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Challenging the 'distance education deficit' through 'motivational emails'

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Abstract

Graduation rates in distance higher education are low compared with full-time higher education - often less than 20% compared with full time UK rates of around 80% - the 'distance education deficit'. In the University of London International Programmes the difference between the face-to-face graduation rate of 61.5% and the distance version at 15.7% is particularly marked.

A previous paper in Open Learning reported evidence that 'proactive motivational support' to distance students had some effect on their success rates. This paper reports an attempt in the International Programmes to use proactive motivational support in the form of 'motivational emails' which found an increase in retention of 2.3%. Although this increase was small, it had a positive financial return on investment to the institution.

The paper suggests that motivational emails could be made more effective through the use of interactivity, nudging and priming. However it also argues that distance student retention will always depend less on technology and more on personal human support.

Keywords

Distance education, graduation, retention, dropout, motivational emails, cost/benefits of retention activities

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Introduction

In a recent article in Open Learning (Simpson, 2013) one of the authors of this article argued that there was a 'distance education deficit' - a substantial difference in many cases between the graduation rates in distance education institutions and those in conventional higher education institutions. See for example Figure 1 from that article, which compares graduation rates at UK full-time universities with the graduation rates at UK part-time institutions, the Open University, the University of London International Programmes and some other distance institutions. It can be seen that graduation rates in some other distance institutions are even less than those of the UK OU, and are often in single figure percentages.

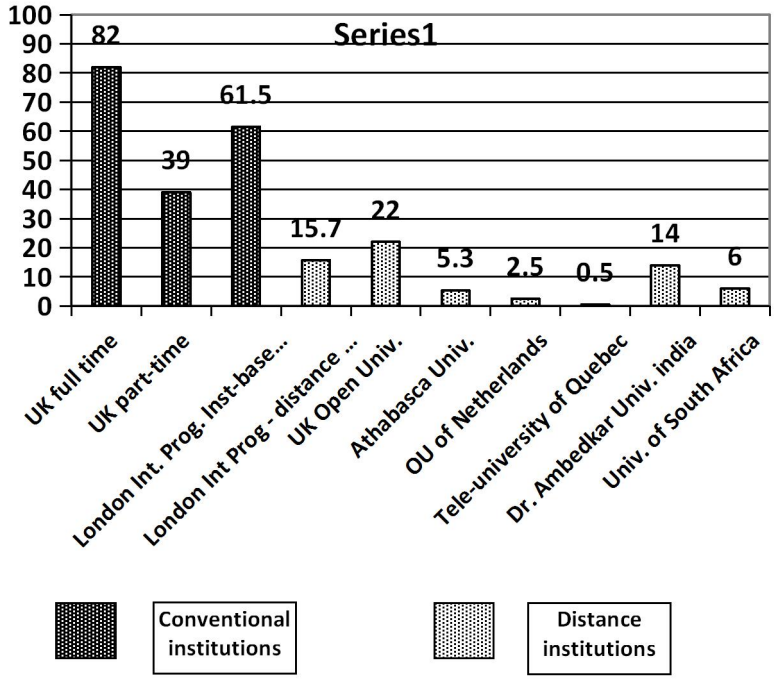

Figure 1 Graduation rates at various institutions (Simpson, 2013)

Massive Online Open Courses (MOOCs) do not appear on this graph as it appears that few people have yet graduated with degrees through taking a series of MOOCs. Since the completion rates for individual MOOCs appear to average around 6 to 9% (Times Higher Education, 9 May 2013, p10) it seems likely that any degree graduation figures will be of the same order as distance institutions' graduation rates, and probably very much less.

The UK Open University

The figures for the UK OU are derived from an analysis of students entering in 1997 since it can take up to eleven years for a cohort of students to move through the system. More recent data from the UK OU for 2001 entry students (Open University Student Statistics Team, 2010) suggests that its graduation rate has actually fallen further more recently to around 14%, so that its distance education deficit may actually have increased (Figure 2).

