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ABSTRACT

The progress of students under 21 years old at the United Kingdom's Open University (OU) was compared with a sample of mature students, using sociological and psychometric research methods. The research goal was to consider whether the OU's teaching system originally designed for adults is suited to the needs and circumstances of students in the 18-20 age group. Additionally effort was directed to developing predictive indices of success and failure at the OU and to assess the level and nature of demand for OU places from the younger age group. Postal questionnaires, personal interviews, and administrative and academic records were used to monitor their progress, to measure their reactions to courses, and to discover their reasons for withdrawal. Groups of entering younger and older students completed a sociological questionnaire and a battery of psychometric tests. Findings include the following: the pilot scheme for attracting younger students attracted very few 18-year-olds and even fewer school leavers; the younger students fared less well than older students in their first year of OU studies; and younger OU students tended to score lower on the intelligence test than did older OU students and younger students elsewhere in higher education. Among the factors that appeared to underlie the relatively poor performance of the younger students are the following: instability, finance, time pressures, and attitudes. Some policy implications for OU are considered. (SW)

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THE SUITABILITY OF NON-TRADITIONAL DISTANCE LEARNING SYSTEMS  
FOR DIFFERENT TYPES OF STUDENTS - THE EXPERIENCE OF  
THE OPEN UNIVERSITY OF THE UNITED KINGDOM

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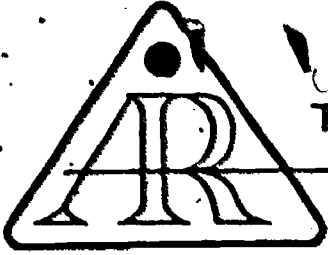
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Mary Corcoran  
University of Minnesota  
(Editor, AIR Forum Publications)

THE SUITABILITY OF NON-TRADITIONAL DISTANCE  
LEARNING SYSTEMS FOR DIFFERENT TYPES OF  
STUDENTS.

Abstract

As an example of non-traditional learning system set up to meet the needs of mature (21 and over) students the Open University of the United Kingdom has been strikingly successful. It now has over 75,000 students and over 38,000 graduates. A request by government led to the acceptance of three experimental intakes of 'younger' students (under 21) in 1974, 1975 and 1976. A longitudinal research program has been completed comparing the progress of these younger students with a sample of mature students, using sociological and psychometric research methods. The results provide much new information on the suitability of such open learning systems for different types of students.

Introduction

Interest in non-traditional learning systems has continued to increase in many countries. The forms are various and range from individualised and experiential learning to structured independent learning using new technologies. Motives for utilising these new systems range from 'pragmatic economics' to the more idealistic one of providing for 'creative individual development', or the goal of extending educational opportunity. An important issue for planners and educationalists is to discover which different types of student benefit from these different types of learning systems.

Many non-traditional systems also utilise the media and other new technologies in order to reach students who could not be reached in conventional ways, or alternatively to reach conventional categories of students either in greater numbers or in more (cost-) effective educational ways. Usually this involves some degree of independent learning, and a degree of distance between the teacher and the learner. Such 'distance learning systems' are also frequently described as open learning systems, since most of them are characterised

by attempts to provide learning opportunities to students in significantly more open and accessible ways than heretofore. Coffey (1977) drawing on Mackenzie, N. Postgate, R. and Scupham, J. (1975) distinguishes between the restrictive nature of closed learning systems and the requirement of an open-learning system in which restrictions will, as far as possible, have been removed or provision will have been made for students to overcome them. Coffey's list of constraints is contrasted with his requirements for openness in Figure 1. They group under three main headings: administrative constraints, educational constraints and informational constraints. In an ideal open-learning system students would be able to study what they wanted, when they wanted it, and where and how they wanted it. The educational provision must be student-centred, and not institution centred. Open learning systems have mainly been considered as suitable and therefore set up for adults.

