



Student engagement analytics:

A guide to using data for personal tutoring and pastoral support

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Foreword

Most higher education institutions (HEIs) offer some form of personal academic tutoring provision – variously called personal tutoring, personal academic tutoring, academic advising, academic mentoring, academic tutoring, or any one of a myriad of similar names. Personal academic tutors (PAT’s) are often positioned as the first point of contact between a student and the institution when concerns or issues arise. The precise nature of personal academic tutoring varies within and between institutions, but it is essentially a holistic support mechanism for issues impacting on a student’s ability to achieve academic success. In some HEIs, personal academic tutoring is reactive, responding only to issues as they are raised by students. In others, PAT’s proactively reach out to students to intervene before issues are declared. The best personal academic tutoring schemes are proactive, structured, and developmental, helping all students – whether they face issues or not – to flourish and succeed.

Data is everywhere. Our everyday interactions generate countless items of data which can be combined and analysed to reveal patterns and trends about our habits, preferences, and behaviours. Higher education is no different. Students generate data which can reveal indicators of their level of engagement with their studies. Such inferences have long been drawn from student ‘data’. Anyone who has taught will recognise how a teacher who knows their students can get a sense that something is out of the ordinary for a student. Subtle signs in their demeanour, their behaviour in class, or their absence from class, suggest something is wrong and allow the teacher to intervene with them, checking in to see what might be going on and linking them to appropriate support. Modern learning analytics systems find patterns and trends in much larger volumes of data and give us a broader range of indicators to alert us to the fact that all may not well with a specific student. They can provide a valuable adjunct to our academic ‘spidey sense’.

Data is simply a collection of raw, unorganised facts and only becomes meaningful when it is processed to generate information, knowledge, and ultimately wisdom. But there are some things data can’t tell us. If I have a loyalty card for my local supermarket, the supermarket might know that I always buy a bar of chocolate when I buy a can of baked beans. They can use that information to make targeted marketing promotions that are likely to appeal to me based on the behaviour shown in the data. What their data can’t tell them is *why* I always buy

beans and chocolate together. Perhaps I always buy beans and chocolate when I’m very hungry and I eat the chocolate bar on the way home? Maybe I have a wonderful recipe for baked bean and chocolate casserole? (I don’t, in case you’re wondering. It’s a terrible thought experiment so you’ll have to look elsewhere for that recipe!) The only way that the supermarket will find out why I buy beans and chocolate together is by asking me directly.

In the same way, the indicators from HE learning analytics systems may suggest that something is not going well for a student, and even suggest behavioural changes that might enhance academic outcomes for them. But what these indicators cannot tell us is *why* something is going wrong for that student. That requires a PAT or other concerned individual to have a conversation with the student to skilfully tease out any underlying issues - often using non-verbal as much as verbal communication to infer what is happening – before offering guidance and connecting the student to specialised sources of support (or, in the case of purely academic matters, assisting themselves). This isn’t rocket science, it is simply caring about our students. Learning analytics platforms don’t – and can’t – care about our students. But in the time and resource poor world in which we work, they do provide a valuable way to help us target our care more efficiently on those who will most benefit from it.

If you are a personal tutor, the insights provided by a learning analytics system have much to offer in helping you to provide pastoral support to your students through prompting timely conversations that identify and enable you to address issues before they get out of hand. This short publication explores the features of learning analytics platforms which help us to spot those tell-tale changes in our students and their behaviours so that we can proactively reach out to them to offer advice, guidance, and specialised support to improve outcomes for them.

Dr David Grey

RLA, SFHEA
CEO, UK Advising and Tutoring



Executive summary

Supporting university students to navigate the world of UK higher education has long been part of the academic personal tutoring role. Personal tutors and pastoral support teams play a pivotal role in helping students negotiate university life, grow their personal and professional selves and plan for their future by helping remove barriers to learning and scaffold students' academic and professional development.

This guide to enhancing personal tutoring and pastoral support using student engagement data has been written against a complex and difficult backdrop. Many students who have just started at university, do so following two years of interrupted learning, having missed important milestones in their educational experience, particularly in terms of preparing for university. Many will not have attended a physical Open Day at their chosen institution, met their academic programme team, explored the university facilities or viewed accommodation options. Their university reality may vastly differ from their expectations. In addition, we have an unprecedented cost-of-living crisis that is significantly impacting student populations (NUS 2022). It seems reasonable to assume therefore that the sheer volume of work-life pressures they are facing will affect students' ability to engage effectively in their studies.

In turn, these pressures significantly increase the demands on personal tutors and professional services colleagues providing pastoral support. Over the last 10 years, Solutionpath has worked with around 25 UK universities to provide insight into student engagement and academic progress based on their

participation in academically-purposeful activities. Those insights help colleagues to be more effective personal tutors, identifying where to focus limited time and providing a data-informed basis for more nuanced pastoral conversations that signpost or refer students to targeted sources of help and support as appropriate. Ultimately, our engagement analytics platform - StREAM - can provide a constructive foundation upon which universities can help students plan for success.

It is our genuine hope that the use-cases, examples and research evidence within this guide initiate institutional conversations about deploying student engagement analytics and offer insights to inform institutional decision-making around the use of data to support the student experience and subsequent outcomes. We are thrilled that Dr David Grey, CEO of the UK Advising and Tutoring association (UKAT) has written the foreword and we look forward to continuing partnering in work to support the student experience and successful student outcomes.

Happy reading!

