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ABSTRACT

College enrollment trends were examined with attention to participation of women and youth, part- and full-time study, and qualifications of entering students. Findings include the following: in 1973 there was only one university in Western Australia, and the colleges sector consisted of five teacher training institutions and one institute of technology; in 1983 the colleges had amalgamated into one multi-campus college of advanced education and another university had been founded, making a total of four institutions in higher education; student enrollments increased by 65 percent; in 1973, 55 percent of university students were in the 17-21 age group, but by 1983 only 47 percent were in this age group; part-time enrollment in the college sector increased from 41 percent to 56 percent during the decade, while the percentage (38%) of part-time students in the university sector remained about the same; and part-time enrollment by women has increased notably. Data for the 1973-1983 period are provided on: enrollments by 17-21 year olds by sector and sex; male students as a proportion of total enrollments by sector and institution; part-time enrollments by sector and institution; full- and part-time enrollments; and the numbers of students beginning college directly from school. (SW)

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STUDENT ENROLMENTS IN HIGHER EDUCATION IN WESTERN AUSTRALIA:

Some observations on trends over the period 1973 to 1983

A Discussion Paper

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STUDENT ENROLMENTS IN HIGHER EDUCATION IN WESTERN AUSTRALIA:

Some observations on trends over the period 1973 to 1983

by

Janette Stuart

This paper has been prepared for the Western Australian Post Secondary Education Commission and is being released in order to promote discussion of some of the important and complex issues facing, post-secondary education. The paper should be considered as a discussion document. It is not intended to be a definitive statement of the issue under consideration nor does it necessarily represent the views of the Commission. Any comments on the paper would be welcome and should be forwarded to the Secretary of the Commission, 16 Stirling Highway, Nedlands WA, 6009.

September 1983

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- ABBREVIATIONS -

University of Western Australia (UWA)

Murdoch University (Murdoch)

Western Australian Institute of Technology (WAIT)

Western Australian College of Advanced Education (WACAE)



I. INTRODUCTION

Late in 1982 the Commonwealth Tertiary Education Commission (CTEC) published a report which focused on trends in participation in higher education in Australia. The report entitled Learning and Earning(1) indicated great concern over what appeared to be a decline in the participation rates of young Australians, particularly young men, in our system of higher education. Given the serious economic problems of the last decade and the growing technological complexity of our society, this result appeared to be highly contradictory and give cause for concern.

Within this broad framework it was decided to analyse historical statistical data for WA institutions of higher education in an attempt to answer some of the following questions:

- 1. Did the situation in this state parallel the national findings?
- 2. Are there differences between universities and colleges/among institutions?
- 3. Are there unique factors which might help to explain any changes in enrolment trends?

It is the intent of this paper to look at four important variables which might show change over the decade of 1973-1982. They are:

- 1. Participation of Youth
- 2. Participation by Women
- 3. Mode of Study
- 4. Qualifications of Commencing Students

Student program choices and entry scores are other significant variables in attempting to develop an understanding of change in our higher education institutions but their very complexities make them the subjects for other papers.

II. METHODOLOGY

Annual statistics provided by the institutions for use by the CTEC and its predecessors provided the primary data base for the study. Some categories were collapsed for easier data handling. The historical data of the five original teachers colleges (later CAEs) were amalgamated to provide the newly formed WACAE (1982) with an historical identity. Population data was obtained from the ABS "Estimated Resident Population by Sex and Age" (Cat.No.3201.0) for the period 1973 to 1981. Population data for 1982 and 1983 was taken from ABS "Projections of the Population" available on microfiche. Their Series A estimates with conservative assumptions on fertility and migration were used.

The basic technique for providing comparisons was to reduce the raw data to percentage form. From there it was converted to indexed based figures which highlighted any changes. Some simple statistical techniques were employed, most particularly the computation of correlation coefficients. Discussion in the text highlights important changes over the period and the complete statistical tables are placed at the end of the text.

III. GENERAL FINDINGS

The WA higher education sector, comprised of universities and colleges of advanced education, has moved through a decade of substantial change in the period 1973-1982. Several factors stand out.

- 1. Institutions of Higher Education: In 1973 there was but one university; the college sector was comprised of five teacher training institutions and one institute of technology (WAIT). Ten years later the colleges had amalgamated into one multi-campus college of advanced education providing a wide variety of programs designed to broaden its base of appeal. Another university had been founded to provide four major institutions of higher education in the State.
- 2. Enrolments: The number of students enrolled in higher education institutions increased dramatically from 20 848 in 1973 to 34 554 in 1983. In percentage terms this represents a growth of 65% in student enrolments compared with a 23% increase in the WA population. The college sector was the faster growing with an 82% increase while university enrolments, despite the establishment of Murdoch, grew by only 43% in the same period.
- 3. Age Distribution: There was a change in the age distribution of the student body, though more so in the colleges once again than in the university sector. In 1973, 55% of university students were in the 17-21 age group. By 1983 only 47% were of this category. In 1973 fully 67.5% of college students were 21 or younger. By 1983 this had declined to 40%. However, as a percentage of the WA population, there was little change in the representation of the 17-21 age group in higher education between 1973 and 1983. In 1973, 5.1% of this group went to university. This was unaltered at 5.26% in 1983. In 1973, 7.52% were enrolled in college; this was virtually unchanged at 7.33% in 1983. However, this masks a peak in participation in 1975 across both sectors and a subsequent decline as well as changes in the participation rates of men and women.
- 4. Participation of Women: The decade has witnessed a major improvement in the participation of women; one can say that much of the expansion in student enrolments has been taken up by women. In 1973, 65.6% of university students were male. This had dropped to 55.3% in 1983. There was a similar shift in the CAEs where 62% of students were males in 1973 and only 51.5% in 1983. This change was more dramatic in some institutions than in others.
- 5. Mode of Study: Another important variable which has altered the higher education scene in the past decade is the shift towards part-time (including external) study as a desirable option. While the university sector remained virtually unchanged with about 38% of students enrolled part-time, the college sector saw an increase from 41% to 56%. Once again these broad-based figures mask changes by institutions. There are actually proportionally fewer part-time students at UWA with an increase at Murdoch. There has been a slight decline at WAIT but a dramatic increase at the WACAE. Obviously there are special circumstances which go far to explain a good proportion of this change; but one must still consider overall trends general in our society.
- 6. Male/Female Participation: Another interesting perspective is to look at mode of study and sex. In the universities women have increased their participation over both the part-time and full-time modes. However, the shift in the colleges sector has been dramatic. There are proportionally fewer men studying full-time. There has also been a drop in the proportion of full-time women students. The proportion of part-time male students has decreased but slightly. It is in the part-time female group that there has been significant expansion. From 14.6% of all students in 1974 they now comprise 24.8% of college students.
- 7. Entry Qualifications: Given the concern over the decreased participation of young people in higher education, particularly young men, as