The Open University in the United Kingdom is an early example of such a new learning system<sup>2</sup>. Its first Chancellor, Lord Crowther, in attempting to summarise the philosophy of the OU in his inaugural address, claimed that it would be "open" in four important ways - "We are open first as to people... We are open as to places... We are open as to methods... We are open, finally, to ideas." (Crowther, 1969) The OU (UK) has been variously described as an open learning system, a distance learning system or a non-traditional learning system. The key features which distinguish it from most conventional institutions are that:

- it is designed mainly for adults who are already working
- its study is mainly home based and part-time
- it requires no educational qualifications for admission
- it uses open network British Broadcasting Corporation television and radio in addition to written material and other technological and educational aids.

Inevitably it has had more success in achieving some of its proclaimed goals than others: recent attempts to assess the measure of this success have been made by McIntosh (1979) and Woodley (1979). However,

taken overall, there is no question that the OU has been successful in offering educational opportunities to large numbers of people. In its first nine years of teaching, it has admitted over 170,000 undergraduates and in 1979 there were 77,000 students currently enrolled on OU courses. Six out of every ten students admitted to the undergraduate program gain some course credit, and as Table 1 shows, around one half of those who complete final registration in the first year go on to graduate (McIntosh, Morrison and Woodley, 1979). Increasing numbers of students use their OU credits to gain admission to full-time courses elsewhere. In this paper we consider whether the OU's teaching system originally designed for adults is suited to the needs and circumstances of students in the 18-20 age group.

#### Background to the Pilot Scheme

It was originally intended that the Open University should cater for students aged 21 and over. The Planning Committee (1969) expressed the view that it was always preferable for people aged under 21 who wanted to combine work and study to do so by means of sandwich, block release or part-time day release courses. The rigours of distance learning were felt to be too great for young people who at that point in their lives were making the difficult transition from school to work. However, in 1970, the newly elected Conservative Government wrote to the Open University asking it what contribution it felt it could make to the development of higher education in the future. One proposal was that the University should directly admit qualified school-leavers. Later discussions, involving the Senate of the University, included the possibility of admitting unqualified younger students, and also a third group to be admitted through the Universities Central Council on Admissions, the normal admissions procedure for conventional universities. Finally, a pilot scheme was agreed whereby the University would admit five hundred eighteen to twenty-one year old students in February 1974 and a further five hundred in February 1975. Both intakes were to comprise two groups, each of two hundred and fifty, one group having two 'A' levels or their equivalent and the other group without these qualifications, the minimum entrance requirements for a full-time degree course. In the event, a third and final intake was also admitted in 1976 to provide further data on the level of demand from this age group.

### Research into the Pilot Scheme

It was agreed by the Department of Education and Science and the Open University that the Younger Student Pilot Scheme should be accompanied by systematic monitoring and evaluation. Consequently, the DES approved a grant to cover a five year research project with the following objectives:-

- a) To test to what extent the Open University was suitable for students in the eighteen to twenty-one year old age group
- b) If the Open University was found to be unsuitable for younger students, to try to establish why and in what ways this was so.
- c) By the uses of data drawn from a variety of sources, to attempt to develop predictive indices of success and failure at the Open University
- d) To attempt to assess the level and nature of the demand for Open University places from this age group.

### The Administration of the Pilot Scheme

The Open University's Information Services Department ran a special publicity campaign to inform potential younger students about the Pilot Scheme.

Advertisements were placed in relevant journals and magazines and details were sent to secondary schools, youth clubs and career officers. There was considerable coverage in the press through features and localised stories about individual applicants, based on Open University press releases. Frequent references were made to the Pilot Scheme in the normal University publicity material.

Due to the small number of applicants, no selection policy was necessary and all of those who were eligible for admission under the Scheme were offered a place. As a result, three hundred and seventy five younger students were admitted in 1974, five hundred and fifty three in 1975 and four hundred and seventy eight in 1976. Once the younger students were admitted under the Pilot Scheme, it was agreed that they were to be treated like any other Open University students. They therefore studied in the same way, with access to the same resources and under the same regulations.