Rachel

Dr Rachel Maxwell

LL.B (Hons), TQ(FE), PFHEA
Community Manager, Solutionpath





Introduction

The provision of pastoral care and support¹ is a key aspect of universities' work to support student success. In practice, pastoral support is both proactive and reactive. Proactive personal tutoring is intentionally structured to develop student agency in respect of planning to achieve their goals, exploring their values and reviewing progress over time. Proactive tutoring - in the form of scheduled appointments or group sessions - can also be an opportunity for tutors to identify any real, perceived or potential issues that may impact on a student's ability to engage with their learning with a view to identifying and implementing actions to prevent those issues from affecting their study.

In contrast, reactive personal tutoring is arguably more demanding and unpredictable. Students present academic colleagues (not necessarily their named tutor) with a situation that has often already escalated to a point where it is impacting the student's engagement with their studies and where action to address or mitigate the situation is required.

It is unlikely that personal tutoring will ever be either fully proactive or fully reactive, but rather it operates on a spectrum from the more reactive, transactional work to remove barriers and resolve issues that inhibit student engagement, through to purely developmental activity designed to scaffold a self-directed approach to achieving personal goals.

In recent years, the demands placed on those providing pastoral support - whether academics undertaking a personal tutor role, or members of

professional services teams - have dramatically increased. The number of students self-declaring a mental health condition on arrival at university has risen by 450% over the last decade (UCAS 2021). Specialist provision aside, this increase impacts the demand for non-specialist, pastoral support. The consequences of COVID-19 lockdowns on staff and student wellbeing in general, the requirement to shift pedagogic practice online as part of emergency remote teaching and the subsequent transition to varying levels of blended learning with the move back to on-campus education have also placed significant additional burdens on academic staff time. Supporting students to (re-)adjust both their expectations of university education and the practical realities of their learning experience requires time and effort from the same group of staff who are also seeking to adapt their pedagogic practice

to accommodate the best of the lessons learned through the pandemic. The association of UK Academic Tutoring (UKAT) reported that, post-COVID, their members are finding an increased need to focus on supporting students during the transition to university, to develop academic skills and behaviours and on meeting more intentionally in group settings to help build a stronger sense of belonging among new students (see also Blake et al. 2022).

Within this complex learning landscape, the StREAM engagement analytics platform² provides universities with data-informed insights of individual student academic engagement behaviours³ that enable deeper personalisation of those pastoral and personal tutoring conversations, aided by an interventions lifecycle that helps deliver targeted help and support in the most appropriate way. StREAM enables tutors to answer questions that are essential to the provision of effective information, advice and guidance. Specifically, StREAM helps tutors to:

- ▲ Strengthen students' academic confidence in progression with their studies
- ▲ Know if their tutees are engaged with educationally purposeful learning activities
- ▲ Identify who needs support and which students to prioritise
- ▲ Ensure every student is enabled to reach their potential
- ▲ Maintain a consistent and quality experience for all learners (Solutionpath 2022a)

StREAM uses a student's digital education data profile to identify changes to engagement patterns that signal a possible risk of underachievement or withdrawal from university. Early identification creates an upstream 'window of opportunity' in which staff can support the student to proactively address the root cause(s) of the changes in engagement patterns to avert failure, redress negative engagement trajectories and positively re-engage with their learning.

The following pages explore how to get the most out of StREAM in those personal tutoring and pastoral conversations - to understand the insights from each student's digital footprint and operationalize them in conversation with tutees to achieve impactful outcomes.



¹ In this guide, the terms 'pastoral support' and 'personal tutoring' are used interchangeably. Both refer to non-academic support provided to students by university staff.

² <https://www.solutionpath.co.uk/stream/>

³ Within the StREAM platform, 'engagement' is considered from the perspective of participation in educationally-purposeful activities. This definition aligns with Kuh's definition of student engagement as 'the time and effort students devote to activities that are empirically linked to desired outcomes of college and what institutions do to induce students to participate in these activities' (Kuh 2009). See further Thomas 2012.

The importance of learning analytics in HE

Over the last decade, Solutionpath have seen both a change in the underlying reasons why universities want to deploy learning analytics and a growth in the number of institutions seeking to use data to impact the student learning experience (Solutionpath 2022b)⁴. The deployment of learning analytics signals a move away from a 'one size fits all' approach to tertiary education to the promise of a better, more personalized experience based on individual needs.

Today, multiple reasons for the use of learning analytics within higher education exist (Morris 2022):

1. To support student agency and independent study
2. To enhance and personalise the provision of academic and pastoral support
3. To support students' engagement with their studies
4. To help address curriculum inequalities
5. To help tackle inequalities in assessment
6. To enable institutions to address awarding gaps⁵
7. To support successful student outcomes⁶
8. To ensure regulatory compliance e.g. for engagement under the UKVI student route⁷

The current regulatory and policy framework within UK Higher Education expects universities to demonstrate what they are doing in each of these areas. As an example, the current provider guidance from the Office for Students in respect of the TEF 2023, lists 'relevant findings from learner analytics, for example about students' active engagement with learning' as a potential source of quantitative and qualitative evidence that could inform provider submissions (Office for Students 2022).

Appreciating how a successful learning analytics deployment contributes to fulfilling the moral contract that universities take to support individual student outcomes helps secure staff buy-in and engagement. Reflecting on individual and institutional practice within the StREAM platform can further help identify individual and corporate actions required to progress that deployment towards the end goal of impacting student lives, albeit reflected in institution-level metrics on outcomes and metrics.

⁴ For more about how data informs and supports personal tutoring, see Solutionpath 2022b.

⁵ See further Foster & Siddle 2019. In particular, the authors discuss how identification of students at risk based upon engagement rather than demographic characteristics is both more effective and creates 'a more neutral framework for any tutoring discussions, avoids the risk of stigmatising a student's background and keeps any conversations to matters associated with engaging with the course'.

