

Reach Scotland – supporting the transition to Professional degree study

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ABSTRACT: Reach Scotland, created in 2010 with support from the Scottish Funding Council, is a national project which aims to widen access to high demand professions. Reach West is coordinated by the University of Glasgow and works with 95 secondary schools across the region to encourage, support and prepare S4-S6 pupils interested in studying a degree in Dentistry, Law, Medicine or Veterinary Medicine.

This paper reflects on the impact of the programme in terms of supporting pupil's application, admission and transition to Dentistry, Law, Medicine and Veterinary Medicine degrees, with particular focus on the experience of transition from first and second year Veterinary Medicine students. By analysing focus group data, this paper considers the effects of the Reach programme on transition, and how this, alongside a unique mentoring model employed by the School of Veterinary Medicine, supports widening participation students beyond admission aiming to provide guidance throughout the Veterinary Medicine degree.

1 Background

Reach Scotland (Access to the High Demand Professions) was established through support from the Scottish Funding Council (SFC) with the overall aim of widening participation to high demand professions: Dentistry, Law, Medicine and Veterinary Medicine. Five universities facilitate Reach: the Universities of Aberdeen, Dundee, Edinburgh, St Andrew's and Glasgow, covering different regions of Scotland. Each of the five partner universities created programmes which focus on the particular professional subjects which they offer and the needs of their local area. These come together to form the national programme (Scottish Funding Council, n.d.)

The Reach programme at the University of Glasgow (UoG) works with Dentistry, Law, Medicine and Veterinary Medicine. It is the only University in Scotland to offer all four of these professional degrees. These professions were chosen not only because of the low numbers of school leavers from areas of socio-economic disadvantage successfully gaining entry, but because of the highly competitive and rigorous nature of the application process (The Sutton Trust, 2010).

In order to widen participation, the University of Glasgow targets what are often termed as 'non-traditional' students. A traditional student is one who achieves entry to university straight from school, achieving the tariff by sitting the requisite exams and being made an offer on this basis. A traditional student will typically attend a school with a high progression rate to higher education.

Non-traditional students encompass a wide range of applicant groups, but there are certain criteria a typical widening participation student may meet: attend a school with a low

progression rate to Higher Education (HE); be the first or part of the first generation in their family to attend university; have spent time in care; be in receipt of Educational Maintenance Allowance (EMA).

Currently, in Scotland one of the main measures by which the Scottish Funding Council judge how successful a University is at widening participation, is the number of pupils who gain entry from disadvantaged postcode areas identified by the Scottish Index of Multiple Deprivation (SIMD). This index divides Scotland into 5 quintiles by full postcode and the most relatively disadvantaged are quintiles 1 and 2, the 0-20% and 21-40% or MD20 and MD40 postcode areas (Scottish Government, 2012).

The barriers experienced by non-traditional students often correlate with MD40 postcode areas. If a pupil lives in a disadvantaged postcode, they are likely to attend a school with a low progression rate to HE, their family will have limited or no background of Higher Education, or they may receive EMA.

In 2010, the average school progression rate to HE in Scotland was 32%. This had risen to 35% by 2013. By focussing on schools on or below the average progression rate, the Reach programme can target pupils in these schools who meet any of our WP criteria, whether or not they live in MD40 areas.

The Reach programme for the west of Scotland works with 95 schools across 12 Local Authorities. In order to provide an early enough intervention to have an impact in terms of support and guidance for pupils attending those schools, the Reach programme works with pupils from S4 through to S6. This allows Reach to provide subject-specific support and guidance throughout the senior phase of Curriculum for Excellence.

S4-S6 pupils showing the interest and ability in these schools to progress on to study Medicine, Law, Dentistry or Veterinary Medicine are nominated by contact teachers to complete a three-year programme, which has been devised with collaborative input from the four University subject areas. In-school and on-campus sessions run by postgraduate tutors, undergraduate students and university staff are held for each year group, providing participants with an insight into career pathways, experience of subject-specific university study, support during the application process and preparation for university study.