## Research Strategy

Data for the evaluation of the Pilot Scheme were gathered from a variety of sources on all three intakes of younger students and on control groups of older Open University students. Postal questionnaires, personal interviews and administrative and academic records were all used to monitor their progress, to measure their reactions to courses and to discover their reasons for withdrawal.

The 1975 intake formed the main focus of the detailed study. In this year, groups of entering younger and older students were asked to complete a large-scale sociological questionnaire and were invited to undertake a battery of psychometric tests. The battery consisted of the AH6 Group Test of High-level Intelligence (Arts and General version), the Eysenck Personality Inventory (Form B), the BVT4 vocabulary test and a self-rating questionnaire. This multi-faceted research approach is not dissimilar to the 'multiple perspectives' strategy described by Palola (1976).

### Some Findings on the Demand from the Younger Age Group

- (i) While demand from conventionally qualified younger students was not high, it nonetheless represented significant numbers in the context of the country as a whole. There were 3,132 applications for admission to the Open University through the Younger Student Pilot Scheme, an average of just over one thousand per year. This is comparable to the average number of applications received by institutions which are members of Universities Central Council on Admissions (UCCA) but the numbers were still small when one considers that the scheme was available to all those in the eighteen to twenty age-group and not just those with 'A' levels.
- (ii) Despite the publicity given to the Pilot Scheme it was apparent that many younger people did not get to hear about it. In fact many young people had not heard of the Open University at all or mistakenly believed that 'A' levels were required for entry and that full-time attendance was required. A more vigorous publicity campaign could probably stimulate an increased demand among this age-group.



- (iii) Many young people sent for details of the Pilot Scheme but did not apply for admission and 55% of those who did apply decided not to become Open University students. These people were generally deterred from entering the Open University by by cost, the number of hours of study required each week, the length of time taken to gain a degree, the compulsory summer school attendance and the limited range of subjects available. A large proportion of this group decided to enrol on courses elsewhere which they considered to be more appropriate to their needs and circumstances.
- (iv) The Pilot Scheme attracted very few eighteen-year-olds and even fewer school-leavers. Over one-half of the younger applicants were aged twenty and two out of three did not possess the minimum entry requirements for a full-time degree course. The Pilot Scheme proved to be relatively popular among the clerical and office workers, technical personnel and housewives. In comparison with conventional universities, the Open University attracted a higher proportion of women and students from a working-class background.

#### Some Findings on the Suitability of the Open University for Younger Students

- (i) The younger students fared less well than older students in their first year of Open University studies. They were less likely to 'finally register' after the initial three month 'provisional registration' period (61% compared with 75%) and those who did finally register were less likely to gain a course credit at the end of the first year (63% compared with 81%). However, those who successfully completed the first year went on to make satisfactory progress in subsequent years. They gained credits as quickly as their older counterparts and, given their lack of credit exemptions<sup>3</sup>, graduated at the same rates.

- (ii) A general relationship was found between age and progress at the Open University. Between the ages of eighteen and thirty, the older a student was, the more likely he or she was to gain a course credit in the first year. This relationship held true even when differences in educational qualifications and credit exemptions were taken into account. (See Table 2)
- (iii) It is difficult to make exact comparisons between the progress of younger students at the Open University and that of students elsewhere due to differences in the teaching systems and the nature of the student intakes. Broad comparisons would suggest that the wastage rate among younger Open University students was much greater than those found in other sectors of full-time higher education in the United Kingdom. However, this is almost certainly ~~not~~ the best comparison since drop-out rates are normally appreciably higher for part-time than for full-time study. While only a relatively small proportion of the younger students are likely to graduate from the Open University, four out of ten of all those admitted gained some course credit and many had used this qualification to gain entry to a full-time degree course.
- (iv) If the success rate of the younger students is to be compared with that of older students, then if the comparisons are to have any validity, it is necessary for "ability" to be measured in some way. Put in simple terms, if the younger students fared less well than the older counterparts, we need to know whether this was due to the nature of the Open University's teaching systems, or whether the younger students were less academically able. The common research strategy often employed, of equating ability with educational qualifications obtained, and ranking these, was not possible in this context. Not only was the range of qualifications too diverse and over too great a time-scale for comparability, but also many of the

students had no qualifications at all. The administration of an intelligence test<sup>4</sup> would at least permit all students to be ranked on an interval scale measuring some aspect of cognitive ability. These scores would also enable comparisons to be made with population norms for conventional students and could also be compared with the formal qualifications held.