⁶ Research at Nottingham Trent University found that students who log in to StREAM are more likely to progress the year (Foster & Siddle 2019). See also research from University College Birmingham that demonstrates how increased engagement typically produces higher grades (Cliff-Hindley 2022).

⁷ It is possible to trace the origins of some of these reasons for introducing engagement analytics back to the pivotal 'What Works? Student retention and success programme published in 2012. See further Thomas 2012.

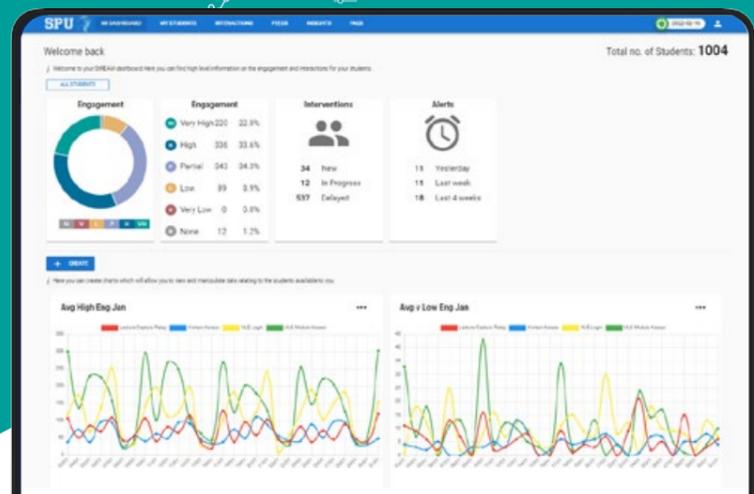
“

In a pre-StREAM world, all of this data was available but on lots of different systems, so you spent more time working out who to intervene with than actually intervening.

”

Michelle Dickson, School Registrar for the School of Health and Life Sciences at Teesside University





Start with the end in mind

Impactful student outcomes, while a necessary part of the Office for Students (OfS) regulatory framework (Office for Students 2022), are much more than a metric against which a university is measured. Ultimately, they are about individual students seeking to achieve their goals and dreams and the multiple benefits and ripple effects that follow. For this reason, Solutionpath advocates that institutions adopting StREAM seek a student-centred deployment approach that reflects their centrality within higher education.

Given that pastoral support activity occurs 'within the ecosystem of student support at the institution' (Foster & Siddle 2019), the deployment of StREAM needs to be situated as part of a whole-institution approach to student success. A successful adoption of StREAM should therefore start with the end goal - the impact on student outcomes. Achieving successful student outcomes requires universities and individuals to have the wisdom to act based on the insights that result from the knowledge of how students are engaging with their studies which in turn are gleaned based upon the information

generated from the multiple data points feeding into StREAM. StREAM is therefore neither an end in itself, nor an 'auto-tutor', but rather the starting point in the creation of a culture of student engagement and positive, proactive support. Contextual understanding and insight – both for the individual students and from a university perspective - are critical to any successful deployment, requiring student engagement data to be available to those who need it most - each individual student and all relevant academic and support staff.

Best Practice

Providing both the data and the information that it generates to both staff and student users ensures that they have the agency to reflect and act upon what the engagement activity data is telling them. A strategic, student-centered, lifecycle approach to the deployment of StREAM, captured within a consistent and coherent student support policy and implemented in practice, maximises the likelihood of closing the loop on student interventions and achieving the intended impact at individual and institutional level. Consider defining an expectation for tutors to proactively reach out directly to students, particularly in complex or more serious situations.

A student-centred use of engagement data

Profile information within StREAM⁸ provides insights into individual students that can shape pastoral conversations that enable users to:

1. Understand the student's prior educational experience
2. Consider the student's prior assessment experience in the light of the demands of the current course (e.g. short pieces of coursework or end of module exam)
3. Know whether the student is returning to study after some time out of education and may need some more support to get used to studying again, or may be more likely to have caring responsibilities⁹
4. Learn whether the student is living on-campus or is commuting and consider what impact this may have on their ability to attend early morning classes

It is important that the potential for any of these factors to impact a student's ability to engage with their learning emerges during pastoral conversations rather than staff assuming that the mere existence of certain demographic characteristics automatically means that the student will be experiencing particular difficulties. Research¹⁰ supports the underlying design principle within StREAM that engagement scores are calculated solely using data that students can directly impact through their academic behaviours. This helps to remove potential user-bias by ensuring that equitable decisions around support provision are based on individual needs.