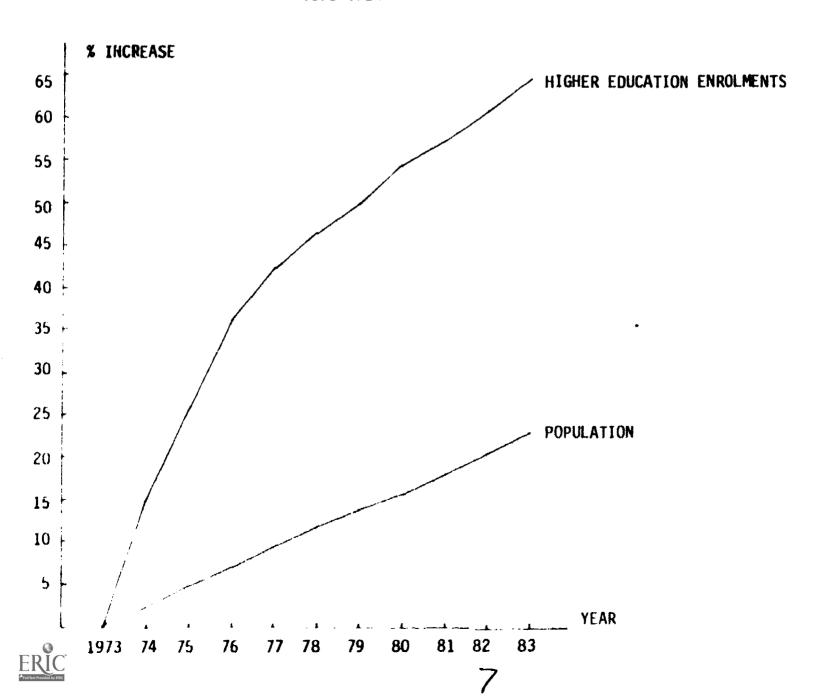
evidenced in Learning and Earning it was deemed important to look at the qualifications of commencing students in our institutions. Focusing upon those enrolled directly from school revealed that a slightly declining percentage of the student body were of this category over the period. Once again this was much more dramatic in the CAE sector. There has also been an increase in the proportion of college students with some previous tertiary training - from 28% in 1973 to 37.4% in 1983. There have been fluctuations in the university sector but no obvious trends in the enrolment of students with a tertiary background.

IV. ANALYSIS

1. Growth

Over the period 1973-1983 the population of WA grew by some 23% in a regular fashion. But demographic changes heralded by the aging of the baby boom showed a rise and then decline in the actual proportion of the population taken up by the 17-21 age cohort. There was a constant rise from 8.9% in 1973 to a peak of 9.13% in 1979, dropping thereafter to 8.6% in 1983 (based on ABS projections). Given current birth rates and the population's age structure one cannot expect this group to constitute such a large proportion of the population again in this century, although government policy changes in the immigration area could alter this situation.

FIGURE 1: POPULATION GROWTH: WA 1973-1983 (est.) ENROLMENT GROWTH IN HIGHER EDUCATION: WA 1973-1982



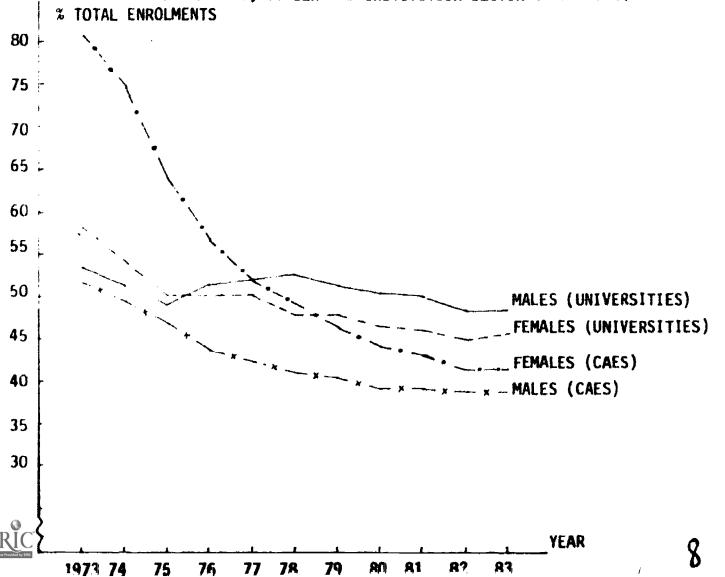
Growth in the number of places in higher education has also slowed. The average annual growth rate between 1973 and 1978 was 7.95%. This had declined to an annual rate of 2.37% between 1978 and 1983. In actual figures there was an expansion from 20 848 enrolments in 1973 to 34 354 in 1983, a growth of 65%. This growth was much greater in the college sector with an increase of 121% at the WA College, 62% at WAIT and only 8% at the University of WA. The creation of Murdoc' University had provided an additional 3 100 places in the period or about 23% of the total increase.

Growth was substantial in the first part of the decade but minimal in the latter half as a result of government policy concerning the provision of places and, perhaps, some flagging of interest in higher education courses. This is clearly illustrated by Figure 1 where the rate of growth in enrolments has slowed considerably, more commensurate with growth in the general population. However, the average annual growth rate in the Western Australian population of 1.93% is less than the 2.37% recorded for higher education enrolments.

2. Age Distribution

The major focus of the Learning and Earning report was on the seeming disinclination of the young to take up places in higher education. Here the figures must be very closely studied. It is true that the age distribution in the institutions has altered over the decade. Some 55% of university students were aged 17-21 in 1973. This had dropped to slightly more than 47% in 1983. The decrease was more precipitous in the colleges with a high of 67.5% in 1973 dropping to 40% in 1983. A distribution according to sex shows even more differences. To highlight the changes, the data was indexed to the figures for 1973 (see Appendix A1). Figure 2 graphs this decline.