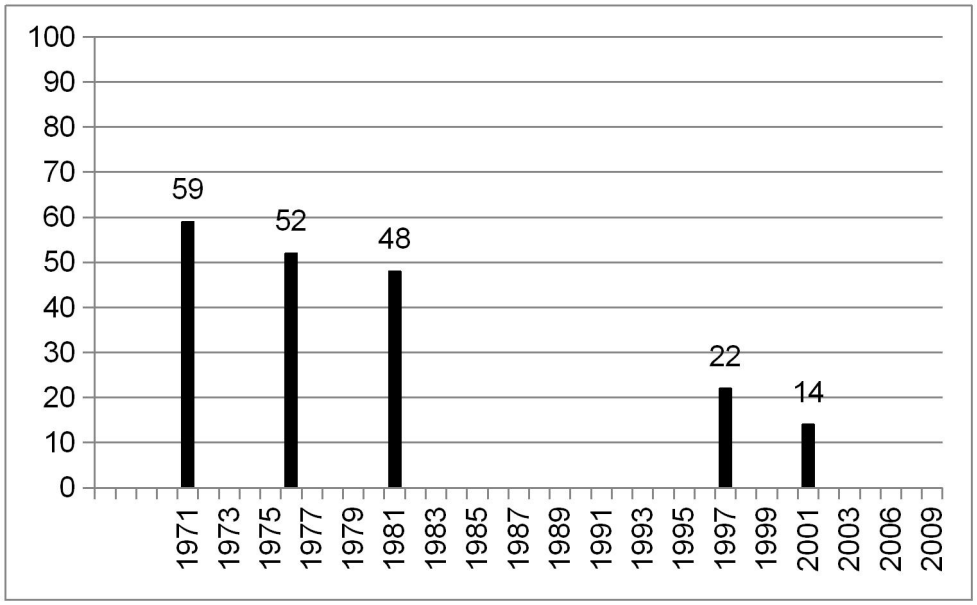

Figure 2 Graduation rates for the UK OU by year of entry

The previous paper suggested that this level of non-graduation does not just represent a large amount of wasted effort and resource on the part of both students and institutions, but may also lead to subsequent harm to the students involved. Bynner (2001) found data for full-time UK students who had dropped out which suggested they may have a higher probability of experiencing depression, unemployment and (for women) higher levels of violence from their partners, than either students who successfully graduated or who never went to university at all. Whilst this might not apply to distance students to the same degree and in some cases depression may be a cause rather than a consequence of dropout, another consequence of dropout for both kinds of student will certainly be increased indebtedness due to having a student loan. Student dropout in distance education is not just an undesirable phenomenon - it is a multi-million dollar and pound problem.

The University of London International Programmes (previously the University of London External System)

The University of London International Programmes has more than 50,000 students studying in 150 programmes in the UK and abroad. Students can study in two modes – at an approved institution face to face, or entirely at a distance. Figure 1 shows the graduation rates on the face to face version and the distance version of the International Programmes, which are 61.5% and 15.7% respectively, a 'distance education deficit' of more than 45% points.

The 'Motivational Emails' Project

There could be a number of reasons why the distance education deficit occurs. This paper is not an attempt to evaluate those reasons, but to see if an inexpensive intervention might reduce the deficit.

The project is based on findings from various sources (Visser 1998; Chyung 2001; Case and Elliot 1997; Simpson 2006, Huett *et al.* 2008; Twyford 2007, and others) all of which suggested that retention could be increased by the use of 'motivational messages' delivered in various ways - postcards, letters, phone calls, emails and so on. We decided that the use of email might offer a particularly economical way of delivering such motivational messages in distance education[1].

