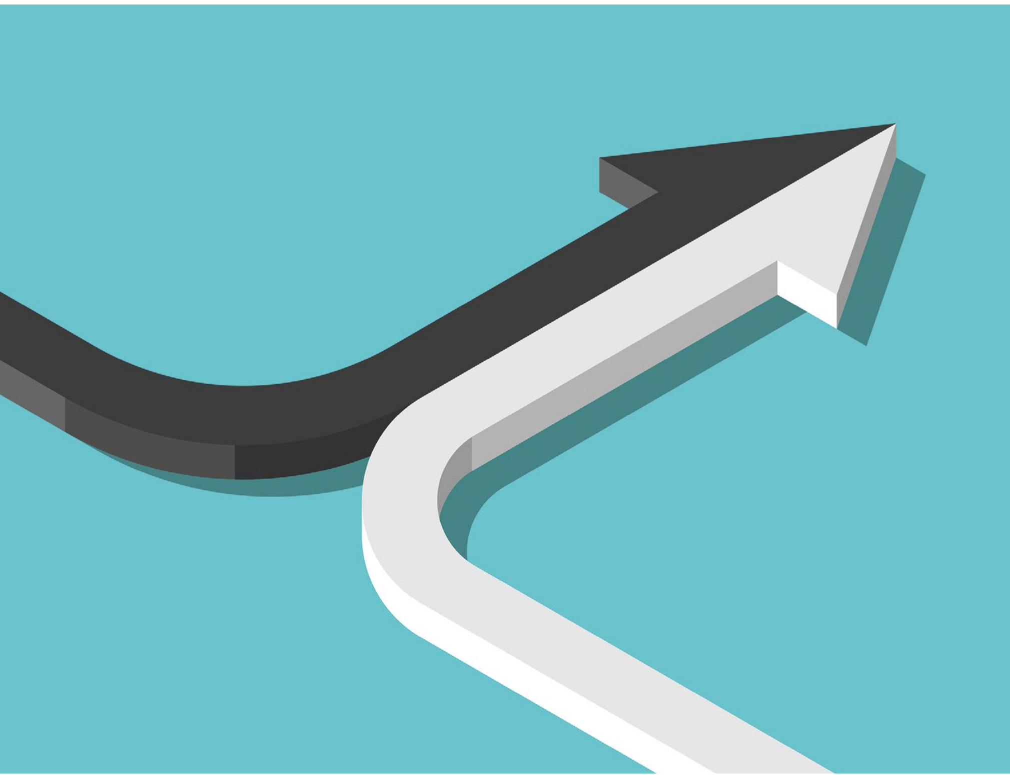

Student perceptions of integrated dental therapy and dental education at Peninsula Dental School

By **Ruby May Allen**,[1] **Amy Beare**[2] and **Morag Powell**[3]

Introduction

For the last seven years, Peninsula Dental School (PDS), University of Plymouth, has delivered a BSc (Hons) Dental Therapy and Dental Hygiene (DTH) three-year programme, and more recently a BSc (Hons) Dental Therapy and Hygiene with foundation year four-year programme.[1,2] In the first year DTH students are fully integrated with the Bachelor of Dental Surgery (BDS) students, studying the same curriculum, sitting the same assessments, and achieving the same academic standard required of a BDS student.[1,2] However, 'Same scope, same standard' is the underlying philosophy throughout all years of integrated teaching at PDS.[2,3] The integrated curriculum at PDS is both spiralled in content throughout the years and based in a primary care setting.[4] It has been designed to prepare DTH students to deliver direct access to patients both in the NHS and private sectors on graduation, such that graduates report feeling prepared for modern general dental practice, once they enter the workplace.[5,6] Supporting the success of BDS-DTH integration in relation to later preparedness for practice, two recent graduates from PDS share their student journey through PDS (2020–2023) and their experiences so far in the workplace on graduation.

DTH student journey – Ruby-May Allen

My experience at Peninsula Dental School has been fantastic. From day 1, I felt supported

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Ruby May Allen receiving BADT award at graduation

by the school, benefitting from the range of teaching methods used. There was ample opportunity to study and learn with other students during Enquiry Based Learning (EBL) sessions, as well as time scheduled for independent learning.

The integration of DTH and BDS students was invaluable to both cohorts, with each learning and understanding about the other's role. This integration was similar to how the professions work together in practice, and there was a strong sense of 'same scope, same standard' at the school. Being taught and assessed together enabled each cohort to understand the other's scope and skillset. Year 1 was entirely integrated, and as the courses diverged in second year, many of the plenaries were identical. The final year was integrated with the final year BDS, so again many of the plenaries were delivered shared between cohorts.