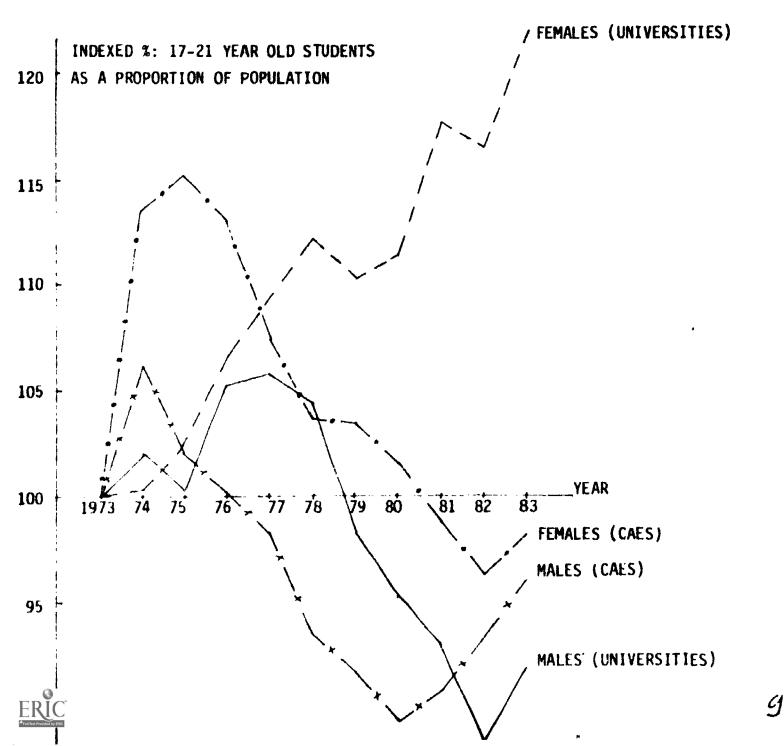
FIGURE 2: 17-21 YEAR OLD ENROLMENTS AS A PROPORTION OF ALL STUDENT ENROLMENTS, BY SEX AND INSTITUTION SECTOR (1973-1983)



But given the increase in enrolments over the period it would be quite possible for the age distribution within the institutions to alter dramatically; yet the actual enrolments of the young as a proportion of the WA population could remain stable. In fact this proposition was partially confirmed. In 1973 some 13.72% of WA 17 year olds were enrolled in higher education. This had risen slightly to 14.06% in 1983. The high in the period was 16.29% in 1975. The indexed figures once again highlight this fact (see Appendix B1). A distribution by sex and sector is revealing in other ways, however. The proportion of 17 year old males attending college has stabilised to above the 1973 level but changed little in the university sector. However, the proportional increase in 17 year old females attending university has been 30% with a big decline in the college area. Presumably part of this latter decline can be attributed to the reduction in opportunities in pre-service teacher education programs in the colleges.

Looking once again at the 17-21 age cohort we can see similar trends as with the 17 year olds alone. This is clearly illustrated by the indexed figures. There was a high in the college sector for this group in 1974. For the universities, this high was reached in 1977 (see Appendix C1 and Figure 3).

FIGURE 3: 17-21 YEAR OLD STUDENTS AS A PROPORTION OF 17-21 YEAR OLDS IN WA, BY SEX AND INSTITUTIONAL SECTOR (1973-100)



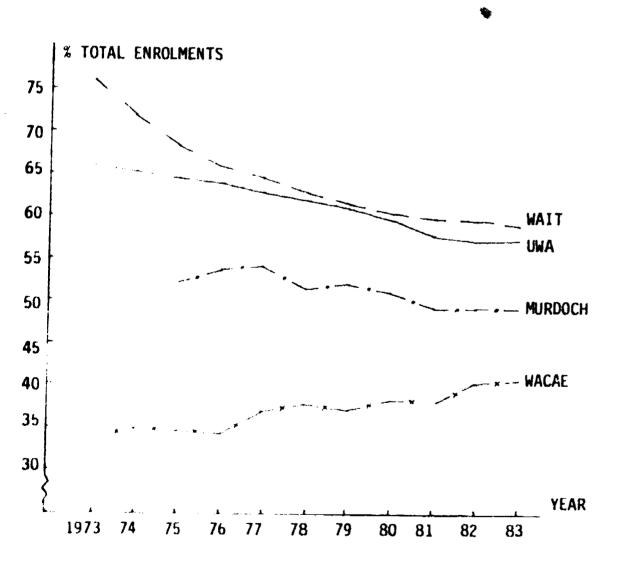
When one regresses the total number of enrolments against the numbers of young people participating in higher education we get correlation coefficients of .67 for the college sector and .96 for the university sector. In other words, the attraction of university sector for this group has remained relatively stable over the period while the attraction of the college sector has not. College sector growth was derived from the enrolment of mature age students.

3. Sex Distribution

The ratios between men and women in the tertiary institutions have altered dramatically in the past decade. Overall the percentage of men in the institutions has declined substantially. In 1973, 65.65% of university students were men. In 1983 this was 55.3%. In the CAE sector the drop was no less precipitous, 61.92% to 51.5%. Men, however, still comprise the majority of higher education students. There are interesting variations by institutions as well. UMA and WAIT enrolments continue to be male dominated, though by decreasing numbers.

The male component at the WACAE has increased as the female oriented pre-service primary teacher education component declined in significance; however women are still in the majority. Murdoch now has slightly more women than men (see Appendix D and Figure 4).

FIGURE 4: MALES STUDENTS AS A PROPORTION OF ALL STUDENTS, BY INSTITUTION (1973-1983)



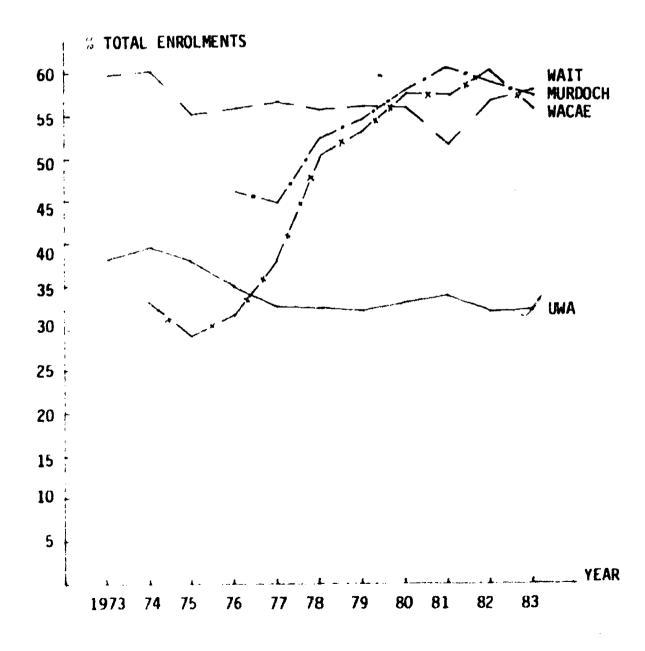


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4. Mode or Study

Closely related to both the changing age distribution in the institutions and the altering sex balance is the increasing popularity of part-time(2) study as an option for many students. Once again there are significant differences between institutions. There were almost no part-time students at the WACAE in 1973 when pre-service teacher education was the primary activity. This had jumped to 56% in 1983 reflecting the development of an extensive range of opportunities in post-experience teacher education courses and the introduction of business studies programs which were available on a part-time basis. The proportion of students studying part-time at WAIT dropped over the period from just under 60% to 58% although there was a rise in absolute numbers. UWA also lost part-timers, 38% being enrolled in 1973 and 32% There was also a decline in absolute terms. A good proportion in 1982. of the UWA decline might be explained by the fact that Murdoch had taken over the external teaching program of the university sector completely by 1976. As one might expect, then, discounting the figures for 1974 and 1975 which were too small for statistical reliability, Murdoch's part-time component had increased to 58%. Overall the picture shows that part-timers have increased from 39.6% of the total student population in 1973 to 49.1% in 1983 (see Appendix E and Figure 5).