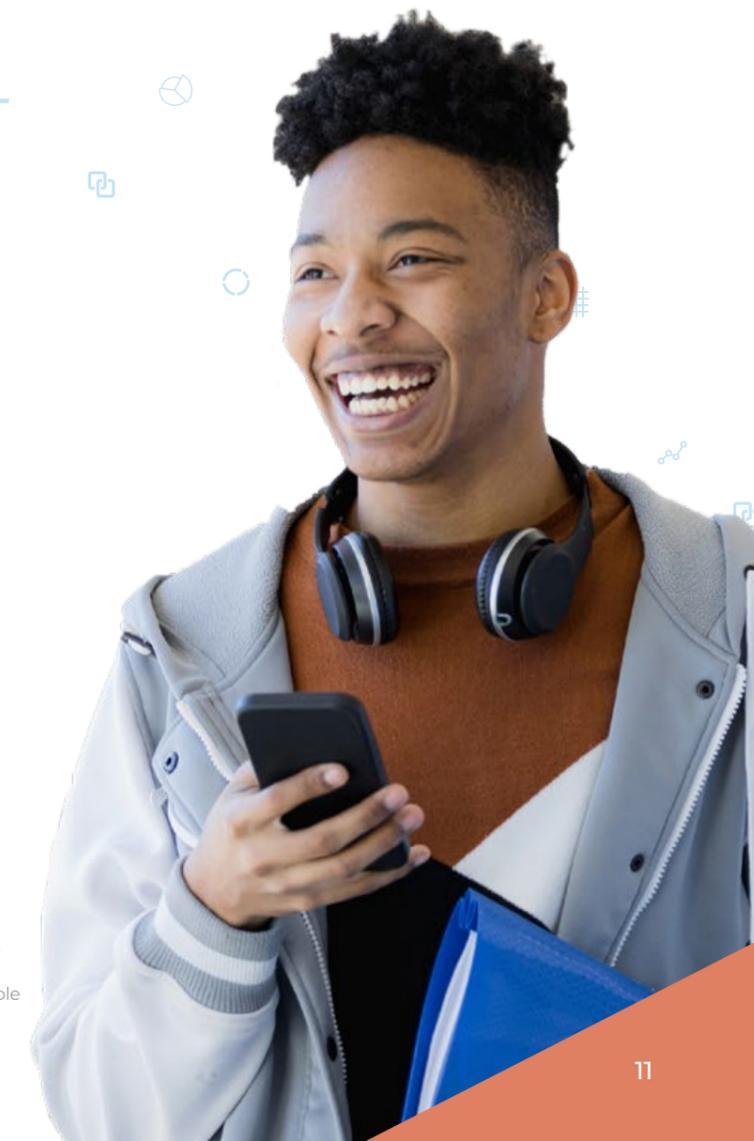
Best Practice

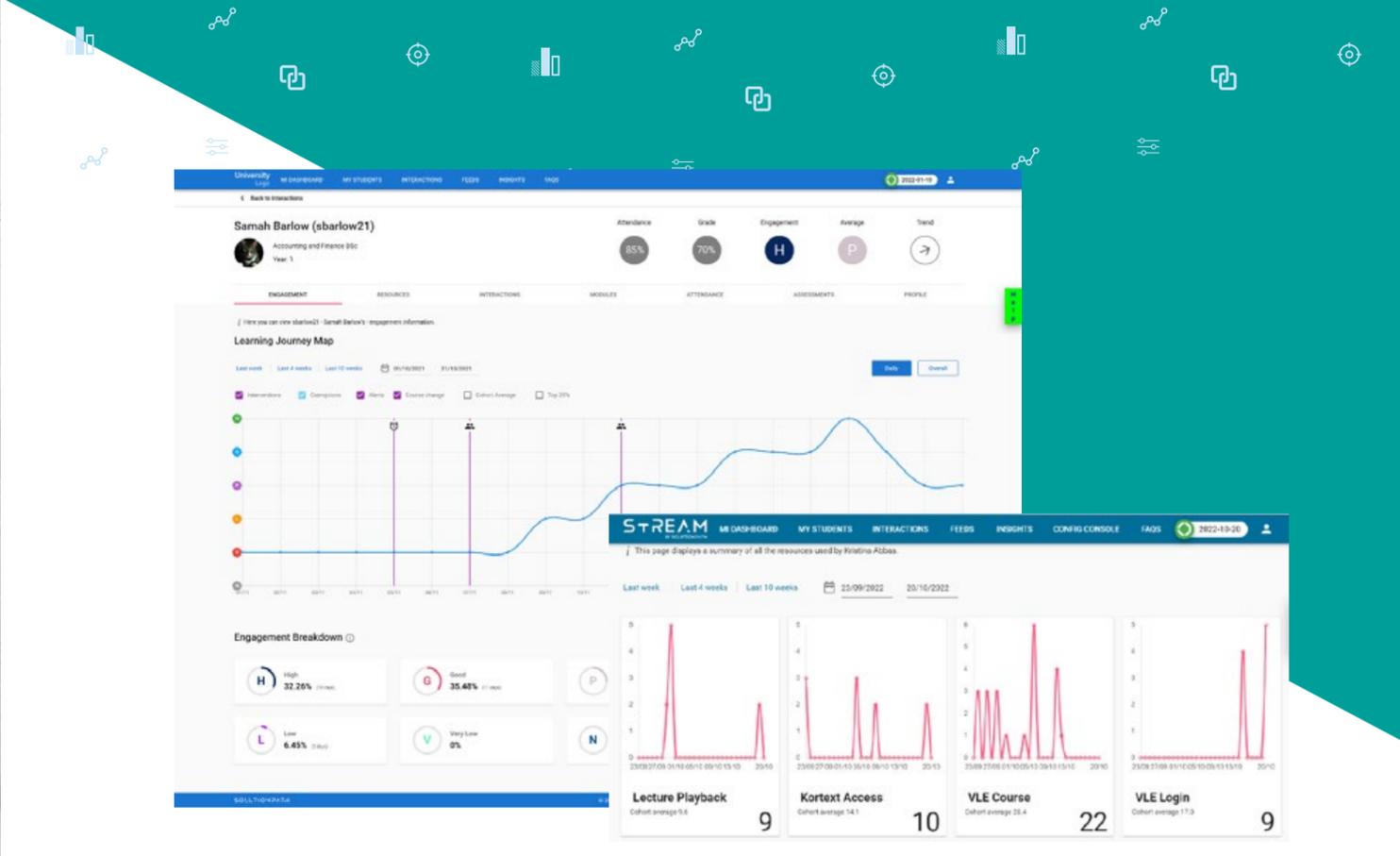
Proactively review student profile data in advance of tutorials to be aware of any factors that might influence how they are engaging with their studies. Use any insights to initiate early outreach activity and pre-empt or mitigate future difficulties. Deeper, coaching-style conversations that draw on contextual knowledge and understanding can help identify areas for improvement and encourage proactive and independent action.

⁸The nature of Profile information within StREAM is determined by each university.