The integrated dental science module in year 1 built upon previous level 3 learning (eg, A-levels, BTECs or access courses). This module was more prominent in the earlier stages of the course, as students were taught the relevant science, upon which clinical understanding is developed. In the first year of DTH, students were taught this entirely alongside BDS students, sitting the same examinations together as part of the 'same scope, same standard' philosophy. In the later stages of the programme, students found that they are building upon this knowledge in the clinical setting and making new connections between ideas.

Clinical placements started early in the programme, in Year 1, semester 3. Early patient contact was hugely beneficial, as it incoporated the integrated dental science module into clinical practice. Initially, integrated clinics started once a week in year 1, increasing throughout the programme to four days in year 3. Clinics were not integrated with BDS in year 2, but they were fully integrated again in the final year. Final year clinics felt much more like working in dental practice, as each cohort referred work to each other, and the patients were treated with a shared-care approach.

Throughout the programme, there were multiple opportunities for extra-curricular activities, both within the dental school and the wider university. I personally enjoyed being a course representative, communicating feedback from the cohort at staff/student meetings. Additionally, I valued being part of the Oral Health Conference organising committee, a dental therapy day full of workshops, lectures and corporate trade. This conference helped prepare me for practice as it featured lectures focussed on non-clinical topics such as employment, indemnity and dealing with workplace issues. It was also beneficial to have the opportunity to speak with trade exhibitors who were often employers or suppliers, to build relationships and network whilst at university.

Overall, I found the DTH programme at the University of Plymouth to be an excellent course, offering a vast practical module. This focus on clinical experience has instilled me with confidence moving into the workplace, and so far I feel well equipped and prepared for practising in primary care.

Amy Beare receiving the BSDHT Dean's award and BSc Dental Therapy Academic prize at graduation

'It enabled a huge amount of personal growth, which I believe has now made the difference for being able to transform from a timid clinician into a confident one.'

DTH student journey – Amy Beare

Personally, I feel integration of DTH and BDS has resulted in a multitude of benefits which have allowed me to become a safe, confident clinician. In year 1 BDS and DTH students were completely integrated, meaning everyone learnt the same curriculum at this point.

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Year 1 was heavy on theory, as indicated by academic based exams (rather than more practical based exams in years 2 and 3). This meant a lot of learning in year 1 through EBL and science for dentistry, which was vital for success. Despite being affected by COVID-19 in year 1, our academic staff did their best to always be available and provide good resources to enable education.

As many dental nurses were enrolled on the programme, some did not have traditional entry routes, which led to varied clinical experiences and learning styles within a cohort. The design of the programme, having a combination of individual study and group working, meant that these different skillsets were utilised, benefitting all. To begin with, the thought of being integrated with BDS was quite daunting. However, as many DTH students were dental nurses, we had a lot of knowledge and experience to share with BDS students, so I came to think it would be inappropriate to believe I was not equal. Accepting that everyone was learning together allowed DTH students to believe that they could achieve the same standards and breakdown the barriers within the dental team, which without a doubt helped later in general practice.

'This integrated way of working in the final year also helped us to get to know our scope of practice fully.'

Being on an integrated course has also given me a greater sense of confidence in my communication skills with BDS students and dentists, as in practice I can confidently now have clinical discussions with dentists – as this is what we did throughout the course and especially in the final year. Rather than a faceless referral from a BDS student, in the final year interprofessional case discussions were encouraged, and this resulted in better relationships between the roles, and a better understanding of each other's scope of practice.

The curriculum spiralled throughout the years, with topics revisited at a deeper level throughout the programme. Year 1 built a foundation of anatomy and normal systems; Year 2 then enhanced this with application of pathophysiology and 'real life' examples. Year 3 built yet again, recapping topics to develop us as independent learners in practice. The theory seemed difficult and irrelevant in the first year, but it all tied together in the final year when we made the links between theory, science, and disease. This made final year a lot more achievable – in essence, you do the hard work in the first year!

Due to full integration in year 1, simulated dental learning occurred together with BDS, meaning that all assessments were undertaken at the same time, to the same standard. This gave DTH students another opportunity to believe that their work could match that of a dentist and provided them with more confidence in their own work and profession.

Simulation labs began in the first week of year 1, which allowed me to take a very practical approach to the course. Previously, as a dental nurse, I really enjoyed these sessions as they felt familiar and made the transition from working to studying easier. Some simulated sessions could be full days, which were tiring and when practising for an assessment it was sometimes difficult to keep focus. Fortunately, there were always experienced staff around to help with improving techniques and provide different opportunities to do something new. Some of these techniques-tips were only small but have transformed my clinical skills for practice.