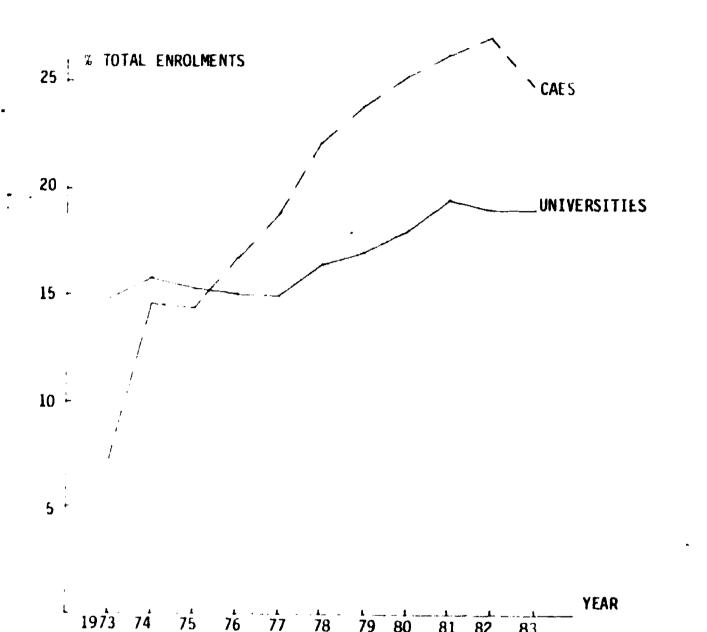
FIGURE 5: PART-TIME ENROLMENTS IN HIGHER EDUCATION, BY INSTITUTION, AS A PERCENTAGE OF THE TOTAL (1973-1983)





While the overall figures are impressive in themselves, an analysis of this data according to sex is even more revealing (see Appendix F and Figure 6). The proportion of women studying part-time has increased in both sectors, most dramatically in the college area.

FIGURE 6: PART-TIME ENROLMENTS (FEMALE. AS A PROPORTION OF ALL ENROLMENTS, BY INSTITUTIONAL SECTOR (1973-1983)



There is also an increased percentage of full-time women students at university though not at college. The enrolments of men in the full-time study has dropped in both sectors and has not been compensated for in the part-time mode. The proportion of part-time male students has declined in the university sector. In the college sector the proportions have fallen somewhat below 1973 levels. The trends are clearly illustrated in the indexed figures of Appendix Fl.

81 82

It was considered an interesting exercise to correlate mode of study against both age and sex. Some strong relationships were found.



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| Institution | Murdoch | • • • • • | WACAE | |
|--------------------|---------|-----------|-------|-----|
| 17-21 x full-time | .99 | .83 | .34 | .95 |
| Female x part-time | .99 | .57 | .97 | .95 |

In particular, growth in Murdoch and WAIT youth enrolments has correlated very closely with growth in the number of full-time students. This was true to a lesser extent for UWA but there was little relationship between youth enrolments and full-time study at WACAE. The most significant findings indicate that enrolment growth at all the institutions with the exception of UWA is highly correlated with the movement of women into higher education. The UWA result suggests that this university is different from the other institutions in that it attracts a greater number of women who are inclined to fu'll-time study. Over the period 1973 to 1983 the number of part-time female students role only 11.8% while full-time female students increased 51.4%. This finding suggests areas for further investigation.

5. Entry Qualifications

assumes that the vast majority of those entering higher education direct from TAE are 17 years old, we can attempt to relate this group to 17 year olds in the population generally. The trends are parallel to those seen in Appendix B. A slightly higher proportion of WA 17 year olds entered university directly in 1983 than in 1973 (6.95% vs 6.43%). In the colleges there was also a slight rise from 9.93% to 10.57%. Once again, a high point of 13.23% in the college area was reached in 1975 and a high for universities of 7.91% in 1977.

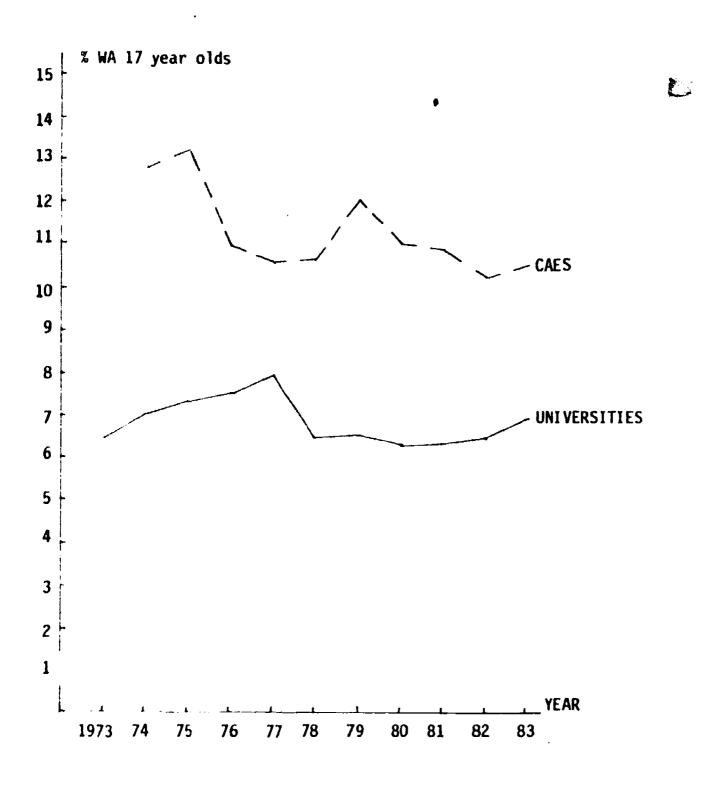
But if that is true for direct enrolments (see Appendix G and Figure 7), one must ask what qualifications are held by those who are making up the increased enrolment figures. Students with some tertiary experience constitute a large proportion of commencements(3). In 1981 Murdoch University had registered a 59% increase in the proportion of their commencing students with a tertiary background over 1975. However, this had decreased substantially in 1983 and there were relatively more school leavers enrolling at Murdoch. There was a 44% increase in the proportion of students at WACAE (over the 1975 figures) with some tertiary experience in 1983. One might reasonably expect that a good number of the latter are teachers upgrading their qualifications. The number of direct entrants have held up well at UMA and WAIT (see Appendix G) and there are no clear trends in the figures for students with tertiary experience.