'Motivational emails'

There are now a large number of websites such as http://sur.ly/o/2inspiredaily.com/ and http://dailymotivationalquotes.com/ which offer to send regular 'motivational emails' to customers, generally in the form of inspirational quotes. Some sites are more sophisticated such as the US 'National Motivation Network' http://www.nationalmotivationnetwork.com/ which offers a range of motivational emails, phone calls, texts and live chat at various rates, including the 'Gold Star' service, which will make a five minute motivational phone call and two motivational emails a day for a month or longer, at a cost of $399 a month.

Evidence as to the efficacy of such contacts is not clear apart from quotes from 'satisfied customers'. Neither are there are many sites which offer motivational support specifically for learners. Clear findings of increases in retention as a result of motivational email messaging by distance institutions are few, but Huett *et al.* used 'motivational emails' and found substantial reductions (more than 20% points) in non-completion rates in an online course - see Table 1:

Group	Non-completion rates
Control	34.5%
Experimental	11.1%

Table 1 Comparative non-completion rates of students receiving 'motivational emails' over students not receiving them (n=153, significant at 0.5%, Huett *et al.*, 2008)

Huett also found differences in overall motivation and argued that 'simple, cost-effective, and easy-to-design email messages show potential for addressing distant students' motivational needs' (unfortunately it has not proved possible to get details of the emails from the author of

[1] The UK OU has recently introduced a system of regular email interventions to its students called MILLS (Model for Integrated Learning and Learner Support). These appear to be largely administrative - reminders of assignment due dates and so on. Apparently an evaluation will be carried out although it is not clear what form that will take.

the paper). Similarly Twyford (2007) found an 11.7% points increase in a group sent motivational emails over a control group.

Organization of the motivational email project

The project outlined in this paper piloted a series of 'motivational emails' with an experimental group of new London International students on the first year of the distance version of Laws (LLB) Programme and compared their success with that of a control group. There were a number of fairly arbitrary decisions made about the emails:

Frequency - it was decided to send the motivational emails roughly once a fortnight and 'front-loaded' towards the beginning of the project as dropout was more likely then (Simpson, 2013).

Length - there is a compromise to be made between messages which are too short to contain significant content or too long to be read by students who are already likely to be short of time. A length of about 400 words was agreed - about the length of an average newspaper feature.

Addressing - there is some limited but unpublished evidence from psychology studies that emails that are 'personalised' (i.e. personally addressed, preferably by first name) are more likely to be read than those addressed to (for example) 'Dear Student'. An email merge system was therefore important.

Customising - evidence also suggests that 'customised' emails (i.e. containing materials specific to that student) might be more effective. Kim and Keller (2007) used what they called 'Motivational and volitional email messages' (MVEM) combined with personal messages, and found increases in motivation over a group receiving just the MVEM. However that level of sophistication was thought likely to be costly and require a higher level of knowledge of individual students than is usually available in distance education.

Another administrative issue was about who signed the emails - suggestions that they should apparently come from the University of London Vice Chancellor were dismissed early on - and they were eventually signed by one of the authors with the title 'University of London Learning Consultant'.

Style - the emails were written in an informal friendly style using humour where appropriate (Keller's 'Attention' - see below) but always contained serious ideas about learning and overcoming learning problems (Keller's 'Relevance'). The humour was an essential part - the aim was to get them read, demystify learning and act to lower stress levels. Humour may be the best de-stressor we have and students report humour as amongst the nine most important characteristics of their teachers (Delaney *et al.* 2010).

We also aimed to use short anecdotes as these often seem to be a particularly effective way of communicating points and getting them remembered.

Content of the emails - the most important decision was of course the content of the emails which was largely based on three theories of motivation - Keller's ARCS Theory (Keller, 1998), Dweck's Theories of Self (Dweck, 1999), and Positive Psychology (Simpson, 2008).

(i) Keller's ARCS theory of motivation suggests that messages should:

Get the **A**ttention of students

Be **R**elevant to their self-perceived needs

Enhance their **C**onfidence in how they are progressing

Increase their **S**atisfaction with the process.