(v) In the event, younger Open University students tended to score lower on the AH6 intelligence test than did older Open University students and younger students elsewhere in higher education. However, the differences in scores were not large enough to suggest that the relatively poor performance of younger Open University students could be attributed to their lower ability.

(vi) Certain groups of younger students fared better than others with their Open University studies:-

- 'Qualified' students were much more likely to gain a credit at the end of the first year than were 'unqualified' students. (Fifty four per cent of provisionally registered 'qualified' students were compared with 29% of the 'unqualified' students).
- Female 'qualified' students fared best with 60% gaining a credit. Less than one in four of the male 'unqualified' students were successful.

(vii) While previous educational qualifications were a good predictor of first-year performance, it was also shown that younger student progress was related to factors in their study environment such as ease of access to study centres, the attitudes of friends, work colleagues and employers, the amount of preparatory study etc. and to certain personality characteristics. A multi-variate model was constructed which demonstrated that younger students with low qualifications

fared less well with their OU studies because they were 'disadvantaged' not only in terms of academic ability but also in terms of their study environment and their personality characteristics.

- (viii) When the multi-variate model was applied across the age-range it was shown that younger students with few social and psychological 'problems' fared as well as their older counterparts and that the relatively poor progress made by the younger age-group could partly be explained by the fact that their study environments and personality characteristics tended to be less suited to distance study. However it was also shown that when numerous problems existed it was the older students who were more willing and able to overcome them.

### Psychological and Environmental Factors which Underly the Relatively Poor Performance of Younger Students

We outline below the factors which emerge as underlying the relatively poor performance of younger Open University students.

#### 'Instability'

Many younger students were entering an unstable period in their lives. They were often just embarking on a career, changing jobs, getting married, moving house etc. Older students were less likely to experience such changes and were more able to cope with them when they did occur.

#### Finance

Many younger students experienced financial difficulties. Often this was because they had just got married and were buying a house or starting a family. In other cases temporary financial crises arose. Faced with such problems they frequently did not apply to anyone for financial assistance as they were unaware that this was possible.

#### Time pressures

Once they began their studies some younger students came to realise the true time-scale of their undertaking. To gain an OU degree would require many hours study per week and this would have to be sustained over a great number of years. Some decided to withdraw because they were unwilling to

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sacrifice their other leisure activities. Others decided that they could advance their career more quickly by taking shorter, more vocational courses, instead of by putting in extra hours at work to demonstrate their ambition to their employer.

#### Failure to 'play the system'

Many of the problems mentioned by younger students could have been overcome if they had adopted a more positive and instrumental approach to their studies. Strategies for coping with the heavy workload such as omitting parts of the course were not considered or were rejected because they wanted to study 'properly' or not at all. When crises arose they succumbed to them rather than seeking help from OU staff or possible sponsors. The corollary of this was that they almost always blamed themselves for their failure rather than the system itself.

#### 'Easy come, easy go'

When crises arose at home or at work it was usually their OU studies which were first to be sacrificed. In part this reflected a lack of commitment to their studies but many younger students saw this as perfectly natural behaviour for members of their generation and it was not generally a harrowing experience for them. For them this was a time when they were sampling different personal, occupational and educational experiences and they were used to such changes. They could always come back to the OU in the future and did not regard their first attempt as a waste of time or money. They felt that the emotional impact of withdrawal might be greater for older OU students, who were perhaps staking all on one final attempt to gain a degree.

