

A Faculty Personal Tutor Model to Support Student Transition into Higher Education During a Global Pandemic

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In 2020, Science, Technology, Engineering and Math (STEM) faculty within a United Kingdom university implemented an online personal tutoring model. This model aimed to deliver a consistent experience to ~1000 students, supporting learning and fostering a sense of belonging during a global pandemic. Here we describe and evaluate a Curriculum Integrated personal tutor model, designed to provide a structured and dialogic student experience. We provide details on the timetabled activities, aligned to student development needs, and reflect on the model's effectiveness in supporting student learning, building belonging, and providing accessible delivery. We highlight strengths and explore weaknesses, providing recommendations for implementation of this type of model at other institutions.

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REVIEW

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Background

Personal tutoring greatly impacts a student's university experience (Grey & Osborne, 2019; Lochtie et al., 2018; Yale, 2019) and crucially supports students in Higher Education (HE). When done effectively, personal tutoring supports a student's transition to college, builds a sense of belonging (Harding & Thompson, 2011; van Hooff & Westall, 2016), and provides student-to-student interactions alongside staff-to-student relationship building (Barefoot, 2000).

Despite such recognition, student experiences with personal tutoring vary drastically (Ghenghesh, 2018; Yale, 2019). Differences in United Kingdom (UK) personal tutor practices, even within the same faculty, are not uncommon, as the personal tutor's role remains ill-defined (Grey & Osborne, 2020; Walker, 2018). Tutors must provide a wealth of information and support on HE processes and

procedures, academic feedback and skill development, and personal welfare support; tutors also signpost information, build institutional relationships, and create a sense of belonging (Grey & Osbourne, 2020). However, during Covid, most interactions went fully online, and student engagement with their academic tutors changed drastically (Mulrooney & Kelly, 2020).

For Science, Technology, Engineering and Math (STEM) students, the challenges may have been even greater. Covid meant the loss of on-campus laboratory teaching and small group tutorials (Appleby et al., 2022). This work considers the experience of STEM faculty of an Engineering and Physical Sciences (EPS) department, housed within a medium sized, dual intensive, Midlands based UK Higher Education Institution (HEI). Although the university provided centralized, personal tutoring guidance, university faculties had autonomy in implementing personal tutoring. Within EPS, each department managed its own personal tutoring schedule. Some departments offered comprehensive, structured, and well-communicated personal tutoring experiences; others managed personal tutoring more informally, whereby students contacted their personal tutor only when required. Concerns quickly arose during Covid as online teaching reduced informal staff-to-student interactions (Khan, 2021). Students reported fears of missing out on campus learning opportunities and felt Covid restrictions negatively impacted friendships (Appleby et al., 2022). Those students new to university in 2020 and 2021 had their pre-university studies disrupted as well, resulting in even less preparedness (Bhopal & Myers, 2020).

In response to these concerns, the EPS faculty designed and implemented a new model of personal tutoring. It aimed to reach all new first year undergraduates and ensure a smooth transition into higher education during a global pandemic. Below we present the personal tutoring model and an evaluation of its initial implementation at this institution.

Definitions

Personal tutoring is a title used widely within UK universities. We define personal tutoring as the delivery of academic support to help students get the most out of their time at university and reach their full potential (Kuhn, 2008; Miller, 2012). In the UK, personal tutoring is part of being an academic; all personal tutors in this study identify as faculty members and academic staff. Our definition of faculty encompasses everyone involved in the delivery, teaching, and administration of programs of study, including academics and professional support staff. Faculty describes an area within the university, not a group of people. Finally, when referencing accessibility, Duggin (2016) informs our definition: to make an artefact, activity, or environment useable by as many people as possible.

Our Approach: Theory Informed Design

Our university has one of the highest UK HE communities of Black, Asian, and Minority Ethnic (BAME) identifying students; most come from under-represented communities, lower socio-economic backgrounds, and/or are first-generation and face specific challenges (Demetriou & Mann, 2011; Kosin, 2020). Our faculty oversees approximately 1,000 first year undergraduates; we have $\sim\!100$ academic staff acting as personal tutors to new undergraduates, with some tutors having $\sim\!30$ personal tutees. Recognizing this demographic's specific challenges, the new personal tutor model delivered personalized support to a sizeable, diverse cohort.