In S4, pupils are introduced to each of the professions via case studies during a school session and attend a one day visit to the University of Glasgow, where they undertake a workshop on a topical subject-specific issue delivered by staff and current students. In S5, pupils complete a fully referenced essay on a subject-specific topic set by university staff and attend a summer school week held at the UoG campus. Pupils take part in subject-specific activities, including clinical and communication skills, seminars and lectures. Workshops cover: the U.K. Clinical Aptitude Test (UKCAT), required by Medicine and Dentistry as part of the application process; the Law National Admissions Test (LNAT), required for Law at Glasgow; and the UCAS application process, with particular focus on personal statement writing. All of these activities are conducted by University staff, current students and postgraduate tutors. In S6, the emphasis is on supporting pupils in their UCAS application, specifically the personal statement. Applicants to the medical professions attend an on-campus interview workshop again, run by University staff and students.

Pupils have to undertake a number of assessed exercises throughout the programme, including the S5 essay assignment, a subject-specific seminar/tutorial at the campus week and their general participation in school sessions and across the campus week. Not only does this introduce some key academic conventions and skills necessary for successful study at university, but successful completion of these exercises enable pupils to benefit

from progression agreements put in place for Reach applicants to these four professions at the University of Glasgow.

Progression agreements for Reach applicants were formulated with admissions officers in each professional subject and successful completion of the programme was taken into account for the first time for entry in September 2012. Variations on grade adjustments and/or adjustments in the UKCAT aptitude test were introduced to aid Reach applicants towards reaching the interview stage, e.g. a Reach participant might be considered for entry to Medicine who has achieved AAAAB rather than the standard AAAAA required.

Higher grade attainment within Scottish schools tends to correlate with a low progression rate to Higher Education, illustrating that pupils attending schools with a low progression rate are less likely to achieve the minimum qualifications necessary to be considered for entry to Medicine, Dentistry, Veterinary Medicine or Law. Progression agreements for Reach participants, which form part of a contextual admissions approach developed at the University of Glasgow, allow pupils from low progression schools to be considered for an offer of entry, irrespective of educational disadvantage.

Similar progression agreements are also in place for pupils who complete the Top-Up programme, upon which the Reach programme was initially based. Research surrounding the effectiveness of the Top-Up programme in preparing pupils for University shows that those pupils who had completed the programme were more likely to perform better and progress in to second year of their degree than pupils from comparator and higher performing schools who had not taken part. The effectiveness of the Reach programme in preparing pupils for the transition to University study is discussed later in this paper, but what this research suggests is that even if pupils are admitted with a grade adjustment they are still likely to succeed at University if they have taken part in a pre-entry programme.¹

The Reach progression agreements have had a significant impact on the number of pupils being selected to interview and subsequently admitted to the four professional degrees at UoG. In the three years prior to the programme beginning, 2007-09, the average number of entrants from MD40 postcode areas entering all four Reach professions was between 10-12%. The UoG average for MD40 entry to all other subjects in the same time period was 21.5%.

The Reach programme at the University of Glasgow set targets based on this data, in agreement with the four professional schools and the SFC, to increase the numbers of pupils from MD40 postcodes and the target schools taking part in these degrees. To achieve these targets, the programme aimed to increase applications and entrants from target schools and postcode areas to the four subject areas.

¹ See Croll N. and Browitt, A, *Pre-entry Widening Participation Programmes at the University of Glasgow: preparing applicants for successful transitions to degree study*, also submitted for the QAA Transitions Conference.

2 Impact of the Reach programme

The first year upon which Reach impacted on admissions was for those pupils applying during academic year 2011-12 (for entry in September 2012). Tables 1 and 2 illustrate the impact across the four professional degrees for the three years prior to 2012 and the three years since, for both MD40 and target school entry. These figures demonstrate, on average, a rise in entrants across all four professional subjects.

Table 1: MD40 Reach entrants 2009-11 and 2012-14

Subject	Entrants	2009-11 average	2012-14 average
Medicine	MD40	10.66	19.66
	Overall Scottish	96	115.33
	MD40 % of overall Scottish entrants	11.1%	17.0%
Dentistry	MD40	4.66	7.67
	Overall Scottish	59.3	51.3
	MD40 % of overall Scottish entrants	7.9%	15%
Law	MD40	16.67	25.3
	Overall Scottish	186.67	180
	MD40 % of overall Scottish entrants	8.9%	14.1%
Vet Medicine	MD40	4	5
	Overall Scottish	42	44
	MD40 % of overall Scottish entrants	9.5%	11.4%

