intervention** – The meeting, coaching session or problem-solving exercise (face-to-face or virtual) to help a student to reflect and, if necessary, change behaviour or direction.

In theory there is a clean break between step 2 and 3, in practice, the communication may be sufficient to change some students' behaviours.

2. Context

This section details a broad overview of current practice at each institution, and collectively, against the three-stage model.

2.1 Prompt/alert

A range of different prompts were analysed at each partner for the O6 work.

Prompts used in all three partners included:

- Attendance monitoring – staff used absences at scheduled teaching as a trigger for intervention (AHS O6, 4.2; NTU O6, 2.2.3, 3.2.3; UMCU O6, 2.1)
- Staff observed behaviours – staff used their observations of student behaviour as the basis to act (AHS O6, 4.2; NTU O6, 3.2.3; UMCU O6, 2.1)

Practices specific to each institution were as follows:

Nottingham Trent University

- A 'Dashboard Alert' (or 'alert') – the learning analytics system generates an automatic email to the students' personal tutor when it registers 14 consecutive days of no engagement (NTU O6, 2.2.1, 3.1.1).
- 'Mid-term Reviews' – a periodic review of a mix of attendance, engagement, and other student performance data, used to identify 'at-risk' students. This occurs at various points in the year (NTU O6, 2.2.3).

Artveldehogeschool

- The 'FIT-test' – completed by students around the 8-week mark, aiming to measure student experience of higher education, from academic skills to environment and social aspects of university. (AHS O6, 2)
- Exam results – results of final exams per semester or module, especially the first semester or module. (AHS O6, 3).

University Medical College Utrecht

- Provisional study advice – an early notification after 6 months based on the number of credits earned so far, with a forecast of likelihood of passing the year. (UMCU O6, 2.1)
- Formative assessment/evaluations – assessments conducted throughout the year as an indication of ongoing performance. (UMCU O6, 2.1)

2.2   Communication

Both NTU and AHS's policy-mandated method for communicating with students is to email the student's institutional email address (AHS 06, 4.3; NTU O6, 2.2.3). The aims of the emails are predominantly two-fold: 1) to establish contact with the student in an attempt to find the cause of the trigger, and 2) to invite the student to a meeting to discuss their situation in more detail. (AHS O6, 4.3; UMCU O6, 2.2.1).

Other methods of communicating with students, such as by phone, letter, or instant messaging, were used informally as an additional method when there were no responses to the official method.

2.3   Support/action

Although the HE systems are different in each country, the main staff users interviewed for the work carried out similar functions. At NTU, the main users interviewed were personal tutors based within the students' academic programme. At AHS and UMCU, the study advisers providing support to students more typically located in central teams. Whilst these interviewees were well-placed to coach students with academic issues, there were a number of problems presented by students that staff were unable to help with. Here, staff are required to signpost students to appropriate guidance services (AHS O6, 4.4), are expected to know what services are available (UMCU O6, 2.3) and are encouraged to access resources available to support the process (NTU O6, 2.1.4).

Recording the actions of an intervention is a key part of the process (AHS O6, 4.4; NTU O6, 2.1.2), and subsequent monitoring of student progress is necessary to ensure the student is no longer deemed as 'at-risk' post-intervention (UMCU O6, 2.3).

Training and guidance is consistent across the three institutions, with two key aspects of support of note.

1. The student is shown that the staff is concerned about the students' issues in a personal and supportive knowledge
2. The staff acknowledges the student and their situation, rather than focusing on corrective actions (NTU O6, 2.1.2)

The strengths and weaknesses of these approaches are discussed further in the next section.

3.   Findings

This section provides an overview of feedback from staff and students used to evaluate the strengths and challenges of current practice at each institution, and collectively, based on lived experience.

Interviews with both management staff and staff directly involved in supporting students (these are a mixture of primarily tutors at NTU, and study advisors at AHS and UMCU) are described in detail in each of the three main reports. This summary document will highlight the overall themes and give reference to the document/section where they are drawn from.

3.1 Prompt/alert

Through staff interviews, we understand that the main outcome of receiving an alert is a trigger for action (NTU O6, 3.2.1), and that action is primarily to establish contact with the student.

Evidence from interviews across the three institutions highlights that the type of trigger that staff rely on to inform them of a student potentially being at risk is observable behaviour within the classroom (AHS O6, 4.2; NTU O6, 3.2.3; UMCU O6, 2.1). This type of alert is the closest to 'real-time' information that staff can access and therefore is the most informative. Staff do, however, make use of other data sources to inform them about students being 'at-risk' of failure or withdrawal.