A robust tutoring model was essential to enable needs to be met during the transition to HE because the proportion of students in this population continues to rise (Earwaker, 1992). Success has been seen for tutors who empathize, share personal stories, direct students to support mechanisms, and provide needed positive affirmations, especially for first-year students (Demetriou & Mann, 2011; Kosin, 2020). Thus, our personal tutor model aimed to be a first point of contact, informing new students about study skills and academic support, and encouraging tutor/tutee relationships that promote integration and belonging (Thomas, 2012).

The following three educational principles were utilized to inform our personal tutor model's design:

1: The personal tutor model should support student learning by:

- providing learning material aligned to our students' educational needs and requirements;
- promoting a consistent faculty approach in supporting first year student HE transitions.

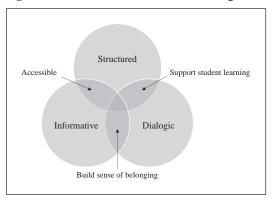
New students must adapt to collegiate teaching styles and support mechanisms (Earwaker, 1992), therefore our personal tutor model focused on such skills, which are known to improve retention (Crosling et al., 2009). We scheduled tutor/tutee contact point sessions (Stephen et al., 2008) and adopted a Curriculum Integrated Model, which utilizes a structured and consistent experience of student development with activities linked to specific learning outcomes to foster student success (Earwalker, 1992; Grey & Osborne 2020; Lochtie et al., 2018). In short, our approach aligns with concepts linking advising pedagogy with curriculum and learning outcomes (NACADA, 2006). Additionally, students' personal and academic development can be enhanced in a system that integrates the pastoral, professional and curricular support (Livingstone & Naismith, 2018). Adopting this Curriculum Integrated Model allowed for structured, personal tutor sessions that aligned with specific learning events and provided students with consistent opportunities to seek support.

2: The personal tutor model should build a sense of belonging through:

- building tutee awareness of and relationship with their tutor;
- providing an environment where students build peer networks and develop new friendship groups.

While a scheduled, structured approach has benefits, personal tutoring must also take place outside of scheduled meetings (Race, 2015), and students need to be empowered to interact with their tutor at times of challenge (Harding & Thompson, 2011; Stephen et al., 2008; Willet et al., 2014). A lack of belonging lowers student retention (Crosling et al., 2009). Stephen et al. (2008) found that students who never connected with tutors felt displaced from their institution and studies, and Thomas (2012) concluded that supportive peer relations and meaningful interactions foster feelings of belonging. Therefore, personal

Figure 1. SID Model of Personal Tutoring



tutoring should also facilitate peer group interactions (Yale, 2019), which can be achieved through the group sessions advocated by the Curriculum Integrated model (Grey & Osborne, 2020). Stenton (2017) emphasized that tutoring *is* teaching. Using dialogic teaching while tutoring allows academics to maintain their "teacher" role while also providing support through discussion (University of Cambridge, 2024). This combination of roles—academic advisor and personal tutor (Smith, 2008)—was common in our faculty, but we felt that combining our existing practice with a dialogic approach would foster a more supportive, considerate environment (NACADA, 2017).

3: Produce a personal tutor model with which both students and staff can engage comfortably.

For personal tutoring to succeed, staff and student roles need to be clear. Stenton (2017) argued that for staff to engage, the personal tutor role needs to be a part of, not distinct from, the academic role. A structured approach enables clear objectives and engagement timeframes that can address issues of staff confidence and competence (Barlow & Antoniou, 2007; Myers, 2008). Although a structured approach can increase staff workload, unstructured, open door personal tutoring alone can be less successful as students remain unaware of the benefits of making contact (Neville, 2007).