⁹While it is useful to have a prior awareness of these factors, it is important that the potential for them to impact a student's ability to engage with their learning emerges during pastoral conversations rather than a member of staff assuming that demographic characteristics automatically mean that the student will be experiencing particular difficulties simply because they possess those characteristics.

¹⁰Research conducted at Nottingham Trent University has proven that demographic data is less efficient at identifying students at risk of not progressing with their studies than the engagement measures available within StREAM (Foster & Siddle 2019). More accurate identification of students at risk of not progressing also enables more efficient and effective resource deployment within an institution.





A holistic view of student engagement

Viewing demographic data alongside assessment¹¹ and attendance¹² data at module level or with resource use, provides a holistic picture of students' digital engagement at the individual level in one easy-to-interpret dashboard that makes it possible and substantially quicker to build a comprehensive picture of how each student is engaging with their academic studies and pinpoint where a student should focus attention to increase engagement and thus improve their potential for success.



Having visibility of assessment information within StREAM helps our tutors and students to see how their engagement activity is impacting their grades. We know that students are driven by assessment – for the University of Bedfordshire, the ability to triangulate this information provides a deeper level of conversation with our students and helps them to better understand how their engagement affects their outcomes and to take action accordingly.



Caroline Reid, Associate Dean (Student Experience) in the Faculty of Health and Social Sciences, University of Bedfordshire

Understanding how your students normally engage with their learning opportunities is essential if you are to know when a student's engagement behaviours are at odds with their 'normal' engagement profile. StREAM provides a focal point around which to engage the student in an early conversation about the amount of and reasons for any missed learning, agree actions that could help the student re-engage and mitigate against early withdrawal. Being able to identify areas for concern, transparently record notes from the conversation with the student, agree a course of action - whether signposting the student to take responsibility for connecting with support services, or a direct referral to a specialist service asking them to reach out proactively - within StREAM, reduces the knowledge burden on tutors and makes it easier for students to access appropriate support in a timely manner. A year-long study conducted by Wonkhe and Pearson highlighted the level of frustration experienced by students when access to appropriate support at time of need was overly bureaucratic and administrative in nature (Blake et al. 2022).

Best Practice

Focus support on students currently identified as having low-no engagement alongside a proactive and scheduled programme of pastoral support activity. Use the Alerts/Notifications functionality to inform staff and/or students when engagement behaviours fall below institution-specific thresholds and to prompt self-directed changes to learning behaviours by students or encourage tutors to reach out to students.



A key factor in the positive response we've had to StREAM is the introduction of our Learning Analytics Code of Practice. Students like the transparency and that we are clear about how their data will be used.



Jonathan Eaton, Academic Registrar, Teesside University

Enabling student agency

Understanding what the data is 'saying' is valuable for students as well as staff. Research at Nottingham Trent University found that 75% of students found using StREAM extremely beneficial to their time at university. Frequent student users of StREAM were also identified as being more likely to progress to the next level of study (Foster n.d.). Moreover, engendering an increased sense of autonomy over their learning was demonstrated to significantly contribute to students' feelings of belonging (Blake et al. 2022).

¹¹The inclusion of assessment data in StREAM is determined by each university but is not included in the engagement scores for a student. This reflects the fact that the StREAM engagement algorithm requires daily data feeds which doesn't happen with assessment submission. However, assessment data does provide useful insights to StREAM users as it provides evidence to show whether the student's engagement behaviours are resulting in expected attainment levels, or whether that student would be advised to strategically engage with certain learning activities on a more frequent or in-depth basis to improve attainment.

¹² Attendance data can also be visualized within StREAM but not necessarily included in the algorithm. While attendance data used to be considered a useful proxy for engagement, ongoing research has identified that the correlation isn't as secure as was initially believed. This change in view is reflected in the UK Government's replacement of its attendance monitoring policy with a new academic engagement policy for international students. Current guidance is framed more holistically and universities are free to define what counts as engagement in their specific contexts (Gov.UK 2021). It is easy to see how, in this context, the StREAM engagement platform can make it easy to both define and demonstrate engagement for individual students, as well as for groups or cohorts of students. See further Solutionpath n.d.

In a 2017 [post](#) on his [Living Learning Analytics blog](#), Ed Foster, Head of Student Engagement and Analytics at Nottingham Trent University, cites feedback from a personal tutor at the University to show the importance of presenting the data back to students to support a stronger sense of ownership over academic behaviours (Foster 2019a. See also Foster 2019b):

I think that in some cases students who had engaged rather poorly with their course had not fully appreciated how poor their engagement had been in recent months. Showing them the actual data helped them to recognise the extent to which they had disengaged, which in turn created a stimulus for a helpful conversation about how they might address this issue.

It is important to think not simply about what specific aspects of a student's behaviour that you want to focus on, but also *how* you are going to have that conversation and how to demonstrate that every student matters if those conversations are to motivate the student to increase their academic engagement (Hannan 2022).

The transparent approach to data management that is foundational to a successful StREAM deployment¹³ means that students are equally equipped to interpret their learning behaviours from the perspective of engagement. Half of the student

respondents to the NTU research attributed changes in their academic engagement behaviours to the fact that they can see their own data. Reviewing engagement ratings over time on the StREAM learning journey map provides an indication of how a student is getting on – particularly when no external verification of attainment through assessment results is available. Where engagement is low, or lower than for the rest of the cohort, the student can either take self-directed action to address changes in engagement or seek additional help before crisis point arrives.



One of the strongest features of StREAM is its built-in mechanism for referring a student to other specialist support services in the institution. It is incredibly powerful for a personal tutor to be able to use this in the moment with the student, safe in the knowledge that the student will receive the proactive support they need from those other services.



