

***An Analysis of Diploma of Health and Human
Behaviour Completions 2002***

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Abstract

Demographic data from students enrolled in the Diploma of Health and Human Behaviour during 2002 were analysed to determine what factors contribute to completion rates and what interventions may be needed to improve those rates. Students at risk are male, Māori and Pacific Islanders, and especially those with minimal or no secondary school qualifications. Recommendations for improving completion rates include setting a minimum academic standard for entry, limiting enrolments to one course per semester and reducing the volume of learning material by introducing better textbooks.

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An Analysis of Diploma of Health and Human Behaviour Completions 2002

Introduction

The Diploma of Health and Human Behaviour was proposed in 1996 and introduced on an open enrolment basis into The Open Polytechnic's programme portfolio in 1997. Its purpose was to provide an introduction to the discipline of psychology and a bridging programme into the Bachelor of Applied Science for those who had little or no tertiary academic experience. The Diploma consists of six Level 5 courses, of which three are non-degree courses and three part of the Bachelor of Applied Science degree. The programme was offered on an open enrolment basis: enrolments were accepted at any time and courses were to be completed within the 12-month period following the date of enrolment.

The programme was highly successful in attracting a large number of enrolments and consequent EFTS, but engagements and completions were low. Students who enrolled in the Diploma of Health and Human Behaviour had significantly lower completions than students enrolled in the same courses but in different programmes. Very few actually graduated with the Diploma although some have moved their enrolments to other diplomas.

In an attempt to improve the completion rates, in 2002 the courses within the Diploma were put on a semester basis. It was thought that courses with enforceable deadlines for assessments would show higher completion rates as students would be more motivated to engage and complete. This change had an immediate effect on enrolments, with numbers almost halving. It is unclear why this was the case, but it is possible that under open enrolment students enrolled in the Diploma to give them a taste of academic study so that they could make informed choices with future courses. Putting the Diploma's courses on a semester basis removed this enrolment pathway.

To enable an understanding of the dynamics of the Diploma of Health and Human Behaviour, an investigation of the demographics and academic performance of students who enrolled in the programme during 2002 was undertaken.

A literature review found that current research on the relationships between completions and demographic variables is linked closely to particular programmes, institutions and regions. Factors specific to The Open Polytechnic of New Zealand make it necessary to conduct investigations on specific aspects of The Open Polytechnic's programmes in order to understand the specific dynamics driving successful completions. For this reason the literature review is not included with this report.

Method

Records of all students who enrolled in Diploma of Health and Human Behaviour courses during 2002 were extracted and analysed to determine the factors that led to engagements and completions in the six courses.

Once a student has enrolled, a number of paths can be followed:

- withdrawal, with all, some, or no fee refund
- transfer to a future course occurrence (usually the next available occurrence)
- engagement with the course, as evidenced by the submission of one assignment in the course
- completion, as evidenced by the submission of all assignments, including attendance at an examination for those courses with examinations
- non-engagement, by the submission of no assignments
- non-completion, by the submission of only a proportion of the required assignments in a course.

Where a student records two or more ethnic origins, each ethnicity is treated as a separate record. The effect of this was to inflate the number of enrolments. No corrections were made for these duplicates.

An error in the stored data required correction: in a number of cases, a non-completion was recorded as an 'E' grade, indicating an unsuccessful engagement, rather than as an 'ABS' indicating a non-completion. In these cases the 'E' was replaced with the correct 'ABS' outcome.

Most non-engagers were recorded as 'Complete'. However, they were readily identified as they had a course mark of zero and had not withdrawn or transferred.

In this report, the 'Completion rate' was calculated as the ratio of completions to total active enrolments (completers plus non-completers).

All enrolments in open enrolment courses within the Diploma from its inception were compared with the 2002 semester-based courses.

Results

Tables 1 to 4 show the breakdowns of student demographics and course completions.

Table 1: Demographic breakdown of enrolments

	Whole programme		Withdrawals & transfers		Engagers		Completers	
Ethnicity	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
European	333	68	90	27	229	69	135	41
NZ Māori	110	22	29	26	57	52	26	24
Samoaan	11	2	1	9	1	9	0	0
Cook Island Māori	2	0	0	0	1	50	1	50
Niuean	9	2	3	33	6	67	3	33
Fijian	1	0	1	100	1	100	0	0
Chinese	2	0	1	50	1	50	0	0
Indian	4	1	0	0	0	0	0	0
Other Asian	11	2	2	18	5	46	3	27
Other	7	1	2	29	6	86	4	57
N	490		129		307		172	
Age								
Under 20	12	2	2	17	11	92	9	75
20 to 24	72	15	8	11	30	42	21	29
25 to 29	73	15	23	32	48	66	24	33
30 to 39	159	32	48	30	104	65	53	33
40 and over	174	36	48	28	114	66	65	37
Gender								
Female	423	86	110	26	268	63	153	36
Male	67	14	19	28	39	58	19	28