During Covid, many institutions went fully online. While scholars have discussed email and phone advising, most neglect the importance of non-verbal communication (Mueller & Meyer, 2017; Ohrablo, 2016). Discussion blogs can be engaging for online students (Finley & Chapman,

2011), but they too bypass the impact of real time, non-verbal communication. Although an online meeting space (made possible by university-related software) can enable face-to-face engagement and real time communication, it can also open a digital divide (Lucas & Vicente, 2022; Office for National Statistics, 2019; Pearson & Koppi, 2006). Therefore, we utilized the online platform in a way in which both staff and students found easy to use and which aligned with a dialogic approach.

SID Model Design and Delivery

Using the Curriculum Integrated approach, we developed the SID (Structured, Informative, Dialogic) model of personal tutoring (see Figure 1) driven by three principles of supporting student learning: ease of access (aligned to educational principle 3) to key educational content and personal academic support (educational principle 1), underpinned by a dialogic, relationship building approach (educational principle 2). To that end, we structured a series of online sessions where all personal tutors delivered the same educational topic during the same teaching week. Sessions were timetabled and delivered synchronously via the university's Virtual Learning Environment (VLE), which provided easy access and a regular point of contact between tutor and tutee. Students met virtually in unrecorded group sessions to encourage peer networking and to build relationships. The week 4 session was dedicated to recapping information for any students who missed the initial meeting (see Table 1). Additionally, all students received informational resources to ensure that anyone who missed a live session was not left uninformed.

To ensure structured and informative sessions, each meeting featured content that specifically aligned to areas of student support. A group of academic and professional service staff, alongside EPS faculty and students, collaborated to craft slides and supplementary materials. Session plans focused on staff, student, and peer dialog. Personal tutors learned of the new personal tutoring system three months prior to the term starting and provided feedback. Tutors received access to the teaching material a month prior to delivery, allowing them time to seek any needed clarity or guidance.

Topics were linked to weeks of delivery to align with different stages of the student journey through their first year (see Table 1). We scheduled initial meetings for Welcome Week (the first week students are on campus) due to the importance

Table 1. Outline of Personal Tutoring Programme Delivered in 2020/21 and 2021/22

		2020/21	2021/22	
Teaching Period 1	eaching Period 1 Welcome Week Initial introductions and introduction to role of the			
-	Week 1	Managing expectations of personal tutoring and university		
	Week 2	Managing online learning	How to study at university	
	Week 3	Good academic practice	•	
	Week 4	Catch up (for new students)		
	Week 5	Tips for	Tips for assessments	
	Week 6	Putting things back on track		
	Week 7			
	Week 8		1:1 meeting	
	Week 11		Revision and exam technique	
Teaching Period 2	Week 18		Using feedback	
-	Week 19		1:1 meeting	

of initial student/tutor meetings (Yale, 2019). Finally, we updated the delivery structure between 2020/21 and 2021/22, incorporating staff and student feedback in accordance with our research methodology.

SID Personal Tutor Model Evaluation

We evaluated the SID personal tutor model between 2020 to 2022. The evaluation aimed to determine if the SID model addressed our three educational principles:

- 1: The personal tutor model should support student learning
- 2: The personal tutor model should build a sense of belonging
- 3: Produce a personal tutor model with which students and staff can engage

For evaluation purposes, we asked the following research questions:

- RQ1: Did the SID model support student learning and aid their transition into university?
- RQ2: Did the SID model strengthen tutor-tutee relationships?
- RQ3: Did the SID model create peer relationships?
- RQ4: Did the SID model have good levels of student and staff engagement?

Methodology

We took a Participatory Action Research (PAR) approach when designing the methodology. PAR

is a common research methodology that "combines theory and practice, action and reflection with the participation of [relevant] stakeholders" (Jacobs, 2016, p. 49). Aligning with the PAR approach, the project team worked with staff and students to develop questionnaires that gauged their views on how the SID model addressed our four research questions. The presented data reflects the perspective of students involved in academic years of delivery 2020/21 and 2021/22. The team also worked with academic staff and students, who experienced the 2020/21 implementation of the new SID model, to ensure that their input informed the amended delivery introduced in 2021/22.

