Pre-entry Widening Participation Programmes at the University of Glasgow: preparing applicants for successful transitions to degree study

Dr Neil Croll and Ms Alison Browitt
University of Glasgow

ABSTRACT: To widen participation, prepare students for the transition to successful study in higher education (HE) and equalise admissions for all applicants, the University of Glasgow (UoG) has established a suite of pre-entry Widening Participation (WP) programmes, providing access routes to every subject within the university, for school leavers and adult learners. Drawing on 15 years' quantitative and qualitative data, this paper examines the ethos behind UoG WP provision and criteria utilised to target, engage and admit diverse, talented students. It is shown how customised preparation provided on a broad and individual level aids the transition to HE and gives support at entry and on degree course to ensure this transition is made successfully, overcoming the more complex barriers to HE entry, transition and success, experienced by WP students. Research into UoG student performance demonstrates how pre-entry programmes prepare and enable applicants for the transition from school to Year 1 of undergraduate study, successful degree performance and the transition to work or further study thereafter.

1 Context

1.1 The ethos of University of Glasgow widening participation provision

The Greater Glasgow area contains some of the highest concentrations of deprivation and socio-economic disadvantage within the UK.¹ The University of Glasgow (UoG) has endeavoured to widen participation to the University for many years.² To widen participation, prepare target students for the transition to successful HE study and equalise admissions for all applicants, UoG has established and embedded, individually and in partnership, a suite of pre-entry WP programmes for school leavers and adult returners to education. These programmes provide access routes, with adjusted offers of entry, to every subject area within the university.

The ethos of UoG WP provision is to:

1) Promote aspiration for study in HE in under-represented groups.

¹ Scottish Government, Local Authority Summary – SIMD 2012, Glasgow City, available at: http://simd.scotland.gov.uk/publication-2012/ (last accessed 11 May 2015)

² The UoG Department of Adult and Continuing Education (renamed the Centre for Open Studies in 2010) was established in the 1970s. The UoG Summer School was created and UoG was a founding partner of the Scottish Wider Access Programme in the 1980s.

- Prepare applicants for the transition to HE study, within UoG or elsewhere, enhancing their chances of continuation beyond Year 1 and a successful student experience.
- 3) Provide an access route for applicants to gain entry to UoG or elsewhere via Admissions progression agreements.

To widen access, it is necessary to identify and address the barriers which exist for applicants from WP backgrounds to provide them with an equal chance of entry to University. It is this same process which can enable WP applicants to make a successful transition from school or college Access course to HE study in university. These barriers can be systemic, e.g., the profile of school attended (low progression to HE, falling school roll leading to less resource and spread of subjects covered); or residing in a disadvantaged and poorly resourced area with limited opportunities. Barriers can also be individual, e.g., living in a family with no experience of or aspirations to HE; or having no peer group with these aspirations. These can combine to leave an individual applicant lacking in the knowledge they can progress to university or the confidence that they can do so. Thomas (2002) finds these barriers impact negatively in terms of student retention and success once in higher education and uses the concept of 'institutional habitus' to describe the want of 'cultural capital'.

The UoG pre-entry programmes have been designed to aid the transition for WP applicants, who experience more barriers to accessing HE, equipping them with the requisite skills and confidence levels to perform well. Working with 13 Local Authorities (LAs), containing over one-third of Scottish secondary schools, necessitates large-scale programmes which can engage meaningfully with over 10,000 pupils annually. Within this broad approach, however, specific provision is also made for smaller applicant groups and individuals with very complex barriers, who require a high level of support, to enable a successful transition to student life, e.g. care leavers or asylum seekers. This paper examines how UoG approaches widening participation and enables WP applicants to: aspire to make the transition to become an HE student; gain entry to a competitive, high tariff university; make the transition into Year One and beyond on degree course; and progress beyond graduation.