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⁽³⁾ Commencements include all students commencing any course of study for the first time in the college sector. For the universities the data refers only to those students commencing undergraduate courses.

FIGURE 7: DIRECT ENTRANTS TO HIGHER EDUCATION AS A PROPORTION OF ALL 17 YEAR OLDS, BY INSTITUTIONAL SECTOR (1973-1983)



V. CONCLUSIONS

- 1. Growth in the number of students enrolled in higher education increased more quickly from 1973-1983 than the WA population with a decline in the rate of enrolment growth obvious over the last five years.
- 2. The student body, overall, was older in 1983 than in 1973. However, the proportion of young people in this State going on to further study has not altered significantly. New places in our institutions have been taken up by a different kind of student.



- 3. There was definitely a peak in participation rates for young people in the mid-1970s. While concern has been focused on the subsequent decline it might be worthwhile to consider that those high rates were anomalous. One can speculate on a number of possible factors. They perhaps represent a visible effect of the emphasis placed on education by the Whitlam Government in conjunction with the changing nature of the programs offered by the colleges. They have become much more broadly based institutions than the teacher education colleges they were in 1973. The recent reduced need for teachers would also have a depressing effect on current enrolments in advanced education by young people. Neither can one discount both the financial and psychological effects the abolition of tuition fees and the introduction of TEAS may have had on students in 1974 and 1975 in encouraging higher education studies. The establishment of Murdoch University also occurred in this period and may have encouraged a new kind of student into the system; the growing emphasis on education as a life long process may be an important variable in explaining the increased number of older students in our institutions. The upgrading of qualifications by teachers would account for a goodly proportion of the increase in college enrolments by older students.
- 4. More women are undertaking higher education today. They range across all age categories.
- 5. A greater proportion of students (almost 50%) have opted to study part-time. This appears to be associated with changes in the age distribution and sex ratios in higher education, and may reflect a greater emphasis on upgrading courses and second qualifications. One might say that the deviation from the traditional pattern in higher education of full-time study for young men has been most pronounced in its changes at the WACAE and Murdoch where part-time study for older women is strongest.
- 6. An analysis of entry qualifications illustrates little change at UWA and WAIT; once again, this emphasises the role played by the WACAE and Murdoch in providing higher education for the new type of student the older woman.
- 7. In attempting to answer the basic questions which were posed in the introduction one can say that, yes, the results in WA are similar to the national results on youth participation highlighted in Learning and Earning. But any substantial analysis of this problem must be done in conjunction with a study of school retention rates and changes in the labour market.
- 8. UWA and WAIT have changed their basic identities least in the last decade although WAIT has expanded its role in higher degree work and also entered the arena of teacher education. The mantle of change has been occupied by the two new institutions Murdoch and WACAE, and students appear to have recognised this in their enrolment patterns. Historical developments associated with the establishment of these institutions go far towards an explanation of why this is so. The phasing down of pre-service teacher education provided the colleges of the WACAE with the opportunity to broaden its public appeal. The birth of Murdoch University occurred partly as a result of a recognition by the government and the public that an alternative university education which was multi-disciplinary in nature should be offered to the citizens of Western Australia. The ability of these institutions to attract a new clientele for themselves shows the utility of those decisions.



VI. CONCLUDING COMMENT

The decline since 1975 in the participation of young people in higher education in WA, which has been identified in this paper, is consistent with the national trend whic! was identified in Learning and Earning. In response to this trend, and in the light of the employment prospects facing young people, the Commonwealth Government has a policy commitment to "increase participation rates in universities and colleges of advanced education at least to the level prevailing in 1975...". In addition, it seems likely that action will be taken by both Commonwealth and State Government to increase enrolments in upper secondary school (ie. to increase the retention rate), thus increasing the pool of potential higher education students.

At this stage it seems likely that, as a result of these and other social pressures, we will see some increase in the participation of young people in higher education over the next few years. Indeed, the evidence suggests that there has been a resurgence of interest in both upper secondary school and higher education by young people in 1983. If this trend continues, the pattern of enrolments in higher education that will emerge by 1987 may well be quite different to the prevailing pattern.

26 September 1983 D 15a/Jan



APPENDIX A : Enrolments by 17-21 Year Olds as a Proportion of Total Student Enrolments by Sector and Sex, 1973-1983

| | UNIVERSITIES | | | COLLEGES OF ADVANCED EDUCAT | | |
|------|--------------|---------|---------|-----------------------------|---------|---------|
| Year | Males | Females | Persons | Males | Females | Persons |
| 1973 | 53.35 | 58.21 | 55.02 | 51.46 | 80.72 | 67.53 |
| 1974 | 51.40 | 53.80 | 52.28 | 49.39 | 74.42 | 59.59 |
| 1975 | 48.89 | 49.72 | 49.19 | 46.99 | 63.84 | 54.25 |
| 1976 | 51.32 | 49.94 | 50.80 | 43.61 | 56.71 | 49.62 |
| 1977 | 51.88 | 50.11 | 51.19 | 42.43 | 52.06 | 46.86 |
| 1978 | 52.50 | 47.64 | 49.71 | 41.18 | 48.96 | 44.85 |
| 1979 | 51.41 | 47.77 | 49.93 | 40.45 | 46.39 | 43.35 |
| 1980 | 50.27 | 46.48 | 48.68 | 39.21 | 44.21 | 41.67 |
| 1981 | 50.00 | 45.88 | 48.17 | 39.24 | 42.92 | 41.06 |
| 1982 | 48.26 | 44.83 | 46.91 | 38.75 | 41.33 | 40.00 |
| 1983 | 48.47 | 46.04 | 47.38 | 38.39 | 41.31 | 40.07 |

APPENDIX Al: Enrolments by 17-21 Year Olds as a Proportion of Total Student Enrolments by Sector and Sex, (1973=100)

| 1973 | 100 | 100 | 100 | 100 | 100 | 100 |
|---------------|-------|-------|-------|-------|-------|-------|
| 1974 | 96.34 | 91.48 | 95.02 | 95.98 | 92.02 | 88.24 |
| 1975 | 91.64 | 84.54 | 89.40 | 91.31 | 79.09 | 80.33 |
| 1976 | 96.19 | 84.92 | 92.33 | 84.75 | 70.26 | 73.48 |
| 1977 | 97.24 | 85.21 | 93.04 | 82.45 | 64.49 | 69.39 |
| 1978 | 98.41 | 81.01 | 90.35 | 80.02 | 60.64 | 66.41 |
| 1979 | 96.36 | 81.23 | 90.75 | 78.60 | 57.47 | 64.19 |
| 1 9 80 | 94.23 | 79.84 | 88.48 | 76.20 | 54.77 | 61.71 |
| 1981 | 93.72 | 78.01 | 87.55 | 76.18 | 53.17 | 60.80 |
| 1982 | 90.46 | 76.23 | 85.26 | 75.30 | 51.20 | 59.23 |
| 1983 | 90.85 | 79.09 | 86.11 | 75.57 | 51.18 | 59.34 |