(ii) Professor Carole Dweck's 'Theories of Self' suggests that a condition for success is that students need to be persuaded that effort is more important for success than intellectual ability.

(iii) Positive Psychology seeks to enhance personal strengths and has been developed by Boniwell (2005) into a theory of student contact (Simpson, 2013). According to her, a student advisor should adopt a nine point approach:

1. Emphasise the positive during initial contact
2. Focus on existing assets and competencies
3. Draw out past successes and high point moments
4. Encourage 'positive affect' (hope and elevated thoughts)
5. Identify underlying values, goals and motivation
6. Encourage narration (life story, putting life in perspective, making sense of it)
7. Identify resources, protective factors and potentials of learners
8. Validate effort rather than achievement
9. ONLY THEN, if possible, talk about uncertainties, fears, lack of skills

The emails did not set out to give conventional study skills advice. There is evidence that such advice has little effect unless students are first well motivated to learn (Morgan, Gibbs and Taylor 1982). Indeed it has been suggested that conventional study skills advice is often supported by little evidence (Dunlosky *et al.* 2013). The aim of the emails was to switch on students' learning motivation through encouragement and by recognising and addressing barriers to that motivation. The content was also referenced where possible to authentic findings from psychological studies.

Topics addressed in the emails. The emails were called 'Study Tips' and the following topics were addressed in the following order:

1. An introductory email explaining the email 'study tip' system
2. 'Are you fixed or malleable? - Dweck's learning theory
3. What can you expect from study on the London LLB?
4. Motivating yourself to learn
5. Getting organised for study
6. Finding your best study methods
7. Finding the time when getting behind
8. Making lists
9. Losing motivation?
10. Family support
11. Managing your 'procrastinitis'
12. Self-discipline
13. Learning to concentrate on learning
14. Being a lucky student
15. 'Study Anxiety syndrome'
16. Exam tactics
17. Don't stop now!

It isn't possible to give the texts of all the emails - a full list can be found on www.ormondsimpson.com. Figure 3 shows one example 'Finding the time when getting behind' since one of the perennial problems in distance education is students complaining that they have run out of time.

UNIVERSITY OF LONDON | INTERNATIONAL PROGRAMMES

Dear Ahmed,

Distance students tell me that time is the biggest issue they face with their studies. There's finding the time in the first place and what to do when - as almost always happens occasionally - they get behind.

Finding the Time - You can find all kinds of 'time management advice' - making diaries, filling in time charts and so on. But psychologists have found that time management devices often only tend to work for a while before people revert back to their previous ways.

So here's a different way of doing things - the **4D method** for finding time:

- **D**efer – there may be things you think you must do but which you can put off for a while
- **D**elegate – there may be things you do that you can get someone else to do
- **D**owngrade – there may be things you don't have to do to such a state of perfection
- **D**ecommit – a fancy way of saying there may be things you don't have to do at all!

Catching up - Almost every student gets behind with their studies at some point. Life just happens! So here's the world's shortest guide on how to catch up - the **3S model**

- **S = Skim**. Sometimes when you need to catch up it's ok to skim what you're reading and just get a feel for it without reading it word for word.
- **S = Skip**. Sometimes it's okto skip some material all together if you need to and if it's not vital for the next bit of study.
- **S = Scrape**. If you're behind doing an assignment then occasionally it's ok to aim to just scrape through. You don't have to do everything perfectly!

Once you've caught up you can study more carefully. But it's always better to skim, skip and scrape, than drop out! So remember it's 4Ds for time management and 3Ss for catching up.

Best wishes

Ormond Simpson
Learning Consultant, University of London International Programme

Please send any queries to study.tips@london.ac.uk.