1.2 What is a 'WP' or 'non-traditional' student?

To widen participation, the UoG targets what could be termed as 'non-traditional' students. To identify a non-traditional student, it is perhaps easier to first consider the characteristics of a 'traditional' student. This would typically be an applicant who achieves entry to university directly from school, achieving the tariff by sitting the requisite exams in S5 and being made an offer on this basis. The applicant will typically attend a school with a high progression rate to HE.

For UoG, a 'non-traditional' or WP student could be any applicant from an alternative background. This encompasses a wide range of applicant groups. Socio-economic deprivation is a key primary WP indicator, but within this a WP applicant could meet other criteria, e.g.:

- Attend a school with low progression to HE
- Time spent in care
- Reside in an MD20 or MD40 postcode³
- Adult returner to education via an Access Course
- Refugee / asylum seeker status
- In receipt of Educational Maintenance Allowance (EMA)

³ The Scottish Index of Multiple Deprivation (SIMD) divides Scotland into postcode areas ranked by relative socio-economic disadvantage: http://www.gov.scot/Topics/Statistics/SIMD/DataAnalysis The most disadvantaged are the 0-20% and 21-40% quintiles, also termed as MD20 and MD40.

- In receipt of Free School Meals
- First in family to enter HE
- Entrant from Further Education College (FEC)

Other Equality and Diversity criteria such as disability or ethnicity can be contributory factors in WP targeting and provision. This creates a very diverse group and necessitates different methods of institutional engagement to attract talented students from these backgrounds.

2 Engaging with WP students and enabling progression to HE via contextualised admissions

The first stage in enabling WP students to make the transition from school or college Access course to university, is to provide a viable route to allow aspiration to become a reality. An integrated and progressive approach to running WP pre-entry outreach programmes, linked directly to progression agreements utilising contextualised admissions, has been developed to widen participation to the UoG, but also to HE in general.⁴ A transparent and robust WP admissions system, which is equal for all, has been developed, whereby performance on a pre-entry programme is used in combination with collated verifiable contextualised datasets on applicants' educational background. This allows the most talented applicants to be selected for offers of entry, irrespective of educational disadvantage.

Adjusted offers are initially based on successful completion of a pre-entry programme. This is based on the knowledge that pupils in low progression schools may not typically be able to sit the requisite number of Higher Grade exams in one sitting at secondary school to meet the standard entry tariff for Glasgow. Using contextualised admissions requires a willingness by a University to accept that an applicant achieving, e.g. AABB in Highers in a low progression school has achieved the equivalent of another applicant achieving AAAA in a higher progression school.⁵ Taking the context of the educational backgrounds of each applicant into account, e.g., the profile of school attended or area in which the applicant resides, the University can then decide to admit the applicant from the lower progression school, as the context in which the grades were achieved is recognised and taken to equate the two applicants.

The use of a graded Student Profile, based on an academically rigorous programme, which tests pupils and allows them to demonstrate their potential for becoming successful HE students, gives admissions officers' the opportunity to make adjusted offers. Successful programme performance is taken as the equivalent of the grades by which the offer of entry is adjusted from the standard tariff. The WP student is not admitted with 'less' qualifications, but has actually had to complete more work than the non-WP applicant.

To refine and add depth to this WP admissions policy, UoG has developed the use of verifiable datasets on all Scottish schools and candidates. This provides a more detailed and informed view of the disadvantage faced by individual applicants in terms of the educational environment in which they have completed their secondary education. In relation to secondary schools, the datasets show three-year trends on: MD20 population; pupils entitled to Free School Meals; pupils entitled to EMA; Higher attainment of school leavers; HE

⁴ UoG use of contextualised data in admissions was used to evidence the 2012 Equality Challenge Unit publication, *Equitable Admissions for underrepresented* groups; UoG WP staff sat on the SPA Scottish National Expert Think Tank, contributing to the three 2014 SPA publications, *Considerations for introducing and implementing contextualised admissions; Contextualised admissions: What are the data needs in HE providers?*; *Hints and tips for monitoring and evaluating contextualised admissions.*