APPENDIX B: Enrolments by 17 Year Old Higher Education Students as a Proportion of the 17 Year Old Population of WA by Sector and Sex, 1973-1983

| | ŧ | INIVERSITIES | COLLEGES OF ADVANCED EDUCATION | | | |
|------|-------|--------------|--------------------------------|-------|---------|---------|
| Year | Males | Females | Persons | Males | Females | Persons |
| 1973 | 6.54 | 3.98 | 5.30 | 6.76 | 10.19 | 8.42 |
| 1974 | 7.30 | 4.23 | 5.80 | 8.20 | 11.71 | 9.91 |
| 1975 | 7.81 | 4.71 | 6.27 | *8.35 | *11.72 | *10.02 |
| 1976 | 6.62 | 5.23 | 6.25 | 7.23 | 9.98 | 8.59 |
| 1977 | 7.01 | 5.21 | 6.04 | 6.67 | 9.80 | 7.99 |
| 1978 | 6.52 | 4.95 | 5.76 | 6.65 | 9.36 | 7.96 |
| 1979 | 6.50 | 4.95 | 5.74 | 7.05 | 10.11 | 8.55 |
| 1980 | 6.30 | 4.66 | 5.49 | 7.30 | 9.52 | 8.39 |
| 1981 | 6.26 | 5.32 | 5.80 | 7.69 | 9.68 | 8.67 |
| 1982 | 6.07 | 5.47 | 5.78 | 7.70 | 8.70 | 8.19 |
| 1983 | 6.57 | 5.17 | 5.88 | 7.48 | 8.90 | 8.18 |

APPENDIX B1: Enrolments by 17 Year Old Higher Education Students as a Proportion of the 17 Year Old Population of WA by Sector and Sex, (1973=100)

| 1973 | 100 | 100 | 100 | 100 | 100 | 100 |
|------|--------|--------|--------|---------|---------|---------|
| 1974 | 111.62 | 106.28 | 109.43 | 121.30 | 114.92 | 117.70 |
| 1975 | 119.42 | 118.34 | 118.30 | *123.52 | *115.01 | *119.00 |
| 1976 | 101.22 | 131.41 | 117.92 | 106.95 | 97.94 | 102.02 |
| 1977 | 107.19 | 130.90 | 113.96 | 98.67 | 96.17 | 94.89 |
| 1978 | 99.69 | 124.37 | 108.68 | 98.37 | 91.85 | 94.54 |
| 1979 | 99.39 | 124.37 | 108.30 | 104.29 | 99.21 | 101.54 |
| 1980 | 96.33 | 117.09 | 103.58 | 107.99 | 93.42 | 99.64 |
| 1981 | 95.72 | 133.67 | 109.43 | 113.76 | 95.00 | 102.97 |
| 1982 | 92.81 | 137.43 | 109.06 | 113.90 | 85.38 | 97.27 |
| 1983 | 100.46 | 129.90 | 110.94 | 110.65 | 87.34 | 97.15 |

^{*} An anomaly in the age statistics from one of the colleges (now WACAE) was corrected by estimation, based on information from 1974 and 1976.



APPENDIX C: Enrolments by 17-21 Year Old Students as a Proportion of the 17-21 Year Old Population of WA by Sector and Sex, 1973-1983

| | ι | UNIVERSITIES | | | COLLEGES OF ADVANCED EDUCAT | |
|-------------------|-------|--------------|---------|-------|-----------------------------|---------|
| Year | Males | Females | Persons | Males | Females | Persons |
| 1973 | 6.38 | 3.77 | 5.10 | 7.52 | 7.52 | 7.52 |
| 1974 | 6.51 | 3.78 | 5.17 | 7.99 | 8.54 | 8.26 |
| 1975 | 6.40 | 3.85 | 5.15 | 7.67 | 8.66 | 8.16 |
| 1976 | 6.72 | 4.06 | 5.41 | 7.52 | 8.54 | 8.02 |
| 1977 | 6.75 | 4.31 | 5.55 | 7.39 | 8.08 | 7.72 |
| 1978 | 6.66 | 4.23 | 5.39 | 7.04 | 7.80 | 7.42 |
| 1979 | 6.27 | 4.16 | 5.73 | 6.90 | 7.78 | 7.33 |
| 1980 | 6.08 | 4.20 | 5.15 | 6.73 | 7.60 | 7.16 |
| 1 9 81 | 5.94 | 4.44 | 5.20 | 6.79 | 7.43 | 7.11 |
| 1982 | 5.65 | 4.39 | 5.03 | 7.01 | 7.24 | 7.12 |
| 1983 | 5.87 | 4.60 | 5.26 | 7.23 | 7.38 | 7.12 |

APPENDIX C1: Enrolments by 17-21 Year Old Students as a Proportion of the 17-21 Year Old Population of WA by Sector, (1973=100)

| 1973 | 100 | 100 | 100 | 100 | 100 | 100 |
|------|--------|--------|--------------|--------|--------|--------|
| 1974 | 102.04 | 100.27 | 101.37 | 106.25 | 113.56 | 109.84 |
| 1975 | 100.31 | 102.12 | 100.98 | 101.99 | 115.16 | 108.51 |
| 1976 | 105.33 | 167.69 | 106.08 | 100.00 | 113.16 | 106.65 |
| 1977 | 105.80 | 114.32 | 108.82 | 98.27 | 107.45 | 102.66 |
| 1978 | 104.39 | 112.20 | 105.69 | 93.62 | 103.72 | 98.67 |
| 1979 | 98.28 | 110.34 | 102.55 | 91.76 | 103.46 | 97.67 |
| 1980 | 95.30 | 111.41 | 100.98 | 89.49 | 101.64 | 95.21 |
| 1981 | 93.10 | 117.77 | 101.96 | 90.80 | 98.80 | 94.55 |
| 1982 | 88.56 | 116.45 | ∌8.63 | 93.22 | 96.28 | 94.68 |
| 1983 | 92.01 | 122.02 | 103.14 | 96.14 | 98.14 | 97.47 |