Figure 3 'Motivational' email - '*Finding the time*'

Methodology and practical aspects

Students were randomly divided into an experimental and control group and the motivational emails were sent to the experimental group. We were unable to balance the two groups for things such as previous educational qualifications, gender and socio-economic status as individual student data was not available to us. Our hope was that the group sizes were sufficiently large to make differences arising from any lack of balance relatively small. However the possibility of sampling errors remains.

The emails were sent out using the website Campaign Monitor (www.campaignmonitor.com) which allowed the emails to be formatted into a suitable style, individual personalisation to be added ('Dear Ahmed') with some limited reporting of how the emails were received - namely how many were opened and how many students unsubscribed from them.

The Control group received no emails. Given the nature of the distance version of the International Programmes with students working very largely in isolation from each other it was extremely unlikely that the Control group would have been aware of the emails sent to the Experimental group.

The project was carried out during the academic year 2012-13. The initial 16 emails were sent out between 11 November 2012 and 4 March 2013 at roughly equal weekly intervals with a final email sent on 16 June 2013 following the LLB exams.

Emails contained an 'unsubscription' link and a generic email address (study.tips@london.ac.uk) to respond to if they wished. Only 19 recipients out of more than 1600 chose to unsubscribe from emails throughout the process. Although it was not an absolute measure, Campaign Monitor estimated that on average emails were opened by 37.3% of recipients[2].

Results

Students were randomly divided into an experimental and control group and the motivational emails were sent to the experimental group. A summary of the results is shown in Table 1.

Students	**Initial numbers**	**Entered at least 1 exam**	**Sat at least 1 exam**	**Passed at least 1 exam**
Control group	1691	74.4%	66.0	55.2
Experimental group	1683	76.6%	68.3	57.6
Increase in retention in experimental group - % points		**+2.2%**	**+2.3%**	**+2.4%**

Table 2 Results of the 'motivational emails' project

It can be seen that there is a consistent increase in retention of around 2.3% points at every stage. A chi-squared test suggests that the differences are only significant at around 10%.

[2] This figure only includes recipients reading emails with HTML turned on so the actual opening rate is likely to be considerably higher.

A simple review of all emails sent by participants to the study.tips@london.ac.uk mailbox included in the final large-scale study suggests the emails were generally well received. Of 52 received from participants in direct reference to the tips, 30 (58%) contained positive comments relating to the project. No emails contained any negative references to any aspect of the project.

Comment

Obviously 2.3% is not a substantial increase in retention. Such a difference could have arisen by chance. If that was the case then perhaps a repeat of the project using a more sophisticated approach as outlined in the section 'Taking the Project forward' is needed.

Nevertheless there are a number of reasons to be interested in the result:

- The use of an experimental and control group may give this result a more substantial validity than studies which report the results of questionnaires or make historical comparisons
- The effect is the result of quite a small intervention
- It suggests the possibility that more and larger scale interventions might produce greater increases in retention
- The activity has a positive cost benefits ratio - see the next section.

Cost benefits

One argument that is often used against proactive contact with students is the cost of such activities. Yet it is clear that when an activity is carefully designed and produces a retention effect then its benefits can outweigh its costs. The argument is a simple one: increasing retention in one year with a retention activity will mean more students go onto the next year and will pay the next year's fees, possibly making an overall positive return on the activity. Whilst the argument is simple, calculations of the size of the return can be quite complex.

In this case the absolute increase of experimental group students entering the exam over the control group was 32. Each of those students will have paid an exam fee of £232 per paper which suggests a minimum increase in income of around £7500 to the Programme due to increased exam fee income alone (since many students will be sitting more than one exam the actual increase will be considerably more).

There would also have been an increase in fee income in future years from the increased number of students carrying on, although we did not try to estimate that. The costs of the project were of the order of £1000 so the project had a return on investment of more than 600%. The cost of repeating the project would be smaller - of the order of a few hundred pounds - so the return on investment would be greater, and if the project was rolled out to all students the profit on the project would be correspondingly larger.