⁵ For an informative work on the school performance of pupils in differing educational contexts and their progression at the University of St Andrews, see Smith, I, Lasselle, L & McDougall-Bagnall, J M (2014).

progression rate; if the school is a SHEP school.⁶ The postcodes of individual applicants are broken down by SIMD decile. School and individual scores are collated to indicate those applicants with the highest level of disadvantage and offers made accordingly. This has further facilitated the targeting of MD40 students attending higher progression schools, not targeted by the pre-entry programmes. The UoG Summer School is now used to target MD40 pupils within these schools, aid these pupils in their transition to the University and make adjusted offers of entry.

Building the progression agreements within pre-entry programmes allows applicants to be prepared for the transition from school pupil or Access course learner to HE student, and fosters continuation thereafter. The development of the UoG WP contextualised admissions policy enables WP applicants to aspire to enter HE, secure in the knowledge that the progressions agreements give them an equal chance of entry to UoG and other universities. This is the foundation to enabling any transition for prospective WP applicants. Without progression agreements, the barriers present for WP applicants would prevent many successful students from applying and having any chance of making the transition from school or Access course to university. Having this framework in place is a fundamental part of enabling WP students to make this transition.

Additionally, universities across Scotland accept the Student Profiles as verifiable contextual data, which allows pupils to aspire to move away from home, if they so wish and can afford to do so. This is another transition many pupils would otherwise not have the opportunity to consider; to move away to university and experience student life, while living independently.

3 Targeting schools by HE progression

Targeting for the programmes is initially by progression rate of school leavers to HE, as follows:

- <=25% Top-Up Programme (FOCUS West schools); Summer School; Reach;
 Access to a Career in Teaching (ACT); Early Secondary Programme (ESP) 37 schools
- <=27% Top-Up (LA-funded); Summer School; Reach; ACT; 68 schools
- <=35% Reach; ACT; 95 schools

By this model, more programmes and resources are directed at the most disadvantaged schools, gradually decreasing intervention up to a 35% HE progression rate (the average for Scotland in 2013). This gives pupils, in the lowest progression schools, the option of participating in customised programmes, which introduce academic and non-academic skills necessary for succeeding in their chosen field of study. Each pre-entry programme addresses the barriers or gaps which may be present for a WP applicant for specific subject areas. Similar provision is made for adult returners to education during access courses.

3.1 The Top-Up Programme

Established by the University in 1999, Top-Up works annually with circa 1,800 S5-6 pupils across the 50+ lowest progression west of Scotland secondary schools, originally as part of the GOALS (Greater Opportunity of Access and Learning with Schools) programme and now as part of FOCUS West and in partnership with LAs. 80 postgraduate tutors facilitate inschool and on-campus sessions; 16 hours contact time. The course covers the essential skills required to be a successful independent learner in HE. Tutors cover the key skills during sessions in-school and pupils put these into practice on the university campus, e.g.,

⁶ SHEP (Schools for Higher Education Programme), the Scottish Funding Council-funded national schools programme. FOCUS West (Focus on College and University in the west of Scotland) is the west of Scotland roll-out of SHEP: http://www.focuswest.org.uk/

note-taking in a lecture / preparing for and participating in a seminar. Importantly, pupils meet peers interested in similar subjects during the campus sessions.

Pupils take part in a seminar and complete a written assignment on one of five question areas which cover broad academic disciplines: Social Sciences; Arts; Life Sciences; Physical Sciences & Engineering; and Public Art. Pupils are graded and receive a Student Profile, which is sent to the admissions officers of the HEIs to which they are applying. Within UoG, successful completion of Top-Up aids entry to: Arts; Social Sciences; Sciences; Engineering; Nursing; Education; Business; Accountancy & Finance; Psychology; Music.

3.2 University of Glasgow Summer School

The Summer School has been running for 30 years and offers an alternative route of admission for school leavers in 68 target secondary schools and adult learners (circa 250 per year). Participants study two academic subjects relevant to their intended degree course and a study skills course; 110 contact hours over six weeks. Academic subjects are at First Year undergraduate standard, a testing level for participants. Students complete course work and assessments and receive a Student Profile graded on the three courses studied.