Mark Dransfield, Senior Lecturer in Academic Practice, York St John University

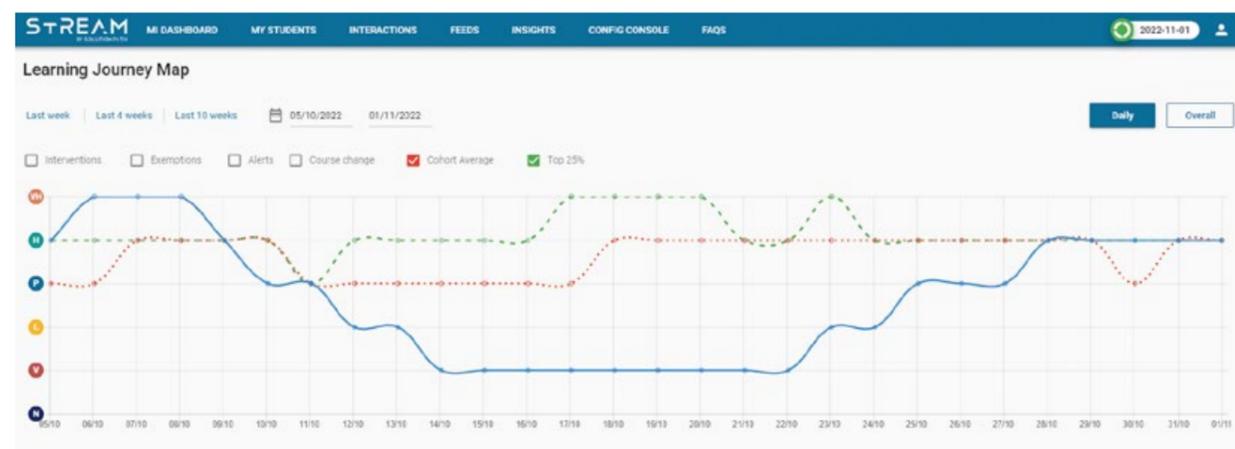


Figure 1: The StREAM Learning Journey Map

Best Practice

Encourage independent use of StREAM by students to provide insights that will stretch and challenge them to aim higher or identify ways to address aspects of non-engagement. Advise on how to use cohort data to compare the individual engagement learning journey with that of peers to identify areas for improvement.

Case Study



The StREAM deployment at the University of Northampton occurred alongside the introduction of a new integrated approach to pastoral support across the institution. The new model introduced new ways of working for all those involved in student support – from personal tutors, through academic and digital skills development to support from specialist professional services teams. At Northampton, StREAM acted as a disrupter – providing data-informed insights to end users enabled a shift to more proactive personal tutoring as the time allocation for pastoral support was utilized differently. Making use of more frequent group tutorials offered opportunities to use the insights within StREAM to proactively reach-out to students whose engagement patterns indicated that an early conversation followed up with clear and agreed actions could prove beneficial to their academic success and prevent possible issues from becoming a reality. Opportunity for 1:1 conversations arising at point of need remained¹⁴.

Colleagues at the University of the West of England have configured their StREAM platform to accommodate the use of online forms where students can request help from a particular team. Louise Carey, student advice co-ordinator, explains that 'some students ... find making that initial call incredibly difficult. The form is an alternative way that students can contact us. The more communication channels that we can make available for a student to ask for help can only really be a benefit' (Solutionpath n.d. c).

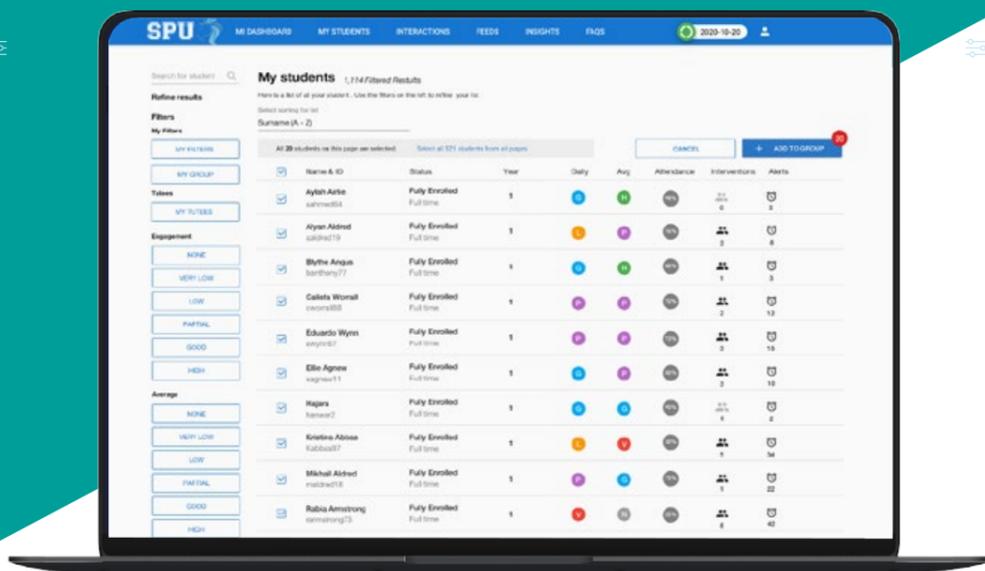
Many pastoral conversations occur based on staff availability at point of need rather than with the named tutor. Recording staff-student interactions in StREAM is key to a strategic and student-centred deployment of StREAM. Role-based access to student data ensures responsibility for pastoral support is clearly defined, in line with strategic and policy imperatives and utilizes the benefits provided by the end-to-end intervention management lifecycle. Resultant intervention activity can remain the responsibility of the student, thereby supporting independent learning, or can be proactively initiated by specialist teams within the university, as agreed by each institution. The ease with which tutors can signpost or refer students can help tutors to avoid advising beyond the limits of their expertise and ensure that the student has timely access to specialist help.