Taking the Project forward

There are a number of ways of taking this project forward. The emails could be modified in the following ways

Interactivity via feedback

The emails could be made more interactive by adding in links to short online questionnaires which allow students to respond to questions about their progress and problems. Whilst it might not be possible to answer individual responses the overall data might well offer insight into ongoing issues in the course rather than end-of-course questionnaires.

But the idea is not so much to elicit useful feedback (although it may well do), but to give the students some sense of belonging and integration with the Programme through increased interactivity with it, thus building some sense of community. Some educational theorists (such as Tinto, 1993) believe that a sense of community is one of the most important factors in encouraging student retention

So some emails would contain a link to a short 'SurveyMonkey' questionnaire and invite students to give the Programme their feedback so far. The first set of questions could be along the following lines with a simple Likert Agree/Disagree scale.

1. 'So far the course is what I expected'

2. 'I'm happy with my progress so far'

3. 'I'm having difficulty with a part of the course at the moment'

4. 'If you answered agree or strongly agree to question 3 please tell us briefly which part of the course is giving you concern'.

Later questionnaires might ask for suggestion as to how to improve the course. The questionnaires would contain wording to the effect that we will be very grateful for students' responses which will help improve the Programme, but that there will be no individual responses. The extra expense of such a system will be very small.

Nudging and priming

'Nudging' - Thaler and Sunstein (2009) suggested that one of the most effective ways of changing behaviour is through 'nudging' subjects into making choices rather than using any kind of compulsion or coercion. The UK government is so convinced by this thesis that it has set up a 'nudging unit' - the 'Behavioural Insights Team' - although they have yet to apply their efforts to education in any form.

'Priming' - in the past decade experiments by social psychologists have shown that goals can be 'primed' - in other words people's behaviour can be affected by goals of which they are unaware. Shantz and Latham (2011) showed that call centre employees who were primed using a photograph of a woman winning a race, raised significantly more money from donors than those who were randomly assigned to a control group. Whether such an effect would work in educational settings remains to be seen, but motivational emails might offer an appropriate medium for testing the idea.

Both nudging and priming suggest some minor modifications to the wording of the emails. One example might be to use feedback from the surveys such as:

"Dear < >,

"We've been analysing the feedback from our last student survey. People are finding the course challenging - chapter 4 is particularly tough - but are finding that hard work is getting them through - etc"

Another example might be to use occasional pictures of students reading and working hard on various texts.

Using Twitter

There is anecdotal evidence that many students are using Twitter rather than emails. Perhaps it might be worthwhile setting up a blog to post the emails as they are sent and then use Twitter to post a link to the blog every time a new email is posted.

For example a tweet might say "New posting in the Blog! - how to manage your procrastination - click on www.uliptips.com". The costs of any of these modifications to the emails would be very small.

Using text (SMS) messaging.

Finally other media will be worth exploring. Pei-Luen, Gao, and Wu (2008) found that the use of SMS messaging increased motivation. Clearly the restriction to 140 characters limits the kind of messages that can be sent, but the immediacy of the medium is attractive, as is the fact that one of the authors has found that such messages seem more likely to get responses.

Conclusion

Our conclusion is that it may be possible to ameliorate the 'distance education deficit' to some extent through placing a greater emphasis on 'proactive motivational support' of students. This may be particularly important for MOOCs if they are to be a significant way of meeting the demand for higher education word-wide. We believe that student retention will increase in importance in an increasingly competitive environment for distance education and that there should be further projects examining the retention effects of simple, low cost, proactive and motivational retention activities that can have positive cost-benefit ratios.

On the other hand the extent to which mass technological and impersonal interventions can affect dropout may always be limited. As the Provost and Senior Vice President Dr. Jon Bellum of the Colorado State University (an entirely online institution) remarks "Retention is about people: technology can help cut costs, but it can't do it all" (Bellum 2014). Those institutions who can combine proactive motivational activities with more personal and individual support are the most likely to challenge the distance education deficit.

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