Table 2: Reach target school entrants 2009-11 and 2012-14

Subject	Entrants	2009-11 average	2012-14 average
Medicine	Reach target schools	13.66	32.33
	All Scottish schools	96	115.33
	Reach target school % of overall Scottish entrants	14.2%	28.0%
Dentistry	Reach target schools	7.67	11.3
	All Scottish schools	59.3	51.3
	Reach target school % of overall Scottish entrants	12.9%	22%
Law	Reach target schools	24	26.3
	All Scottish schools	186.67	180
	Reach target school % of overall Scottish entrants	12.9%	14.6%
Veterinary Medicine	Reach target schools	5.3	7.3
	All Scottish schools	42	44
	Reach target school % of overall Scottish entrants	12.6%	16.6%

As well as having a positive impact on the numbers of pupils from MD40 postcodes and target schools, Reach applicants who successfully gained admission to one of the four professions are also more likely to progress in to the second year of their degree. The four Reach professional degrees at the University of Glasgow generally have very high retention rates. The three health professions have all maintained 100% continuation from 2012 to 2013 and Reach West target school and MD40 entrants have performed at this high level. Whilst there has been a slight decrease in continuation across the overall Law 2012 MD40 entry cohort, Reach target school entrant continuation is above the overall cohort retention rate.

Both of these sets of data suggest that not only are Reach applicants better prepared and more likely to be successful in their application but also that these students are performing as well as and perhaps even better than the average student cohort and MD40 entrants from out with the Reach West target area, including higher performing state and independent schools. This would be in line with our findings for the other UoG pre-entry programmes, illustrating the impact on student performance of the completion of a pre-entry programme.

3 Qualitative research

The University of Glasgow School of Veterinary Medicine has, to date, three cohorts of Reach students. The students in the first two years were asked to attend separate focus group meetings to discuss their experiences with Reach and transition into the School of Veterinary Medicine. Focus groups were also held with five students who had not completed the Reach programme in order to evaluate whether there were any distinct differences or similarities between the two groups. These groups were a mix of UK and international students. Lasting 30 minutes and comprising six second year students and five first year students, these focus groups allowed us to discuss with students their experience of transitioning from school to university, their experience of the support that exists such as the mentoring scheme, and what they would like to see implemented to help support future first-year students. We have chosen to focus on Reach entrants to Veterinary Medicine in this paper to allow us to scrutinise the unique approach to mentoring and supporting students within the School of Veterinary Medicine and the effect it has had on Reach entrants.

When asked about which aspects of the Reach programme former participants found significant, the group of second year former Reach students cited the S6 interview preparation workshop as being particularly helpful. One student commented, 'It prepares you, because it's nothing like you've ever done before, it's not something that you can have experience with, and very few people will be able to give you that sort of experience, but you guys [Reach coordinators] know what you're talking about and you know what's going to happen'. Another student, referencing the interview workshop, stated, 'I think it prepared you for it [the admissions interview], you knew what you were getting in to'. Another recalled, 'Interview days are always really stressful, but I just felt a little bit more prepared'. One first year student mentioned that, 'Although school helped us with our interviews, it was better getting an outside view of it', meaning the perspective of the Vet School and staff.

Another aspect of the Reach programme that was highlighted in both Reach focus groups as significant was the S5 campus week. One student stated, 'I'd say the summer school was a big thing because you got familiar with the building which is a big thing, and the staff, we met a lot of the staff'. This suggests that Reach assists with the transition from school to university by allowing pupils to familiarise themselves with the campus, so when they return as students they are familiar with this new environment and know who to seek out, should they have questions or issues surrounding their study.

Academically, through the Reach programme pupils were able to experience certain features of the Veterinary Medicine and Surgery (BVMS) course before starting the degree. One student stated, 'I really liked the clinical skills we did, we did suturing and bandaging, and I quite liked it because it made me feel like a student and what it would be like in the future...I was better [at suturing] when I started practising here, I found it easier because I had the basic idea of what it is like'. Knowing how to reference, an aspect of the S5 essay assignment, was also cited as a beneficial aspect of the programme because students were asked to do this in first year. One student stated, 'There were people in our year that hadn't referenced before, whereas we had, so that was a benefit, that was good...it's definitely a lot of help'. The topic of the S5 essay was covered in the first year BVMS curriculum and students saw this as beneficial: 'At school you're obviously not doing anything that's that related, but then doing a piece of writing that's linking in to what you want to at university's good'. Students also mentioned suturing and clinical skills (both experienced during the S5 campus week) and the S5 essay assignment topic on ringworm as experiences that were useful once they had commenced their degree, suggesting that the Reach programme is aiding transition to academic study as well as admission.