#### Interest in the Course

Some younger students found the breadth of the Open University foundation courses too much to cope with and they also found them slightly less interesting. However, their general response to the context of the courses was very favourable.

#### Some Policy Implications for the Institution Itself

There were two main reasons for setting the age limit for entry to the Open University at twenty-one. Firstly, it was a protective measure taken on behalf of the younger age group for whom it was considered the Open

University was not suitable and secondly it was designed to avoid competition for students with other institutions of higher education. However, arguments based partly on the present research could now be advanced for lowering the age limit:-

- (i) The age of majority was reduced to eighteen in 1971. If people aged eighteen are now considered to be 'adults', they should be allowed to decide for themselves whether the Open University is appropriate to their needs and circumstances.
- (ii) Drop-out rates among younger students at the Open University are high but this is also true for older students who are manual workers and those with low educational qualifications. To exclude certain groups on the basis of poor performance would go against the basic philosophy of the Open University.
- (iii) It was felt that dropping-out from the Open University would be more psychologically damaging for young people. However, there was no research evidence to support this. Those who dropped out did not regret entering the Open University and were often planning to re-enter at some later stage.
- (iv) Although younger students fared less well than older students there was no clear break point at the age of twenty-one. A break-point, if any, appears around the age of thirty when people are more likely to be settling down both in their lives and in their jobs.
- (v) In its developments in the area of continuing education the Open University is itself making decisions to allow students as young as sixteen to enrol on courses. Some of these are specially designed short courses but others are 'remade' versions of Open University undergraduate courses, albeit without formal assessment.
- (vi) The evidence from the Pilot Scheme would suggest that a lowering of the age limit would not attract students away from

full-time higher education. For a variety of reasons the majority of younger students were unable or unwilling to take up a full-time course. In fact the rest of higher education might benefit from such a move as many younger students chose to transfer to conventional institutions as a result of their Open University studies.

If the Open University were to lower the age limit for entry to eighteen, it is unlikely that this would have a significant impact on its student population. Although demand from the younger age group might increase as the new age limit became more widely known, in the short-term special publicity would be necessary to maintain application levels at one thousand per year. If one thousand applications were received only 60% would be offered a place, due to the general surplus of applications over available places at the OU, and probably only 45% would accept this offer. Therefore, in a normal year's intake of 20,000 students, only 270 would be aged under twenty-one.

A lowering of the age limit would produce demand from the following types of younger people:-

- (i) Those who are 'accidentally' unqualified in that personal, domestic or educational circumstances have prevented them from achieving the qualifications normally appropriate to their ability.
- (ii) Those who have chosen to opt out of the conventional educational system but have subsequently decided that they wish to attempt further study. They may either still prefer a less conventional system or, having started a career, may not want to return to full-time study.
- (iii) Those who for personal or domestic reasons are unable to study full-time, et. housewives with small children and disabled people.
- (iv) Drop-outs from higher education. These may include some who are unable to afford to return to full-time study since they

have previously benefitted from a grant. Others may simply prefer non-campus study.

As a group the younger students would fare less well with their Open University studies than older students. However, the present research has enabled us to identify particularly vulnerable types of younger student who could be offered extra support and counselling.

Alternatively, the Open University may choose to maintain the existing age limit of twenty-one but continue to admit young students who are prevented from attending a full-time course. However, under the present procedures only a very small number have been admitted each year. Our research has shown that if the present regulations were interpreted in a more liberal fashion and were more widely publicised, the Open University could provide many more opportunities for younger people.

#### Some Broader Policy Implications for the United Kingdom

The points made above concerning demand from the younger age group were in the context of a 'steady-state' situation. However, we know from population statistics in England and Wales that the numbers in the eighteen year-old age group will increase rapidly over the next two years. The numbers will then begin to decline from 1982/83 and will fall much more steeply from 1990/91. This 'hump' will have great implications for higher education and the Department of Education and Science (DES) discussion document Higher Education into the 1990's (1978) describes alternative strategies for dealing with it. We now consider each of these strategies as they might affect the Open University.