We invited all incoming first-year students to provide their views on the new SID personal tutor model via an online questionnaire at the end of the final Teaching Period 1 session and in a follow-up email. UK HE students are familiar with completing online questionnaires, as the UK Office for Students distributes student satisfaction surveys annually. Participation was voluntary, informed, and consensual. This questionnaire included 45 focused questions for students who had attended personal tutor meetings and 8 for students who had not; finally, 6 general questions inquired about the students' studies, interactions with peers, their tutors, and the online session environment. All participants had a chance to win a £10 Amazon voucher upon completion.

Our survey explored the *what* rather than the *why* of the outcomes. The questionnaire was predominantly (77%) closed questions relating to student experiences of the personal tutor program. A Likert scale indicated student levels of agreement with closed questions (1 = strongly disagree, 5 = strongly agree) and with average scores and

I was interested in the topics discussed (n=96)

Sessions improved my study techniques (n=96)

Sessions enabled me to more effectively search for information (n=96)

Sessions improved my knowledge on academic offences (n=95)

Sessions improved my knowledge on assessments and exams support (n=95)

Sessions improved my knowledge on academic and personal support (n=96)

Figure 2. Support of Student Transition into University Study

standard deviations calculated for each question. However, open text questions allowed students opportunities to provide in-depth thoughts. Overall, 23% of the questions were open text (i.e., What did you like and dislike about the content of your group personal tutor sessions?). Some examples of these responses appear in the data and analysis section; the number following each quote (P#) indicates the participant making that quote.

The data sample—extracted from Ordidge & Sorohan (2021)—consisted of 72 participants in the 2020/21 cohort and 25 participants in the 2021/22 cohort; 55% were male, 39% female (6% did not answer). Ninety percent of participants were domestic; 8% were international students (2% did not answer). Students could also self-report their ethnicity; 18% stated that they were white, 44% Asian, 3% Black, 2% Mixed and 19% stated another ethnicity (14% did not answer). To analyze student engagement, personal tutors monitored attendance and reported any absences to faculty administrators. The University Research Ethics Committee (reference #1798) provided ethical approval for the 21/22 data collection, with 20/21 data being extracted from an internal report generated from ongoing analysis of the project (Ordidge & Sorohan, 2021).

Data Analysis and Key Outcomes

RQ:1 Did the SID model support student learning? (Educational Principle 1). To address the question, "Did the SID model support student learning, to aid their transition into university?" we asked students to reflect on group personal tutor meetings. These questions focused on interest, usefulness, and outcomes. Our analysis of the

responses evaluated the degree to which the SID model supported learning and aided transition into university.

6

3

Average Score of Likert Scale

Responses indicate that the model's delivery most improved students' knowledge of academic offences (see Figure 2), a topic covered within the Tips for Assessment session (see Table 1). Students also reported improved assessment knowledge and exam support. When asked which topics were most relevant to their personal circumstances, students mentioned these same topics in open text responses, along with time management and study skills.

"Exam preparation and the plagiarism and collusion topics." (P3)

"Doing exams and how to do referencing in assignments" (P17)

"Exam support as I was struggling with that" (P4)

"How to prioritize and balance time spent between assignments, revision and reviewing the content of lectures." (P10)

These findings align with van Hooff and Westall (2016) who found that students valued meetings that aligned with their academic development.