APPENDIX D: Male Students as a Proportion of Total Enrolments, by Sector and Institution, 1973-1983

| Year | | UNIVER | SITIES | COLLEGES OF ADVANCED EDU | | ES COLLEGES OF ADVANCED EDUC | |
|-------|---------------|--------|--------|--------------------------|--|------------------------------|--|
| | MURDOCH | UWA | WACAE | WAIT | | | |
| 1973 | - | 65.65 | 33.72 | 75.77 | | | |
| 1974 | *66.67 | 65.19 | 34.81 | 72.07 | | | |
| .1975 | 52.24 | 64.43 | 34.41 | 68.24 | | | |
| 1976 | 53.59 | 63.81 | 34.23 | 65.71 | | | |
| 1977 | 53.83 | 62.69 | 36.90 | 64.40 | | | |
| 1978 | 51.39 | 61.71 | 37.68 | 62.64 | | | |
| 1979 | 51.88 | 61.05 | 37.09 | 61.39 | | | |
| 1980 | 50.82 | 59.83 | 38.04 | 60.09 | | | |
| 1981 | 49.16 | 57.68 | 37.94 | 59.66 | | | |
| 1982 | 49.09 | 57.06 | 40.23 | 59.38 | | | |
| 1983 | 49.07 | 57.31 | 40.68 | 58.88 | | | |

APPENDIX D1: Male Students as a Proportion of Total Enrolments by Sector and Institution, (1973=100)

| 1973 | - | 100 | 100 | 100 |
|------|--------------|----------------|--------|-------|
| 1974 | * | 98.30 | 103.23 | 95.12 |
| 1975 | 100 | 98.14 | 102.05 | 90.00 |
| 1976 | 102.58 | 97.20 | 101.51 | 86.72 |
| 1977 | 103.04 | 95.49 | 109.43 | 84.99 |
| 1978 | 98.37 | 94.00 | 111.74 | 82.67 |
| 1979 | 99.31 | 92.99 | 109.99 | 81.02 |
| 1980 | 97.28 | 91.13 | 112.81 | 79.31 |
| 1981 | 94.10 | 87 .8 6 | 112.51 | 78.74 |
| 1982 | 93.97 | 8 6.9 2 | 119.31 | 78.37 |
| 1983 | 93.93 | 87.30 | 120.64 | 77.71 |

^{*} numbers too small to be statistically meaningful

APPENDIX E: Part-time Enrolments as a Percentage of Total Enrolments in Higher Education by Sector and Institution, 1973-1983

| Year | UNIVER | UNIVERSITIES | | DVANCED EDUCATION |
|------|--------------|------------------|----------------|-------------------|
| | MURDOCH | UWA | WACAE | WAIT |
| 1973 | - | 38.11 | 2.85 | 59.85 |
| 1974 | *50.00 | 39.45 | **33.30 | 60.23 |
| 1975 | *69.61 | 37.70 | 29.19 | |
| 1976 | 46.34 | 35.09 | 31.34 | 55.41 55.07 |
| 1977 | 44.76 | 32.69 | 37.95 | 55.97 56.93 |
| 1978 | 52.54 | 32.38 | | 56.92 |
| 1979 | 54.72 | 32.28 | 50.19 | 56.04 |
| 1980 | 58.11 | | 53.42 | 56.24 |
| 1981 | - | 33.12 | 57.78 | 56.30 |
| 1982 | 60.86 | 33.89 | 57.41 | 51.99 |
| | 59.09 | 32.04 | 60.18 | 56.99 |
| 1983 | 57.59 | 32 . 19 , | 56.10 ' | 58.02 |

APPENDIX E1: Part-time Enrolments as a Percentage of Total Enrolments in Higher Education by Sector and Institution, (1973=100)

| 1973 | - | 100 | 100 | 100 |
|------|------------|--------|---------|----------------|
| 1974 | * - | 103.52 | 1168.42 | 100.63 |
| 1975 | * _ | 98.92 | 1024.21 | 92.58 |
| 1976 | 100 | 92.08 | 1099.65 | |
| 1977 | 96.59 | 85.78 | 1331.16 | 93.52 |
| 1978 | 113.38 | 84.96 | 1761.11 | 95.10 93.53 |
| 1979 | 118.08 | 84.70 | | 93.63 |
| 1980 | 125.40 | 86.91 | 1874.39 | 93.97 |
| 1981 | 131.33 | | 2028.42 | 94.07 |
| 1982 | | 88.93 | 2014.39 | 86.87 |
| 1983 | 127.51 | 84.07 | 2111.16 | 95.22 |
| 1303 | 124.27 | 84.47 | 1968.42 | 96.94 |

^{*} numbers too small to be statistically meaningful.

** figure inflated due to double enrolments between UWA and Nedlands College.

APPENDIX F: Full-time and Part-time Enrolments as a Proportion of Total Enrolments by Sector and Sex, 1973-1983

| | | UNIVE | COLLEGES OF ADVANCED EDUCATIO | | | | | |
|---------------|-----------|----------------|-------------------------------|--------|-----------|--------|-----------|-------------------|
| YEAR | FULL TIME | | PART TIME | | FULL TIME | | PART TIME | |
| | Male | Female | Maie | Female | Male | Female | Male | Female |
| 1973 | 42.43 | 19.47 | 23.22 | 14.88 | 28.49 | 20. 60 | | |
| 1974 | 41.45 | 19.07 | 23.73 | 15.74 | 22.95 | 30.69 | 33.44 | 7.38 |
| 1975 | 41.11 | 20.93 | 22.51 | 15.43 | | 26.00 | 36.41 | 14.63 |
| 1976 | 41.06 | 22.37 | 21.40 | 15.17 | 24.44 | 30.03 | 31.07 | 14.46 |
| 1977 | 41.58 | 23.77 | 19.67 | 14.97 | 24.01 | 29.07 | 30.15 | 16.77 |
| 1978 | 39.90 | 23.82 | 19.81 | | 23.06 | 27.24 | 30.88 | 18.82 |
| 1979 | 39.54 | 23.77 | 19.71 | 16.47 | 21.32 | 24.94 | 31.49 | 22.25 |
| 1980 | 37.82 | 24.00 | • | 16.98 | 20.29 | 24.65 | 31.08 | 23. 99 |
| 1981 | 35.52 | 24.64 | 20.19 | 17.99 | 19.15 | 23.91 | 31.61 | 25.33 |
| 1982 | 35.92 | | 20.28 | 19.56 | 19.22 | 23.59 | 31.48 | 25.72 |
| 1983 | | 25.68 25.63 | 19.27 | 19.12 | 19.21 | 22.47 | 32.22 | 26.10 |
| · <i>3</i> 03 | 35.98 | 25.63 | 19.32 | 19.07 | 20.70 | 24.09 | 30.79 | 24.82 |