- (i) Under Model A put forward by the DES, the full-time and sandwich higher education system would be first expanded to cope with the increase in qualified school-leavers wishing to enter and then be contracted as the numbers fall. Model E would involve a comparable expansion in the number of higher educational places but subsequent contraction would be avoided by increasing the participation rates among children of manual workers and mature students. Neither of these models would place any pressure on the Open University to accept younger students.



(ii) Model B would involve reducing the scale of the projected expansion necessary to cope with the hump, and therefore the need for so much contraction after 1990. The opportunities available for qualified higher education applicants during the years of the projected peak would be reduced, which would in effect mean a break with the Robbins principle. Under these circumstances there would be many school-leavers who were both qualified and willing to enter higher education but who could not find a place.

Under these circumstances the Open University might be seen as a cost-effective method for coping with this extra demand. However, although very few qualified school-leavers were attracted to the Pilot Scheme, the research evidence would strongly suggest that the Open University in its current form would not provide a real opportunity for such students. It is not so much that the intellectual demands are too great, or that the basic content of the curriculum is inappropriate, but rather that the pressures of sustained part-time study taken side by side with other personal, financial and work pressures are simply too much.

One suggestion that has been made, which has an increasing attraction in a time of high unemployment and is not dissimilar to the Manpower Services Commission arrangements which give grants to the unemployed to undergo training, is that younger students studying with the Open University could be allowed a mandatory grant and encouraged to study two full credits a year. In effect they would become full-time Open University students. They would thus graduate in a shorter time and, being freed from many of the financial and work pressures, would almost certainly achieve a higher success rate. An extension of this idea would be to locate such full-time students in a college environment with some minimal level of teaching and counselling support.

(iii) Under Model C the approach would be to adopt a policy of catering fully for projected student numbers but to do so

more economically, in terms of both recurrent costs and long-term resource commitments. Proposed economies include renting rather than building, the appointment of temporary staff and increasing staff-student ratios.

The possibility of looking to developments in educational technology to reduce unit costs is also mentioned. We would suggest that Open University courses, possibly with some modifications, could be incorporated in many higher education programmes to achieve some of the necessary economies. A recent experiment at Essex University with one of the Open University's technology courses, while not without its difficulties, has shown that this is a practicable proposition. (Brew, 1978)

- (iv) Model D represents the most creative attempt to cater fully for projected student numbers. Strategies put forward include increased accelerated degree courses for the most able students, increased provision of two-year courses such as the Diploma of Higher Education, the diversion of students from full-time to part-time courses, and a formal system of deferred entry. Some of these options could involve the use of the Open University or of its systems in a variety of ways either through systematic transfer or through planned mixed modes of study.

Since the publication of the discussion document there have been further developments. In Future Trends in Higher Education the DES reduced its estimate of the size of the hump in student numbers (DES, 1979). The continued decrease in the 'willingness rate' of qualified school-leavers to enter higher education, together with the slower than expected growth in the number of qualified leavers from schools and further education, meant that the projected 'age participation rate' had to be revised downwards. However, recent cuts in public spending have already led universities to plan reductions in student admissions. Therefore, despite the smaller hump, there is still likely to be much unsatisfied demand during the next few years. The decline in the 'willingness rate' might also indicate that a growing

proportion of younger people might wish to study for a degree while remaining in employment.

The younger students attracted to the Pilot Scheme tended to find the Open University a very hard road to follow. However, we would not conclude from this that distance education is inherently unsuitable for the younger age group. From what we have learned in this study we believe that a distance teaching system could be devised which would be more appropriate to the needs and circumstances of young people.

What has been shown is that there are important groups of younger students who for a variety of reasons prefer not to, or are prevented from, study at traditional institutions. The first group include those who have been 'turned off' by traditional education either at school level or later. Indeed they may have already been drop-outs from higher education. The second group includes in particular able young women who married young, or disabled students who could not attend traditional institutions. For these, a non-traditional institution provides valuable educational opportunities.