Best Practice

Ensure that all members of staff with a legitimate academic or pastoral reason to view a student's data have access to that student within StREAM and that the underpinning reasons for the selected approach and the associated areas of responsibility are defined, explained and disseminated.

¹³ Data transparency was key to the deployment of StREAM at Teesside University. See Solutionpath, n.d. b.

¹⁴ For more information on the new model of Integrated Learner Support at the University of Northampton, see Sharp et al. 2020.



Data-informed outreach

Digital signals that a student may be disengaging with their studies are visible within StREAM long before they may manifest physically. A student's individual StREAM engagement score, generated by our proprietary algorithm, is the starting point for those insights, providing users with the knowledge of where to target outreach support or which students to encourage to aim higher¹⁵.

Encouraging tutors to interpret those signals and reach out to the students in question recognizes the role that they play in helping student to navigate the often-complex world of higher education.

Their expert knowledge can help students contextualise the reason for the outreach activity and effectively explore ways to increase motivation or encourage engagement. Dr Elaine Swift, Head of Digital Learning and Teaching at the University of Worcester, explains: 'StREAM will allow the University to spot early warning signs so they can respond quickly and improve the student journey' (Solutionpath 2022c).

Best Practice

- Visualise data in multiple ways to support different groups of students or review progress against key metrics or implement targeted student support initiatives.
- Use data insights to act early in the academic year to remove structural obstacles to student engagement and success. Tailor institution-wide outreach strategies based on engagement categories and what is 'normal' for an individual or within a particular cohort group.
- Align deployment of StREAM to institutional policy and process around student support to encourage independent learning.

¹⁵ Default engagement categories in StREAM range from 'very high' through to 'very low'. A separate category of 'none' exists where either no data is available, or it hasn't been possible to generate an engagement score. Students who spend most of their time in the two extremes of engagement (very high or very low) are the ones who benefit most from intervention strategies (Sherlock 2022).

The easy-to-interpret visualization of engagement available on the StREAM Management Information dashboard can be filtered to enable differential support strategies to be implemented (Solutionpath 2022a). Some typical use cases here include the following:

- Quick access to students in specific engagement categories for the purposes of implementing differential outreach strategies
- Grouping students with live interventions for the purposes of follow-up and to monitor whether the intervention is improving their academic engagement
- Helping to monitor attendance and engagement of international students in line with the UKVI requirements
- Monitoring of targeted outreach activity to address differential student outcomes¹⁶
- Grouping students for specific logistical reasons e.g. those who haven't completed their occupational health forms prior to placement

Engagement behaviours differ at the individual level and fluctuate over time, depending on the day, week, month and stage of the academic cycle. Research at Aston University concluded that early measures of engagement i.e. in the first few weeks of a student starting at university, is predictive of both future behaviour and outcomes (Summers et al. 2021). Viewing engagement over time can reveal behavioural patterns that can prompt a conversation followed by targeted support, particularly when those patterns begin to differ from the norm. Enabling comparisons to the cohort can also evidence how a student might beneficially impact their engagement profile.



You can better look after a student from a personal tutor point of view because you can see where they are ... give them better guidance.



Staff feedback, University of Leeds

Case Study

UNIVERSITY OF LEEDS

As part of a research-informed deployment of StREAM, the University of Leeds sought to explore the implications of exposing anonymized cohort engagement profiles to individual students in StREAM. Leeds identified that individual learning journey maps were contextually richer and therefore of more value when cohort information was available for comparison purposes. The research team concluded that there was no 'right' or 'wrong' in terms of engagement patterns but that the additional insights that were available to staff and students when cohort comparison data was made available resulted in deeper, more focused and more personalized conversations with students¹⁷.

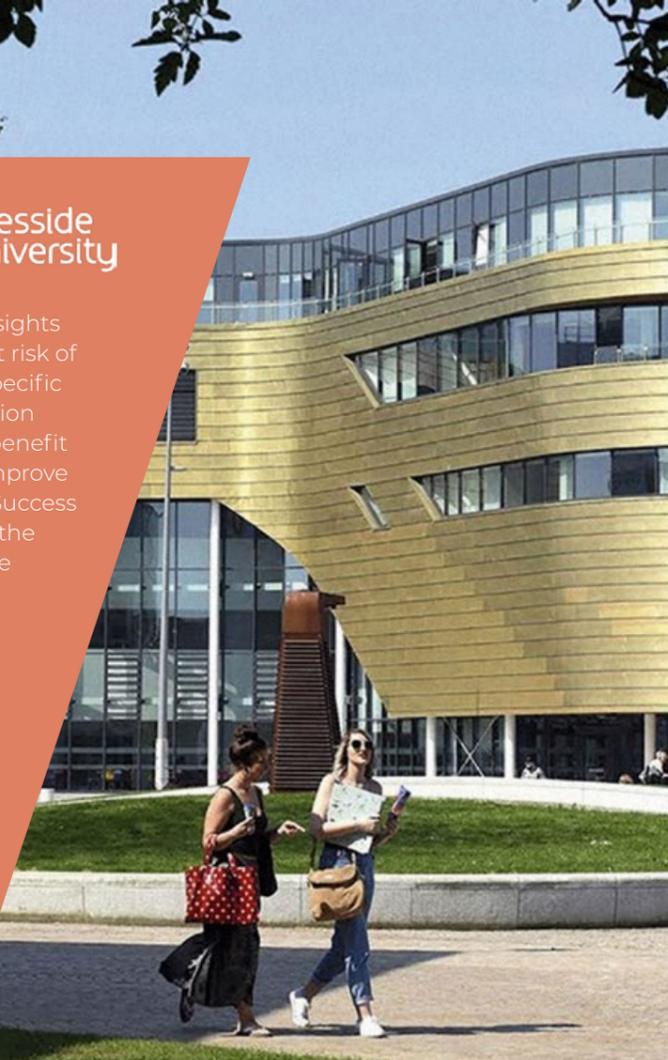
¹⁶ The extent to which StREAM can provide management insights in this way is conditional upon the data that is provided to StREAM by the University. The principles of data transparency that underpin StREAM mean that if certain data is visible within StREAM, it is visible to all users. Alternatively, protected characteristic data can be passed to StREAM without being visualised anywhere within the platform, but included in Insights reports that are only available to StREAM Administrators for reporting purposes.