There were, however, common issues raised in all focus groups, both Reach and non-Reach. Some students commented on the different styles of learning to which they had to adapt, but it was the pace of the course and volume of work that they all seemed to find difficult to cope with: 'I think you get warned about the volume, but not necessarily the pace that it goes at, and how much you have to learn in such a short period of time, and you're expected to consolidate that, move on and then at the end of the year, it's all meant to be there somehow, and that's quite tough'. As has been noted above, the Reach programme was able to provide some very valuable academic and clinical skills relevant to the course to those students who had completed the programme, but it was felt that too much insight might actually have a negative effect. One student commented, 'I don't think anything can prepare you for it... and I think if it was hammered in to you too much that it's going to be really, really hard, it would put people off'.

The social aspect of the transition to university was highlighted as a positive consequence of the Reach programme, as new students were able to form friendships with those they had met via Reach. One student recalled, '[Reach] gives you a few familiar faces...to look out for during Freshers', so you're not just kind of going in to it blind'. Another suggested, 'I think that's really good to know someone as well, that when you first come in, to know that there's people there, even if you haven't spoken to them since Reach, but it's a familiar face...it does feel a lot better to know that'.

Unsurprisingly, many of the students in the Reach focus groups, in comparison to non-Reach, were living at home and commuting to the Vet School every day. Students who did commute were aware of the differences in experience between themselves and those who stayed in halls, especially during Freshers week, '...because of the commuting thing, we weren't quite as up in Wolfson (halls), they were dead close and that, and they all went out together...'. One student from the second year Reach group did comment, however, that the shared experience of commuting had created friendships amongst students: 'A lot of people that do travel, we're all kind of friendly. We all sit together in lectures... we're all still friendly with the people that lived in halls, but you do see all the halls people together and all of us are together'.

Significantly, students cited the Reach programme as a source of inspiration. One student stated that, 'Doing the summer school...it makes you like want it more, it gives you a wee taster and it makes you work harder for your exams and stuff because you're like, I really want to do this'.

4 BVMS mentoring scheme

The mentoring scheme at the University of Glasgow School of Veterinary Medicine is designed to provide a programme of pastoral care for all undergraduate Veterinary Medicine and Surgery students. Upon entering the first year of the BVMS degree, students are assigned members of staff who also have a BVMS degree. This ensures mentors can advise on academic aspects as well as pastoral issues, making mentors a combination of Advisors of Study and student support. Mentors meet with each student a minimum of two times a year to discuss their progress and any issues concerning the BVMS course, extra-mural studies or extra-curricular concerns students feel they may need support with. The mentor-student relationship is maintained throughout the 5 years of the BVMS degree, ensuring that a productive relationship is developed with mentors gaining a good understanding of each individual's progress and specific needs.

Since 2010 and the Reach programme's inception, Dr Karen MacEachern has performed the role of School of Veterinary Medicine Reach programme liaison officer. This role has involved the development of materials for school sessions, organisation of campus events, as well as general application and admission support. Dr MacEachern has been a consistent point of contact for any Reach participant interested in the study of Veterinary Medicine. In 2012, when the first cohort of pupils to complete the Reach programme entered the first year of the BVMS degree, Dr MacEachern requested that she be given all Reach programme students as her mentees. Owing to her involvement in every stage of the Reach programme, from S4 to S6, and her broad understanding of widening participation issues, Dr MacEachern recognised that as a mentor for this particular group of students she could provide valuable support through the transition period from school to university and beyond, maintaining and developing the relationship she had already established through her close involvement with participants of the programme. From September 2012, Dr MacEachern has mentored every student who has successfully gained entry to the BVMS degree and participated in the Reach programme.

As previously mentioned, the mentoring scheme at the School of Veterinary Medicine combines both academic and pastoral support. Dr MacEachern has a well-rounded understanding of every mentee's student experience from personal issues, financial concerns, commuting and living arrangements, to support during exam resits, advice on work placements and providing feedback on academic work. She has developed an understanding that this approach is vital because of the possibility for academic issues to impact on personal circumstances and vice-versa. Having a complete understanding, as much as possible, of a student's circumstances allows her to provide specific and, therefore, potentially the most beneficial support for students. Crucially this means that Dr MacEachern has developed knowledge of and strong links with the University of Glasgow's support services, in order to provide her mentee's with contacts in financial, accommodation, learning and disability services. Having provided support for students in various roles for 14 years as a member of academic staff at the School of Veterinary Medicine, Dr MacEachern has also gained the skills necessary to support students through sensitive and personal problems.