The non-academic side of the transition into student life is covered. Summer School takes place in the University, allowing students to become familiar with the campus. Students meet peers in their classes, who will be studying the same subjects on degree course, setting up social networks and overcoming this barrier for WP applicants, who will often be the only person from their school or locale progressing to UoG. Within UoG, Summer school aids entry to: Arts; Social Sciences; Sciences; Engineering; Nursing; Education; Business; Psychology; Accountancy & Finance; Dentistry; Veterinary Medicine; Law.

3.3 Reach Scotland (Access to High Demand Professions)

Set up in 2010, UoG coordinates Reach in the west of Scotland, working annually with 1,650 S4-6 pupils in 95 schools (27% of all Scottish schools), who aspire to study: Dentistry; Law; Medicine; Veterinary Medicine. 46 contact hours in-school and on-campus prepare pupils for studying their chosen subject and guide them through the complex application and admission processes. Schools are engaged via a cluster system, bringing pupils from three-four schools to one location for in-school sessions. This fosters peer networks from S4 onwards in subjects to which very few pupils in some target schools will aspire or apply. Oncampus sessions build on this social aspect further.

3.4 Adult returners to Education

UoG Access Courses and Scottish Wider Access Programme (SWAP) Access courses, the latter facilitated by FE Colleges across the west of Scotland, and developed in partnership between SWAP, FECs and UoG, provide an access route for adult learners to every subject within the University. Guaranteed entry to general degree courses and access to interview for professional degrees enables UoG to admit circa 200-250 students annually via Access courses.

4 Student Support

4.1 Support for specific applicant groups - care leavers/asylum seekers

⁷ Reach is a national programme funded by the SFC. The Reach West Programme is described in more detail in MacEachern, K, Iguchi-Sherry, S & Tansley, L, *Reach Scotland – supporting the transition to professional degree study*, in this compendium.

The pre-entry programmes allow provision for whole cohorts across a large number of schools or colleges. However, within this broad approach, extra provision can be put in place for smaller target groups, with particularly complex needs, e.g. care experienced applicants. Adjusted offers of entry may be needed, but other provision is required such as financial aid, 365 day-a-year accommodation and a named contact who can advocate with other University staff. Over half of care experienced entrants since 2007 have been mature students, who may have been out of education for some time or recently completed an Access course. The transition to HE study is more difficult for these students and a pre-entry programme like the Summer School can be a helpful bridging course, but additional provision is necessary to allow aspiration to apply to grow and ease the transition.

Another small WP applicant group requiring extra provision are asylum seekers, many of whom will also be care experienced. Finance is a particular barrier for asylum seekers; they have international student fee status and are not entitled to home student funding. This requires imaginative solutions, e.g., a bursary to cover fees and an institutional willingness to engage with a student and aid their asylum claim.

4.2 Local Student Orientation event and on-degree support

The pre-entry programmes expose WP applicants to both academic and non-academic skills required for success in HE, while they are still in school or Access course. A recent initiative to bridge the gap between pre-entry and commencing university has been the Local Student Orientation (LSO) day. This was the result of research and practice funded by the UoG Learning and Teaching Development Fund. LSO introduces students, who commute to University and may have completed a pre-entry programme or reside in a disadvantaged area, to academic and advisory staff within their subject areas, student support staff, student bodies and unions and most importantly, fellow students studying the same courses. The latter allows the development of peer networks before Freshers' Week which last through Year 1 and beyond. The introduction to varied University staff feeds into and improves ondegree support. Advisers of Study and student support staff, who participate in this event, become more aware of issues affecting WP students.