Once we achieved satisfactory assessments in simulation, we made the transition to treating patients. Although the jump from practising on a phantom head to a real person could be very daunting, it was surprising how quickly it became normal. From the beginning of simulation, students were encouraged to imagine the phantom head as a real patient, which helped.

The IPE [Inter-Professional Engagement] experience was integrated in Year 1 and unfortunately hit hard by COVID-19. This resulted in an experience that didn't feel very community centred, which was the aim of IPE. Fortunately, in year 2 COVID-19 restrictions were loosened, which allowed us to re-engage with our communities. Planning a health education event was a great challenge which heavily relied upon good teamwork to be successful, something which is important to be prepared for practice. Organisation and time management were also skills that were tested. If planning was poor, it resulted in a poor experience, and this meant there were lots of lessons learnt throughout the module. Helpful support was always available, but it was definitely the 'sink or swim' module in the course. I learnt that if the event was planned well, the experience was extremely rewarding, and that working with the community can create a great sense of belonging and value to students personally and professionally.

As previously identified, there was a big difference in skillsets and clinical confidence between year 1 BDS and DTH students. This resulted in DTH students leading IPE in the first year, which was rewarding, for those who didn't consider themselves leaders (like me), as it enabled a huge amount of personal growth, which I believe has now made the difference for being able to transform from a timid clinician into becoming a confident one.

Clinic experience of shared care

The final 3rd year DTH with 5th year BDS students was probably my personal favourite part of the integration throughout the course. The dynamics of integration between the DTH and BDS were very different between Year 1 and the final year. In the first year, the majority of BDS students tended to come straight from A-levels and were quite nervous clinically, whereas many of the DTH students were previously dental nurses and were used to communicating with strangers. This created a big difference in confidence between BDS and DTH in year 1 EBL and IPE sessions. This resulted in DTH students taking on leadership roles in year 1, and this was the dynamic I had in my mind when thinking about undertaking the final year integrated with BDS students. However, I was mistaken. BDS students had received three years of their taught programme

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in between, designed to create safe, confident clinicians, and this was a nice surprise when we re-integrated (with a different cohort). DTH students also experienced vast learning in year 2, creating a great foundation for students from both programmes to have in-depth, clinical discussions, be able to question each other, and have engaging and informative exchanges.

The 3rd year DTH learning alongside 5th year BDS students was great preparation for practice dynamics, with a mix of referrals from BDS students (where they were taught how to ensure prescriptions for the DTH were detailed and accurate). BDS and DTH were also taught understanding of direct access for therapists, empowering DTH to use their full scope of practice and not de-skill in clinical examinations and diagnostics, which is a risk when only receiving referrals. Working in this way, where therapists see patients for dental examinations at the beginning of their patient journey, enabled me to have much more confidence in the use of direct access within general practice, while also being confident at referring patients on to dentists for procedures out of scope. This integrated way of working in the final year also helped us to get to know our scope of practice fully; scope can often be a grey area so having that extra confidence really helps.

In summary, integrating BDS and DTH students at PDS for two out of three years has benefitted me and other DTH students immensely. In the real world, I had previously found there can be barriers between dentists and dental therapists, which can unintentionally impact patient care. Being encouraged to view each other as professional equals at the beginning of our careers resulted in a huge amount of respect for both professions. Therefore, I hope that inter-professional working barriers are overcome by my peers in practice, as they understand shared working. At PDS communication was improved when working in an integrated educational model, patient care was of high quality and the relationship between dentist and therapist was respectful, with a detailed understanding of each other's scope of practice. I was delighted to see that several of the dentists in my practice had also graduated from Peninsula Dental School; I look forward to working with them as I know that they will have had the same experience and same appreciation for the multidisciplinary approach.

Conclusion

Based on the experience of two recently graduated DTH students, the integration of dental therapy and dental students at Peninsula Dental School (fully integrated years 1 and 3, partially integrated year 2), has proven to be a successful model for both dental therapy graduates feeling prepared for a modern multi-disciplinary workplace setting. It will be interesting to consider the further benefits and any expected barriers that these graduated DTH students will experience with shared care in the workforce going forward, and whether BDS students also perceive being more prepared to work under shared care as a result of this integrated training model. Seven years on, the PDS integrated BDS-DTH curriculum will continue to evolve to meet changing workforce demands, but 'same scope, same standard' seems here to stay based on the positive reflections of recent graduates.

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