To understand the impact of Dr MacEachern's mentorship of Reach pupils, we asked first and second year BVMS students in the focus groups to comment anonymously on their experience.

When asked if having Dr MacEachern as a mentor made any difference to their experience of first year, one first year student commented, 'it gives you a kind of familiar face amongst the staff...which is good, not just amongst the students that are the same age as you'. Another first year student agreed saying, 'Yeah, someone you know is approachable and

you can talk to even moving in to university, because it's someone you already know and you feel knows about you'. Finally, another first year student suggested, 'I think we have an advantage compared to other students who just met their mentors for the first time, whereas we've known Karen for almost three years, so we are more familiar with her, so we can be more honest and open to her'. One second year student summarised the all-encompassing nature of the mentor-role and its significance: "I found it extremely comforting to be able to speak to someone who I was already familiar with, and knew that if I had any problems I could go to her. I was able to voice any worries I had about the overwhelming work load, long travel and study techniques and felt like I was listened to and supported."

Pupils identified for widening participation activities based on socio-economic disadvantage may have financial concerns related to their studies that can contribute to these students continuing to live at home, rather than moving in to student accommodation. Research conducted at UoG demonstrates that commuting students can be more likely to feel disengaged from their course of study and at greater risk of withdrawing from the University.² The University draws circa 40% of its undergraduate intake from its local, or commuting, area, but 58% of Dr MacEachern's first year mentees currently commute from home to University, indicating the potential for retention issues.

This Vet School model of mentoring, however, which allows for bespoke individual support, ensures any issues which occur are raised and dealt with swiftly. Dr MacEachern is able to pre-empt potential problems because students feel comfortable raising these issues with her sooner and because of the broad understanding of widening participation related issues she has developed as the School of Veterinary Medicine's Reach programme liaison officer. This model of mentoring is also particularly appropriate for BVMS students because the cohort is often much smaller in comparison to other degrees, meaning the BVMS community of staff and students is close-knit and engenders productive mentoring relationships.

Discussing the challenges surrounding the transition from school to the first year of the BVMS in focus groups has allowed us to not only highlight the positive effect the Reach programme and the mentoring scheme has had on individuals, it has also pinpointed gaps in the current provision at the School of Veterinary Medicine which, in collaboration with the Reach programme, we can hope to address. A prevalent theme throughout the focus groups was student's experience of the volume of work in comparison to school and the pace at which the degree was delivered. As well as this, despite mentors being recognised as valuable, some students hoped for more frequent meetings or felt they only needed to meet with their mentors if they were experiencing problems. This first point suggests that more information and preparatory advice could be made available to applicants on how to cope with the workload of the BVMS degree. The second point suggests that students' expectations could be managed better to ensure that mentee's have a clear understanding of the role of the mentor and how staff time dedicated to mentoring is divided between their existing duties.

5 Conclusion

The Reach programme has had a significant impact on the number of school leavers entering high demand professional degrees at the UoG from the 40% most socio-economically disadvantaged postcodes in Scotland and from the lowest progression schools in the West of Scotland.

² See Browitt, A. and Croll N, *Enhancing engagement of local 'commuting' students at induction to support transition and promote student retention and success*, also submitted for the QAA Transitions Conference.

Reach entrants are not only better prepared, more confident and therefore more likely to be successful in their application but are performing as well as and in some cases even better than the average student cohort from comparator and higher performing state and independent schools. The retention rate of 100% for Reach students in these professional courses is a testament to the programme's success.

This is the result of a delivery model which not only provides support throughout the application process but introduces pupils to key academic and clinical skills required for University study. Key to the success and delivery of Reach has been the support from the professional schools and the input from academic, clinical and support staff at each of the key stages of the programme.

In the case of Veterinary Medicine support from the Reach liaison officer has extended beyond the pre-entry stage into the first year of the degree and beyond. Evidently there is still a need to develop the programme to improve the transition experience for Reach entrants however, comments from Veterinary students at UoG have highlighted the positive effect their involvement in Reach and the continuum of support has played in their transition to University.

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