While many will consider it preferable for young people to attend full-time courses whenever possible, there will always be many young people who do not wish or are unable to do so for personal reasons or because there are no places available. Carefully designed distance teaching systems can increase the opportunities open to these people on a cost-effective basis and at all educational levels.

However, research results also showed that for large numbers of 'young' students part-time non-traditional learning opportunities are not beneficial, not because of the academic content and level but because of the other pressures on them at that time in their lives: lack of money, job and family instability. People without these problems and with adequate motivation have studied successfully over several years.

#### Policy Implication for Planners

Higher education in different countries faces different problems. In developed countries such as the United States and Scandinavia demographic

decline is putting pressure on institutions to find new categories of student enrollee. Non-traditional methods can attract new young students back who have been turned off by traditional opportunities. In other developed countries, eg. Germany and Holland, there are more qualified students than there are places available. Non-traditional methods, provided students are adequately supported, can provide a cost-effective way of extending opportunities for traditional groups. In third world countries, the use of new technologies for distance learning can make a major and cost-effective contribution to the provision of education and learning at all levels.

Footnotes

1. The term "distance education" is increasingly used to subsume more specific terms such as "correspondence" education.
2. For an account of its origin and setting up, see Perry, W.: The Open University, Milton Keynes, The Open University Press, 1976.
3. Students may be granted exemption for up to two (and exceptionally three) credits on the basis of previously held qualifications at the "higher education" level. By definition, fewer younger students have had time to pursue other qualifications successfully.
4. The test selected as most appropriate was Dr. A Heim's AH6 Group Test of High-Level Intelligence (Arts and General Version).

The full report of the research will be published as "The Door Stood Open" In print: The Falmer Press, Brighton, 1980.

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	Closed	Open
I Administrative restrictions	<ul style="list-style-type: none"> <li>a) The student must attend in a specific place, at definite times, and over a named period of time</li> <li>b) The student must join a class of a specified minimum size</li> <li>c) The student must pay a certain amount towards the cost of the course</li> </ul>	<ul style="list-style-type: none"> <li>b) Minimal restrictions on time or place of study</li> <li>b) No group size requirement</li> <li>c) Provision to help financially disadvantaged students</li> </ul>
II Educational restrictions	<ul style="list-style-type: none"> <li>a) The student has to accept the sequence of teaching and the teaching strategy that is offered. There will be little opportunity to select his own learning objectives</li> <li>b) The student will have to meet minimum entrance requirements</li> <li>c) Restrictive assessment methods</li> </ul>	<ul style="list-style-type: none"> <li>a) Opportunities for student to determine learning sequences, methods and objectives</li> <li>b) Few if any entrance requirements</li> <li>c) Constructive assessment methods</li> </ul>
III Informational restrictions	<ul style="list-style-type: none"> <li>a) Information about courses not easily available</li> <li>b) Little help for the student in choosing between courses</li> </ul>	<ul style="list-style-type: none"> <li>a) Adequate information about courses and transfer arrangements</li> <li>b) Adequate counselling services</li> </ul>

Fig. 1 Characteristics of 'open' and 'closed' learning systems.