Some staff identify groups of students due to their characteristics (AHS O6, 4.2), through study progress reports (UMCU O6, 2.1), or a combination of various triggers (NTU O6, 3.2.3) and monitor these groups more closely. For those groups identified, the trigger for acting may have a lower threshold than for students who have not been previously identified. Learning analytics systems and engagement data helps to contribute to the wider picture of a students behaviour, however are most informative when considered in context for that student (NTU O6, 3.2.3). The engagement alerts generated by the system often did not identify a previously unknown student as being at-risk, but it did prompt action with a student who had already been identified (NTU O6, 3.2.1). Whilst there are hypothetical situations presented whereby data alone could inform staff that a student was at-risk who they were previously unaware of, staff recollections during the interviews focused more on describing physical cues used to identify at risk students (AHS O6, 4.2; NTU O6 3.2.2;).

Recommendations are produced by each institution as a result of their findings, which fall into two main areas:

1. **Proactive identification of, and intervention with, students who may be at risk**. This could be in the form of mid-term reviews of multiple data sources for a subject or cohort (NTU O6, 5.1, recommendation 2), identifying groups such as students on tailor-made study programmes and facilitating social interactions (AHS O6, 6, recommendation 2) or using data to take a pre-emptive look at student performance earlier in the academic year (UMCU O6, 3). This may mean

that alerts generated have different thresholds for different groups, for example, a Dashboard alert generated earlier for first year students (NTU O6, 5.1, recommendation 1).

2. **Use of a combination of multiple triggers as an alert for at-risk students.** While staff may rely mainly on observable behaviour and attendance, identification should include other triggers, from performance reviews, belonging, social interactions, and/or motivation (AHS O6, 6, recommendation 2; NTU O6, 5.1, recommendation 1; UMCU, O6, 3;).

3.2 Communication

Once a trigger, prompt or alert is received by the staff member, the next step is to establish contact with the student. In all three institutions, the default method of communication as a result of the trigger is via the students' university email address (AHS O6, 4.3; NTU O6, 3.3.2; UMCU O6, 2.2.1).

Lack of response is a common barrier experienced by staff (NTU O6, 3.3.3), and if the student fails to respond, the tutor or study advisor will try to contact the student through other mediums, such as telephone, text message, or face-to-face conversation (AHS O6, 4.3; UMCU O6, 2.2.1). Some staff members through our interviews indicated that they would like more scope to contact the student through these various methods, however they are not always available to the staff member (NTU O6, 3.3.3; UMCU O6, 2.2.1). There is also variance in approach of staff members within an institution, in using various methods of communication beyond email (AHS O6, 4.3; UMCU O6, 2.2.2), which could suggest inconsistencies within the supportive process within an institution.

The style and tone of the communication again differs between staff members, however a common theme across institutions is the need for a personalised approach (AHS O6, 4.3; NTU O6, 3.3.2). Staff are aware of the responsibility to make the student aware that the potential outcome of their performance is poor grades or even failure (UMCU O6, 2.2.1), however contact often takes a restorative rather than punitive approach. When contact is first being made, staff often begin by asking the student how they are, and reassure the student that they are there for them, rather than focusing on the potential failure or further actions (AHS 4.3; NTU O6, 3.3.2; UMCU O6, 2.2.3).

Where a learning analytics system is responsible for the trigger being generated, rather than observable or subjective measures, some staff have developed a strategy of using the prompt as a reason for making contact but not as a basis for the initial conversation (NTU O6, 3.3.1). This allows staff to justify the contact and is felt to encourage the student to disclose any issues to the staff member.

Recommendations are produced by each institution as a result of their findings, which fall into two main areas:

1. **Expanding the available methods of communicating an alert to students, with appropriate guidance.** Having multiple paths of communication to the student not only increases the likelihood that the message will be received by the student in a timely way (NTU O6, 5.2, recommendation 4), it also allows subsequent communication methods to be used should no response be received through the original channel (AHS O6, 6, recommendation 4; UMCU O6, 3).

2. **Personalised and supportive communicative approaches.** Staff from all institutions described a personalised supportive approach to communication as being the most effective way to establish contact with the student. Further research should examine the effectiveness of different strategies (AHS O6, 6, recommendation 4). Particularly the language used should be considered when future systems, templates, or resources are produced (NTU O6, 5.2, recommendation 3).