APPENDIX F1: Full-time and Part-time Enrolments as a Proportion of Total Enrolments by Sector and Sex, (1973=100)

| 1973 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
|------|-------|--------|--------|--------|-------|-------|--------|--------|
| 1974 | 97.69 | 97.95 | 102.20 | 105.78 | 80.55 | 84.72 | 108.88 | |
| 1975 | 96.89 | 107.50 | 96.94 | 103.70 | 85.78 | | | 198.24 |
| 976 | 96.77 | 114.89 | 92.16 | | | 97.85 | 92.91 | 195.93 |
| 977 | 98.00 | | | 101.95 | 84.28 | 94.72 | 90.16 | 227.24 |
| | | 122.09 | 84.71 | 100.60 | 80.94 | 88.76 | 92.34 | 255.01 |
| 978 | 94.04 | 122.34 | 85.31 | 110.69 | 74.83 | 81.26 | 94.17 | 301.49 |
| 979 | 93.19 | 122.09 | 84.88 | 114.11 | 71.22 | 80.32 | 92.94 | |
| 980 | 89.14 | 123.27 | 86.95 | 120.90 | 67.22 | | | 325.07 |
| 981 | 83.71 | 126.55 | 87.34 | | | 77.91 | 94.53 | 343.22 |
| 982 | 84.66 | | | 130.45 | 67.46 | 76.87 | 94.14 | 348.51 |
| | | 131.90 | 82.99 | 128.49 | 67.43 | 73.22 | 96.35 | 353.66 |
| 983 | 84.80 | 131.64 | 83.20 | 128.16 | 72.66 | 78.49 | 92.08 | 336.31 |

APPENDIX G : Students Commencing Higher Education Direct from School as a Proportion of the 17 Year Old Population of WA by Sector, 1973-83

| | COMMENCING STUE (PERSONS) | ENTS | 17 YEAR OLD | PERCENTAGE OF 17 YEAR OLDS | | | |
|------|------------------------------|------|-------------------------|--------------------------------|----------------|----------------|--|
| Year | UNIVERSITIES | CAEs | POPULATION (PERSONS) | UNIVERSITIES % | CAE's | TOTAL | |
| 1973 | 1323 | 2044 | 20574 | 6.43 | 9.93 | 16.36 | |
| 1974 | 1435 | 2617 | 20465 | 7.01 | 12.79 | 19.80 | |
| 1975 | 1528 | 2760 | 20855 | 7.33 | 13.23 | 20.56 | |
| 1976 | 1639 | 2406 | 21888 | 7.49 | 10.99 | 18.48 | |
| 1977 | 1777 | 2368 | 22453 | 7.91 | 10.55 | | |
| 1978 | 1511 | 2483 | 23312 | 6.48 | 10.55 | 18.46 | |
| 1979 | 1501 | 2780 | 22971 | 6.53 | | 17.13 | |
| 1980 | 1479 | 2582 | 23443 | 6.31 | 12.10 | 19.63 | |
| 1981 | 1596 | 2520 | 23113 | - · - · | 11.01 | 17.32 | |
| 1982 | 1479 | 2348 | 22926 | 6.3ß | 10.90 | 17.23 | |
| 1983 | 1593 | 2423 | 22936 | 6. 4 5 6. 9 5 | 10.24 10.57 | 16.69 17.52 | |

APPENDIX H: Qualifications of Commencing Students as a Proportion of all Commencing Students by Sector and Institution, 1973-1983

| | | UNIVE | RSITIES | | COLLEGES OF ADVANCED EDUCATION | | | | |
|------|---------|---------------|---------|--------------|--------------------------------|----------|--------|----------|--|
| YEAR | MURDOCH | | UWA | | WACAE | | WAIT | | |
| | Direct | Tertiary | Direct | Tertiary | Direct | Tertiary | Direct | Tertiary | |
| 1973 | | _ | 65.24 | 5.72 | 69.14 | 15.63 | 30.72 | 33.73 | |
| 1974 | - | | 48.37 | 26.83 | 60.72 | 8.33 | 35.85 | 30.32 | |
| 1975 | 31.36 | 29.17 | 44.76 | 30.73 | 41.68 | 28.45 | 40.72 | 28.20 | |
| 1976 | 23.17 | 40.9 0 | 51.37 | 28.59 | 40.06 | 32.88 | 33.32 | 30.91 | |
| 1977 | 25.25 | 35.83 | 57.81 | 27.21 | 29.95 | 46.75 | 34.8C | 32.41 | |
| 1978 | 16.48 | 23.00 | 53.37 | 24.96 | 27.40 | 46.50 | 37.61 | 33.50 | |
| 1979 | 16.14 | 33.48 | 53.19 | 21.48 | 27. 9 5 | 48.54 | 42.77 | 32.93 | |
| 1980 | 21.22 | 33.46 | 49.55 | 22.97 | 25.59 | 47.34 | 41.06 | 31.88 | |
| 1981 | 24.28 | 46.47 | 50.59 | 25.07 | 24.50 | 49.09 | 39.28 | 32.61 | |
| 1982 | 28.98 | 35.28 | 46.28 | 25.90 | 21.56 | 50.57 | 38.81 | 30.02 | |
| 1983 | 33.88 | 26.23 | 49.85 | 25.32 | 24.61 | 40.87 | 33.39 | 34.59 | |

APPENDIX H1: Qualifications of Commencing Students as a Proportion of All Commencing Students by Sector and Institution, (1975=100)

| 1973 | - | - | 145.76 | 18.61 | 165.88 | 54.94 | 75.44 | 119.61 |
|------|--------|--------|--------|-------|--------|--------|--------|--------|
| 1974 | - | - | 108.07 | 87.31 | 145.68 | 23.28 | 88.04 | 107.52 |
| 1975 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 107.52 |
| 1976 | 73.88 | 140.21 | 114.77 | 93.04 | 96.11 | 115.57 | 81.83 | 109.61 |
| 1977 | 80.52 | 122.83 | 129.16 | 88.55 | 71.86 | 164.32 | 85.46 | 114.93 |
| 1978 | 52.55 | 78.85 | 119.24 | 81.22 | 65.74 | 163.44 | 92.36 | 118.79 |
| 1979 | 51.47 | 114.78 | 118.83 | 69.90 | 67.06 | 170.62 | 105.03 | 116.77 |
| 1980 | 67.67 | 114.71 | 106.23 | 74.75 | 61.40 | 166.40 | 100.83 | 113.05 |
| 1981 | 77.41 | 159.31 | 113.03 | 81.58 | 58.78 | 172.55 | 96.46 | 115.64 |
| 1982 | 92.41 | 120.95 | 103.40 | 84.28 | 51.73 | 177.75 | 95.31 | 84.63 |
| 1983 | 108.04 | 89.92 | 111.37 | 82.40 | 59.05 | 143.66 | 82.00 | 122.66 |