The topics students mentioned are all key to understanding how to succeed at university. Students found this approach supportive of their transition to university when reflecting on what they particularly liked about the personal tutoring experience. For instance: "I liked the information given as it allowed me to get more familiar with university" (p. 16). Although one student reported content overlap between personal tutor and degree information sessions, the information was still beneficial:

Table 2. Tutor Support

In-session academic tutor performance & support	Average Likert score	Standard Deviation
My tutor was well prepared for the sessions $(n = 97)$	4.5	+/-0.7
My tutor explained the subject, so it was easy to understand $(n = 95)$	4.5	+/-0.8
My tutor ensured sessions were enjoyable $(n = 96)$	4.3	+/-0.9
My tutor encouraged me to participate during sessions $(n = 97)$	4.3	+/-0.8
My tutor was responsive to questions during sessions $(n = 97)$	4.7	+/-0.6
My tutor showed respect towards all students $(n = 96)$	4.8	+/-0.5
My tutor contributed to a positive working and learning atmosphere $(n = 97)$	4.6	+/-0.7
Accompanying academic advising & support		
My tutor has offered good personal support $(n = 97)$	4.5	+/-0.8
My tutor has been available to answer further questions $(n = 97)$	4.5	+/-0.8
My tutor showed understanding for different life situations ($n = 95$)	4.2	+/-0.9
I'm more comfortable approaching my tutor on academic support $(n = 96)$	4.4	+/-0.9
I'm more comfortable approaching my tutor on personal circumstances ($n = 97$)	3.9	+/-1.0

"Some parts were quite repetitive and were already covered in different modules. The information provided was relevant and useful" (p. 12).

Our SID model analysis reflects that students were more aware of both academic and personal support systems (see Figure 2) and that the model's dialogic aspect enabled them to discuss concerns that fell outside of timetabled teaching. Thus, the model can be seen to support their learning journey. "I liked the ability to discuss topics that concerned me that weren't covered in lessons" (P4).

Overall, our findings reflect those described in Grey and Osborne (2020), that our Curriculum Integrated SID Model supported student learning. It introduced students to university learning, helped them discuss expectations, and identify sources of expertise. Students reported feeling supported in their learning and their transition to university; additionally, having the SID, model combined with personal wellbeing support, further reinforced student success.

RQ2/RQ3: Did the SID model strengthen tutortutee relationships or create peer relationships? (Educational Principle 2). To evaluate the sense of belonging students developed via the SID model, we explored the tutor-tutee relationship (research question 2) and peer relationships (research question 3) from the student perspective.

Students found their tutors well prepared, responsive, and respectful (see Table 2). Following the personal tutor sessions, students reported that they were more comfortable contacting their personal tutor with academic or personal concerns (see Table 2). This finding indicates that a tutor-tutee relationship was built, with open text responses echoing this. Some responses include:

"Liked that my tutor is friendly and helpful. Content was delivered in a helpful way." (P7) "The PT carried the sessions with her bright enthusiasm to teach and to make us feel like engaging with the content and lesson. Couldn't have had a better PT tbh. Very helpful as our first PT coming into university." (P11)

"I like how my personal tutor explains the slides in a simple and concise way." (P17) "I will contact my PT for any personal matters I need help on and also about questions to do with my course and the content." (P11)

In short, like other studies, we found that structured, personal tutor meetings encouraged student engagement and awareness (Braine & Parnell, 2011). Our findings indicate that when students have positive personal tutor experiences, their willingness to approach their personal tutor outside of sessions increases, a finding supported by Braine and Parnell (2011) and Yale (2019).

The formal delivery of the SID model of personal tutoring enabled students to connect with the university via their personal tutor. As indicated by one student's reflection: "I liked the ability to discuss topics that concerned me that weren't covered in lessons" (P4). This connection point built an institutional sense of belonging and indicates that personal tutors should take the lead in communicating with their students. As found in previous studies, our students also appreciated this proactive approach (Stephen et al., 2008; Thomas, 2012; Varney, 2013).

To evaluate whether the SID model developed a peer network (research question 3), we asked

Working atmosphere among students was good (n=96)Cooperation with fellow students worked well (n=96)Sessions increased my willingness to participate in discussions (n=97) I regularly took part in discussions (n=97) I am satisfied with my own contribution (n=96)I feel I contributed to the success of the sessions (n=96) Since attending sessions I am more willing to collaborate with my peers (n=97) By attending group sessions, I know more students from my course (n=96) Average Score of Likert Scale

Figure 3. Creation of a Cooperative Learning Environment

students about their group meeting environment. Overall, students felt that although they contributed satisfactorily (see Figure 3), their peer-to-peer interactions had not been successful, and they thought they had not developed a peer network.