4.3 Identifying WP applicants to provide transition support

Identifying and maintaining contact with WP entrants underlies any on-degree support structures. UoG operates an integrated admissions and student records system, which allows entrants to be flagged at application for adjusted offer and subsequently flagged for extra intervention on course. In this way, WP students are targeted for employment as mentors on the pre-entry programmes, which helps financially, but also helps foster a sense of belonging within the University. Applicants are targeted for Talent Scholarships of £1,000+per year. A near 100% continuation rate of Talent Scholars suggests the success of this initiative. Pastoral support is aided by the WP flags on the student records system; Advisers of Study can identify WP students and provide assistance accordingly. Extended induction, following on from the LSO, is conducted via e-mail, to flag support at appropriate junctures. These interventions all help with the transition to student life, through Year One and beyond.

5 Targeting interventions at those most in need of support

A broad range of pre-entry and on-course provision is in place for WP applicants and students. It is important to review this work to ensure it is current, effective and reaching the correct applicants. Care is taken to target pupils correctly. Close working relationships with

⁸ For a full analysis of this initiative, see, Browitt, A and Croll N, *Enhancing engagement of local 'commuting'* students at induction to support transition and promote student retention and success, also in this compendium.

contact teachers in schools ensures that the most appropriate pupils to benefit from the WP programmes are targeted.

Table 1 shows entrants to UoG from 2004-13, via the Top-Up Programme, by MD20 and MD40 postcode, in comparison to the latest figures published by the SFC for MD20 and MD40 entrants in UoG and Scotland (SFC, 2015, Table 10a). The figures show that Top-Up entrants to UoG include an average of twice as many participants from the most disadvantaged postcode areas over the years 2004-13 as the UoG and Scottish student population averages. There are a high number of MD40 resident pupils in secondary schools in Glasgow City in particular and other target LAs. MD40 residence is an important WP factor in the west of Scotland. These figures suggest Top-Up is working with high numbers of senior MD40 pupils in schools and that targeting for Top-Up is being conducted towards those who are likely to most need the support due to socio-economic disadvantage. Pupils residing out with the disadvantaged postcodes meet one or more of our other WP criteria; the fact they attend a low progression school is regarded as a disadvantage contextually.

Table 1: Relative socio-economic disadvantage in Scottish HE, UoG and Top-Up

Programme students

- registione etalations			
	Scottish-domiciled students in Scottish	Scottish-domiciled students at UoG	Top-Up Programme students at UoG
	HE 2013-14	2013-14	2004-2013
MD20 postcodes	12.1%	11.8%	31.1%
MD40 postcodes	27.5%	24.4%	53.6%

6 Case-study: Top-Up Programme

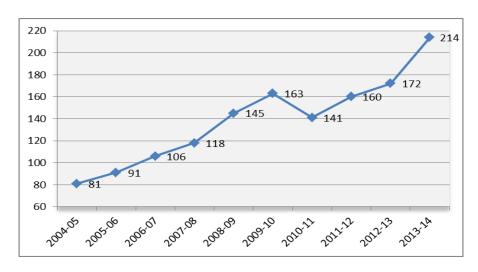
The Top-Up Programme progression agreement has been used as contextual data within UoG Admissions since 2003. UoG has collated data on Top-Up performance since the programme began in 1999. It is the pre-entry programme which engages with the lowest progression schools on the broadest basis and provides a useful case study to assess the impact of a pre-entry programme.

Research for this paper has been conducted, in stages, over a period of 15 years. Quantitative data on WP UoG entrant numbers, on-course performance and completion rates and qualitative data from an alumni survey and focus groups have been used.

6.1 Impact on entrants to UoG

Figure 2 shows the impact on entrants to UoG from the lowest progression schools from 2004-2013 entry. Entrants have risen by 264.2% over these years, a significant increase and evidence that, despite entry tariff rises over these years, Top-Up has encouraged more applicants to UoG and led to many more students being admitted. This demonstrates the effectiveness of a pre-entry programme in raising aspirations to apply and subsequently increasing numbers entering the University. It enables WP applicants to aspire to and make the transition to HE.