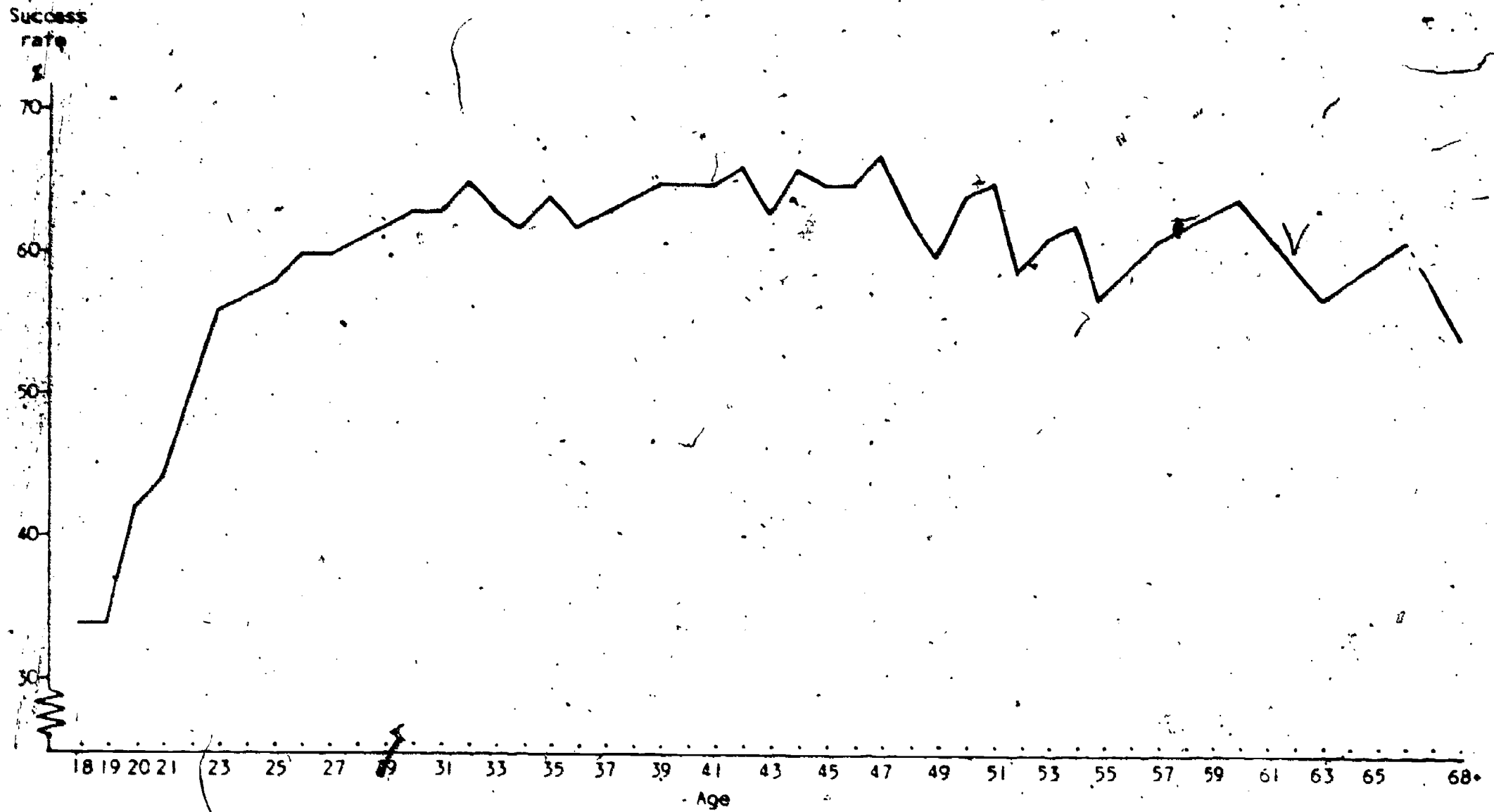


Fig 2 First year progress at the Open University analysed by age

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Table 1 The cumulative proportions of Open University students graduating over time

	Year of entry to the Open University						
	1971	1972	1973	1974	1975	1976	1977
Base - all finally registered students = 100%	19581	15719	12680	11336	14830	12227	14971
Graduated by:	%	%	%	%	%	%	
1972	4.6						
1973	21.5	2.0					
1974	35.0	16.6	2.0				
1975	43.4	27.7	16.6	1.9			
1976	49.8	36.3	28.4	16.8	1.5		
1977	52.7	43.4	36.8	27.9	13.8	1.4	
1978	54.3	46.8	43.5	35.0	22.5	12.8	1.3
1979	55.2	48.4	46.7	41.9	29.5	21.2	12.0