3.3   Support/Action

Once successful contact has been made, the most common next step for staff and students at all three institutions is to meet and discuss the problem in more detail, with a view to addressing the issues causing the initial trigger. This is referred to as the intervention. The interviews conducted at all three institutions suggest that the majority of issues raised during these meetings are not academic in nature, with the student often raising problems such as mental health difficulties, social issues, or financial problems (AHS O6, 4.4; NTU O6, 3.4.3). Tutors and/or study advisors are often not the correct individuals to fully address these issues, and therefore a significant part of the role of these staff members is signposting the student to further support services (AHS O6, 4.4; UMCU O6, 2.3). It is noted by these staff members that although they have a responsibility to direct the student to the correct services (AHS O6, 4.4. UMCU O6, 2.3), the student has the responsibility for taking the action, with the staff role being to coach and support, not dictate the action (NTU O6, 3.4.1).

This role often takes significant time and resource, and while staff do not want templates that specifically shape one to one meetings (NTU O6, 3.4.2), they do require further guidance for how to address the issues raised during these meetings (AHS O6, 4.4; NTU O6, 3.4.3. UMCU O6, 2.3). It is noted that whilst there is no formal structure for how these meetings take place, continuing with a personal supportive approach is often the best way to conduct the intervention (NTU O6, 3.4.2; UMCU O6, 2.3).

Finally, a key component to the intervention is ensuring that any actions are recorded, and the student performance is subsequently monitored to ensure the intervention was successful (AHS O6, 4.4; UMCU O6, 2.3)

Recommendations are produced by each institution as a result of their findings, which fall into two main areas:

1. **Further guidance for staff.** Tutors and study advisors often deal with a variety of complex issues as a result of these meetings. In order to support the staff member, more resources detailing the most appropriate action in a variety of common situations would help ensure staff can coach students with the most appropriate advice (AHS O6, 6, recommendation 4; NTU O6, 5.3, recommendation 6). This is particularly relevant for students with mental health issues, or other difficult personal problems.

2. **Further research to understand staff needs.** Interviews conducted at each institution gave some insight into the issues raised by students. Whilst this provided some insight into staff needs, there is still a lack of information about what key issues affect specific groups of students, and whether staff across each institution are fully equipped to help students with a consistent approach (UMCU O6, 3). In order to produce tailor-made guidance in a more demand-driven way (AHS O6, 6, recommendation 3), further research should be conducted in order to be able to effectively produce resources for staff (NTU O6, 5.3, recommendation 5).

3.4   Sustainability of practice

In order to sustain and improve the practice of supporting students, several key issues must be addressed. Firstly, automating certain processes, such as earlier alerts would alleviate the resource issues on staff (AHS O6, 4.5; NTU O6, 3.5.2; UMCU O6, 2.4). Each institution describes further how the development of automated, earlier occurring, and more effective alerting could be implemented at their institution (AHS O6, 4.5; NTU O6, 3.5.1; UMCU O6, 2.4). This could take the form of introducing a new learning analytics system (UMCU O6, 2.4.3), adding further opportunities to record objective data about the student (AHS O6, 4.5), or customising and refining the alerts and mid-term review process (NTU 3.5.1) that are based on current learning analytics systems.

It should be noted that where more automated processes and systems are in place, an added issue of data literacy exists, as well as the need for effective change management strategies in order for the systems to be properly introduced (NTU O6, 3.5.3). In addition to guidance and training for staff, institutional policy also needs to be developed to ensure systems are used consistently throughout the institution (NTU O6, 3.5.3) and

at various levels (UMCU O6, 2.4.3). A consideration is needed that the role of tutors and study advisors in supporting students is invaluable (UMCU O6, 2.4.1), however resources are limited, and therefore policy needs to be carefully considered at a high level at each institution.

Recommendations are produced by each institution as a result of their findings, which fall into two main areas:

1. **A change of policy to further embed the supportive process.** In order to effectively support students, processes and policy need to be robust throughout the institution. This means fully developing and integrating attendance and engagement policy (NTU O6, 5.4, recommendation 8) as well as introducing supporting elements within the curriculum itself (AHS O6, 6, recommendation 1). Embedding further systems at various levels of the institution could present significant opportunities for staff in their supportive practice (UMCU O6, 2.4.3).

2. **Further staff training for new and developing systems.** Staff have expectations of how data should be used to identify students (UMCU O6, 3). Supporting staff in adapting to new systems is therefore key to ensuring these expectations are met. A critical component to ensuring systems are fully embedded are that staff have improved data literacy skills in order to make use of it (NTU O6, 5.4, recommendation 7).

Notes

This document broadly summarises the findings from the three participating institutions. In order to further understand the context and issues at each institution and to see more detailed findings, we recommend viewing each institutions respective Output O6 report.

It should be noted that several of these recommendations will be taken forward in subsequent OfLA outputs, specifically Output O9 (Evaluation of the Second Cycle of Studies) and Output O12 (Evaluation of the Final Cycle of Studies).