Figure 2: Top-Up Programme entrants to UoG, 2004-2013



6.2 Impact of Top-Up on Student Performance within UoG

Impact on student performance was analysed by comparing three groups of new entrants into Year One over a ten year period (2004-2013), who:

- attended a Top-Up school and completed the programme (Top-Up)
- attended a Top-Up school and did not complete the programme (no Top-Up)
- attended a non-target school (schools with higher participation rates in HE) in the same LA (control group)

Demographic information, exam results and attendance status were taken from UoG Student Records to identify students meeting progression regulations and those not continuing in their studies after Year 1 (a commonly used measure for student retention that adopts the definition of the HESA UK performance indicator⁹).

Impact in the early years of the Top-Up Programme was demonstrated in the 2001 cohort using this methodology by Walker et al (2004). Furthermore, in a recent review of the literature, Thomas (2011) concluded this paper was one of only two studies to evidence impact of pre-entry widening participation programmes on student retention and success.

Many years on and the progress of the cohorts of Top-Up entrants to UoG have been followed, allowing comparison of the 10 cohorts from 2004–2013. Top-Up students performed better in First Year than students from Top-Up schools who had not completed the Programme, and as well as students from higher progression non-Top-Up comparator schools within the same LAs. This data indicates that the pre-entry Top-Up Programme is aiding students make the transition into Year 1 and their continuation thereafter:

Top-Up = 87.3% continue; no Top-Up = 85.5% continue; control = 88.1% continue.

This finding is strengthened by the fact that the students in the comparator groups are generally less disadvantaged than the Top-Up cohort. Proportions of MD40 students within the comparator groups were:

Top-Up = 54% MD40; no Top-Up = 44% MD40; control = 33% MD40.

This suggests Top-Up is fulfilling its objective in helping to bridge the gaps for, and having most impact on, the most disadvantaged applicants and students.

⁹ The Higher Education Statistics Agency (HESA) uses non-continuation after Year One as a UK performance indicator in higher education: https://www.hesa.ac.uk/pis

6.3 Impact on MD40 students

Figure 3 breaks this continuation rate down by SIMD status, based on home postcode: the most disadvantaged quintile (MD20), the 40% most disadvantaged postcode areas (MD40) and the less socio-economically disadvantaged postcodes areas (MD>40). The data shows that Top-Up, while aiding all participants, has been of particular value to students residing in MD20 and MD40 areas. Top-Up students from MD40 areas have been less likely to withdraw than the students from Top-Up schools that did not complete the programme, and are comparable to MD40 students in the control group. MD20 students who did Top-Up are more likely to continue than those in the control group.

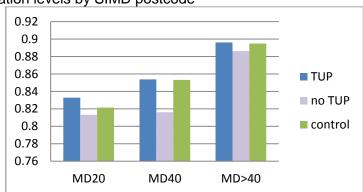


Figure 3: Continuation levels by SIMD postcode

6.4 Impact on degree completion rates

Figure 4 shows the differences in proportions of students in the comparator groups, who entered Year One from 2004-06 and completed their degree within six years. The graduation rates of all students in the control group were taken as a baseline (0%).

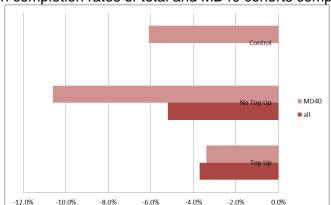


Figure 4: Variations in completion rates of total and MD40 cohorts compared to baseline

For all graduates, Top-Up students graduated in higher numbers than the no Top-Up group, but behind the control group. However, the figures for MD40 students again demonstrate the real value of Top-Up for the most disadvantaged students. The Top-Up MD40 cohort graduated in significantly greater numbers than the no Top-Up group and the 3.7% deficit against the overall student body of the control group becomes an excess of 2.7% against the MD40 students in the control group.