¹⁷ See Solutionpath & University of Leeds (2023) to find out more about the University of Leeds research-informed deployment of StREAM.

Case Study



Student Success Tutors at Teesside University use the data insights provided in StREAM to offer tailored 1:1 support for students at risk of disengaging from their studies or who would benefit from specific targeted academic interventions. StREAM is used in conjunction with personal tutor insights, to identify students who would benefit from a learning support intervention. Alongside seeking to improve retention, progression and student outcomes, their Student Success Programme initiative aims to harness a connection between the student and the university to build a sense of belonging to the Teesside University academic community. Five months into the programme, 290 students were engaged in their intensive coaching/mentoring programme to increase academic confidence and skills and 1300 students were part of the engagement network as a whole. More broadly at TU, StREAM is generating insights and connections that inform a whole-institution approach to pastoral support as additional student-centred solutions are developed in conjunction with academic colleagues but with clearly delineated responsibilities and referral processes.



StREAM can also be configured to support student success at the higher end of the attainment scale. Acknowledging and congratulating sustained high engagement or above-average resource use can motivate learners to apply themselves more and achieve or exceed individual goals with a resultant impact on university metrics as well as benefiting the individual student. More broadly, these activities add a valuable personal touch and help students strengthen their sense of relationship with their tutor and belonging to the university (Thomas 2012), an important challenge to address on the post-pandemic campus (Capper & McVitty 2022; Boynton 2022; Blake et al. 2022).



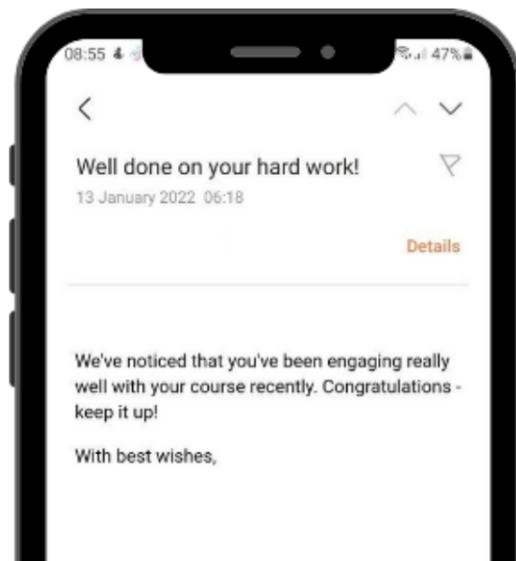
Thank you, it's things like this that keep students like me motivated. It's really appreciated.



University College Birmingham, Student

Best Practice

Personally acknowledge and congratulate students for sustained high engagement.



Conclusions

The provision of pastoral care is shown through the examples in this document to be best facilitated as part of a two-way relationship between students and university staff. Helping students to understand that effective provision of pastoral support and academic guidance is a two-way process has been identified as being one of the main challenges to supporting students at scale¹⁸.

Expecting students to take sole responsibility for their academic engagement undermines the moral contract that universities make with their students upon enrolment to support their success and can function as a 'get out clause for staff'; an approach that is particularly concerning given the increased anxieties, wellbeing and mental health concerns among today's student population that regularly feature in sector press as well as in the mainstream media. Equally, expecting the university to be solely responsible for identifying and initiating pastoral support fails to identify students as adults with responsibilities for their own learning and success. Clearly there is a balance to be found, particularly around the use of knowledge and insights from data sources to maximise their impact for every student.

The rationale for making efficient and effective use of data to support the student experience and student outcomes is further consolidating its place on strategic agendas in response to the regulatory and policy framework within higher education

evidence by the OfS and the evidential requirements for Access and Participation activity or the next round of the Teaching Excellence and Student Outcomes Framework (TEF)¹⁹. In this context, the Solutionpath StREAM platform uses student engagement data provides evidential insights of progress against and impact on key performance indicators to those with senior academic leadership and governance roles.

Underneath the amalgamated cohort data lies the real powerhouse of StREAM, namely the ability to use the information from academic engagement data to generate knowledge and insights that provide staff and students with the wisdom to know how best to act given the individual circumstances. StREAM therefore works in true partnership with every student to support the delivery of 'successful outcomes for all' as required by the OfS²⁰. From encouraging students to engage or re-engage with their studies through to supporting them to aim higher and maximise their potential, StREAM delivers a holistic and personalized approach to academic engagement.

¹⁸Feedback received from representatives of 20 UK universities at a Solutionpath facilitated session on Supporting Students at Scale, presented at the UKAT Annual Conference 2021.

¹⁹The current guidance to providers on the sorts of evidence that they could consider in their submission in respect of student experience and outcomes. Point h refers to 'Relevant findings from learner analytics, for example about students' active engagement with learning' (Office for Students 2022).

²⁰See Condition B3 of the Office for Student's regulatory framework for UKHE (Office for Students 2018).

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