Scholars have shown that group tutorials can facilitate peer relationship building and create a sense of belonging (Grey & Osbourne, 2020). However, student-staff power dynamics can inhibit relationship building, so too can student unease about their own academic abilities, especially for non-native English speakers (Raby, 2020). The responses, shown in Table 2, suggest that tutors actively encouraged participation and explained content clearly, so any lack of interaction is not simply because students did not understand content or were not given opportunities to contribute.

Another potential issue was the online setting. Tutors reported tutees were unwilling to turn on cameras or ask questions and often responded only in the chat function. This response mimics classroom etiquette trends across HE, with academic staff finding it more challenging to build interactive teaching environments online (Brown & Finn, 2021). As such, it appears that our SID model failed to provide an environment in which students could build peer networks or develop new friendships. Therefore, while embedding a dialogic approach within the Curriculum Integrated Model helped students build relationships with their tutors, they did not fully develop peer networks.

RQ3: Did the SID model have good levels of student and staff engagement? (Educational Principal 3). Did the SID model garner good levels of student and staff engagement? To answer that question, we monitored student attendance. Overall, attendance at personal tutor sessions was good, with the average weekly attendance at 67%—significantly higher than before the SID model, which was nearer 20%. Departments that communicated the importance of attendance to students demonstrated better engagement. Therefore, the SID model increased student attendance when compared to the previous unstructured and informal tutor sessions—findings that again confirm those of Varney (2013).

As we delivered this model during Covid, we were conscious of how digital inequity and different learning environments could negatively impact student engagement (Peimani & Kamalipour, 2021; Resta et al., 2018). Tracking the initial online sessions across the faculty showed that 80% of our students attended, with the only digital access issue related to "finding" the online room (Ordidge & Sorohan, 2021) —a finding that aligned with Leslie et al. (2022) regarding student access to internet enabled devices. Therefore, using an online learning environment did not noticeably deter students from attending.

In addition to student engagement, we needed to determine the extent to which the SID model helped increase staff confidence. Role confidence, clarity, and workload all influence staff engagement (McFarlane, 2016). However, staff found pre-prepared teaching material useful; therefore,

the more structured, formalized approach of the SID model timetabled into staff workloads provided clearer roles and responsibilities and alleviated insecurity (McFarlane, 2016). Furthermore, providing an environment where staff could build relationships with tutees (Grey & Osbourne 2020) was clearly beneficial, as staff agreed that group personal tutor sessions were ideal avenues to get to know students (Ordidge & Sorohan, 2021).

Utilizing an online learning environment during Covid to conduct personal tutoring was something new, so we wanted to determine how/if using an online learning environment impacted student engagement. When students reflected on their session group sizes, there was a near-equal split between students feeling that attendance was too low versus just right. Of course, group size can impact a peers' ability to interact online (Juwah, 2006). Given that only 4% of students thought their group size was too big, perhaps some students found themselves in small groups that limited their student and staff interactions (Brown & Finn, 2021; Peimani & Kamalipour, 2021; Raby, 2020). In the open question comments, one student reflected on this opportunity for interaction: "I disliked the online meeting despite having good delivery because it was harder to connect with students" (P4). This comment indicates that the move online did impact the ability to connect and engage with peers. This theme also appeared when students suggested what should change for future delivery:

"If they were on a day that we were on campus" (P4)
"Have a few on campus sessions" (P19)

"Face to face delivery is easier to engage with" (P10)

Staff feedback mirrored this desire for on-campus delivery, believing it would increase student interaction—an opinion reflected in findings by Grey and Osbourne (2020).

Therefore, regarding our research question about whether online sessions influenced student engagement: online sessions had better student attendance than previous on-campus sessions, likely due increased scheduling flexibility. However, like any session, poor student attendance degraded the learning experience (Yale, 2019). This study was implemented during lock-down, so student requests for on-campus sessions may have been higher than normal. To explore how

student engagement could differ between oncampus and on-line sessions, further studies are needed.