6.5 Overall impact of Top-Up on Student Transition

Taken together, the data presented suggests that UoG students who successfully completed Top-Up prior to entering the University, performed better in terms of continuation, retention and degree completion than the students from the Top-Up schools who had not completed the programme. Top-Up students performed better than the control group in terms of continuation, but were slightly behind in degree completion. However, for MD40 students across the three groups, the Top-Up group performed better than both groups across the board. Top-Up, as a pre-entry programme, has effectively influenced the ability of participating students, particularly the most disadvantaged MD40 residents, to apply, gain entry and successfully make the transition to Year 1, leading to continuation into Year Two. By this point, the successful students have developed the confidence and skills needed to be effective HE independent learners, as backed up by focus group findings, and they have continued on to complete their degrees in higher numbers than comparator student cohorts.

6.6 Top-Up alumni survey: transition out of University

Top-Up alumni from the 2004-06 cohorts, who graduated from UoG between June 2008 and June 2012, were surveyed, with a response rate of 26%. Findings include: 70% in employment that required a degree, no-one was unemployed and the average wage bracket was £20-25,000, around the average graduate level salary. The most common career was teaching, which matches Education as the subject which regularly attracts the highest number of WP students within UoG. 63% of respondents were in further study, 23% of whom were doing a research degree. Despite coming from a relatively small number of self-selecting survey respondents, these are positive figures. The trend towards postgraduate study opens up the debate about widening participation at this level.

7 Conclusions

The University of Glasgow is committed to widening participation for applicants from all backgrounds. By setting up a suite of customised pre-entry programmes, the University has striven to raise aspirations in, and applications and entrants from, target applicant groups. Simultaneously, applicants are prepared to make a successful transition to HE study in Year One, throughout degree study and beyond into the workplace or postgraduate study. Evidence collected over 15 years – quantitative data on student entrants, performance and completion rates, and qualitative feedback via surveys and focus groups - suggests the preentry programmes are successfully fulfilling this role. Furthermore, analysis of socioeconomic deprivation factors illustrates that the programmes are targeting efficiently and are benefiting the applicant groups most in need. MD40 residence is a significant barrier to HE progression in the west of Scotland and the UoG pre-entry programmes are proving particularly helpful for these applicants. WP applicants lacking the 'cultural capital', through circumstances out with their control, necessary for a successful transition into HE. are gaining this from participation in a pre-entry programme and are progressing on to become effective students and graduates. The willingness to contextualise applications at admission enables the University to admit applicants via adjusted offer-making, who otherwise would miss the opportunity to fulfil their potential in HE study. This is mutually beneficial to the individual, the institution and society as whole, as this contributes to these talented individuals successfully transitioning from a background of low aspiration and opportunity to progress, with improved life chances, to the level they deserve to reach. Education is intrinsic in increasing social mobility and opening up opportunity for all. An institution showing imagination and willingness to analyse applicants' context can allow this to happen.

References

SFC (2015) Learning for All: measures of success, ninth update. Scottish Funding Council, available at (last accessed 23 April 2015):

www.sfc.ac.uk/web/FILES/Statistical_publications_SFCST062015_LearningforAllMeasuresofSuccess/SFCST062015_Learning_for_All_2015_Measures_of_Success.pdf

Smith, I, Lasselle, L and McDougall-Bagnall, J M (2014) School grades, school context and university degree performance: evidence from an elite Scottish institution, *Oxford Review of Education*, vol. 40, no 3, pp 293-314.

Thomas, L (2002) Student retention in higher education: the role of institutional habitus, *Journal of Education Policy*, vol. 17, no 4, pp 423-442.

Thomas, L (2011) Do Pre-entry Interventions such as 'AimHigher' Impact on Student Retention and Success? A Review of the Literature, *Higher Education Quarterly*, vol. 65, no3, pp 230-250.

Walker, L, Matthew, B and Black, F (2004) Widening access and student non-completion: an inevitable link? Evaluating the effects of the Top-Up Programme on student completion, *International Journal of Lifelong Education*, vol. 23, no 1, pp 43-59.