Study Limitations

Questionnaire sampling can result in self-selection bias, (especially for students with extreme views; Andrade, 2020) meaning that moderate student voices may be underrepresented. The data presented combines both sets of responses, giving an overall sample size of 97, representing around 10% of the cohort. Although the number of student respondents in 2021/22 was lower than in 20/ 21. However, our responses were from students who attended at least one of the group sessions. Furthermore, student responses to questions differed, as shown by the standard deviation on the Likert scale; open comments also demonstrated a range of views and experiences. Noting the above issues around online questionnaires, focus groups may be a possible solution for future studies.

The study was conducted in the UK, with responses reflective of UK student demographics. Some of our findings, (e.g., digital accessibility) may not be fully reflective of other countries' student cohorts. Our findings align with other international studies, as highlighted in the Data Analysis sections. Still, further research is needed into the use of the SID model at another university, preferably outside of the UK, to determine if similar results arise.

Finally, we implemented this SID model during Covid lockdown restrictions, so findings reflect staff and student mentalities during a global pandemic. Future research should repeat the student questionnaire with additional focus groups to explore the model within post-pandemic teaching delivery.

Recommendations

Institutions should consider introducing a proactive, tutor-led approach to increase student engagement and satisfaction with personal tutors. Designing a personal tutor model around dialogue, using a group setting can help build social relationships. Also, providing staff with pre-prepared material can help them structure and lead discussions. Institutions and/or faculties that want a consistent, personal tutor experience that helps students transition to university may find that the Curriculum Integrated Model enables a structured delivery system while incorporating personal tutor sessions into timetables can increase student and staff engagement.

An online delivery format that students and staff can easily access for group settings will enable better initial tutor/tutee relationships. If the institution's students engage with online learning by having their cameras off or by typing in the chat function, then it will not enable students to build peer relationships. Therefore, a mixed-modal format of online and on-campus delivery would be better; however, this approach will add additional constraints around room capacity and scheduling. To deliver the SID model to non-first year students would mean adapting it to students' level of learning. For example, to reflect student autonomy further into their study, we would recommend making the sessions more student led, with the tutor taking a more passive role. Increased opportunities for personalized discussion around future subject choices and career plans would also be essential.

Conclusion

We developed the SID model based on the Curriculum Integrated Model of personal tutoring in the hopes of improving personal tutoring consistency and standards of student support within a large and diverse STEM faculty. Through collecting and analyzing student perspectives, the model's success can be evaluated against its learning principles: supporting student learning, strengthening relationships to help build a sense of belonging, and increasing student and staff engagement. Further, student reflections indicate that structured delivery and matching of topics to key delivery points within the term supported learning.

A dialogic approach within the sessions encouraged student participation and enabled tutors and tutees to interact with each other. While the online delivery of this approach enabled both staff and students to engage in building meaningful relationships, this also acted as a barrier to the development of peer networks. Although students felt they sufficiently contributed to discussions during the sessions, they seldom developed friendships. Therefore, the SID model strengthens the tutor-tutee relationships, and enabled good levels of student and staff engagement but fell short in creating peer relationships.

Student and staff feedback reflected a desire for on-campus delivery. However, a key issue with moving these sessions to on-campus is scheduling sufficient space and finding appropriate times. Adding personal tutor sessions into both student and staff teaching calendars improved student and staff awareness and attendance. However, the addition of sessions into teaching calendars was challenging. Therefore, the additional complexity of room scheduling and constraints of looking to schedule personal tutor on-campus sessions made scheduling all these sessions unachievable. While the online approach failed to build peer networks, it did provide a successful environment for students to get to know their personal tutor.

This study indicates that the SID model did raise awareness and consistency of personal tutors. The model can act as an accessible personal tutoring program which supports student learning and builds a sense of belonging. A structured, dialogic approach integrated within the timetable is practical and well received by students, although time is required for the initial setup of resources.

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