	Whole programme		Withdrawals & transfers		Engagers		Completers	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Occupation								
Secondary school student	7	1	2	29	5	71	3	43
Unemployed or other beneficiary	147	30	20	14	79	54	56	38
Wage or salary worker	174	36	67	39	123	71	54	31
Self-employed	20	4	6	30	12	60	6	30
University student	2	0	0	0	0	0	0	0
Polytechnic student	54	11	15	28	30	56	15	28
Houseperson or retired	72	15	15	21	51	71	35	49
Private training establishment	7	1	0	0	0	0	0	0
Other	7	1	4	57	7	100	3	43
Secondary schooling								
No sec qual/less than 12 cr L1	128	26	35	27	58	45	20	16
SC (one+subjects)/ 12+ cr L1	118	24	35	30	79	67	43	36
6FC/12+ cr L2 up	105	21	23	22	63	60	38	36
UE/National Cert L2	45	9	8	18	33	73	25	56
Higher SC/12–39 cr L3 up	31	6	8	26	25	81	17	55
UE/40+ cr L3 up	5	1	2	40	3	60	1	20
A/B Bursary/National Cert L3	24	5	5	21	23	96	18	75
Overseas qualification	27	6	9	33	19	70	10	37
Other	4	1	2	50	2	50	0	0
Not known	3	1	2	67	2	67	0	0

Table 1 shows the ethnic composition of the students, with Europeans at about two thirds of enrolments, Māori at about one quarter, and Samoan and Asian at about two per cent.

About two thirds of the students were aged 30 and over and a very high proportion were female.

Well over one third were earning a regular income while just less than a third were on a state benefit.

One quarter of students had no secondary school qualifications while another quarter had some basic School Certificate qualifications. A slightly smaller proportion held the Sixth Form Certificate qualification.

Table 2: Completion rates by course

Course	Completion rates of 2002 courses		Completion rates of open enrolment courses
	Semester 1 %	Semester 2 %	%
5130	66	44	20
5131	91	53	32
5132	44	36	23
73 196	44	49	16
73 197	71	32	18
73 198	63	44	17
			N = 3987

Table 2 shows completion rates by course occurrence. In all but 73 196 *Social and Individual Psychology*, second semester completion rates were lower than first semester completion rates.

Table 3: Completion rates of transferred students

Transferred enrolments	
Course	Completion rate %
5130/022	1
5131/022	0
5132/022	17
73 196/022	0
73 197/022	33
73 198/022	60
Semester 2	21

Table 3 shows completion rates of transferred students. With the exception of 73 198 *Human Development*, rates were low.

Table 4: Completion rates of single and multiple enrollers

Course	Single enrolment within year	Multiple enrolments with only one paper per semester % completion rates	Multiple enrolments within a semester
5130/021	60	82	64
5130/022	51	50	36
5131/021	100	100	86
5131/022	67	80	40
5132/021		100	38
5132/022	36	67	33
73 196/021	50	50	42
73 196/022	38	100	46
73 197/021		100	60
73 197/022	33	50	31
73 198/021	75	100	0
73 198/022	63	100	36
Semester 1	69	85	53
Semester 2	51	77	37

Table 4 shows completion rates for students who enrolled in just one course all year, in two courses simultaneously and in one course in each of the first and second semesters. Rates for students taking more than one course at a time were low while the rates for those taking one course in each semester were generally high.

Discussion

In total, 490 records of students who enrolled in the Diploma of Health and Human Behaviour during 2002 were extracted from the SEARS database. Table 1 shows the demographics of these students. Three subgroups of students who, in one way or another, actively engaged are separated from the whole class rolls for analysis. In this context, a withdrawal or transfer has been taken as a form of active engagement with their course.

Ethnicity

Most of the enrolments were European (68 per cent) while 22 per cent were Māori: these represented 443 of the 490 enrolments. Two per cent were Samoan and two per cent were Asian, while other ethnic groups enrolled at less than two per cent each.

About the same proportion of Europeans and Māori transferred or withdrew but few Māori engaged and even fewer completed their courses. Overall, about two thirds of the students engaged with their courses and about one third completed.

Age

With the exception of the under-20 age group, the slight trend is for completion rates to improve with the age of the student. For the under-20s an entry restriction applies: a student needs to have a total of 20 or fewer points from the top four subjects of their Sixth Form Certificate before they can enrol for the Diploma. This restricts entry to students who have demonstrated a good level of study skills and are well prepared to undertake tertiary study. Setting this minimum standard has a positive effect on completion rates, increasing the rate to a satisfactory 75 per cent.

Gender

There is a considerable gender difference in completion rates with about one third of females completing but only about one quarter of males completing. This indicates that males would be a target group for any intervention aimed at improving completion rates.

Employment status

Two groups have better completion rates: secondary school students at 43 per cent and people who are at home who do not need to work for an income, of whom almost half complete. Secondary school students have to demonstrate academic competency before enrolling in any of the Diploma's courses and would be expected to do better than other students. People with discretionary time, such as retired people, can focus more on their courses and would also be expected to complete their courses.

There is no consistent pattern of completion rates for those in other forms of employment or those on welfare benefits.

Course completions

Table 2 shows the completion rates per course.

The increase in completion rates from the open enrolment courses to the semester-based courses is very marked: typically, rates for the semester courses are about three times the rates for the open enrolment courses. This shows the effectiveness of providing a time-linked framework and focus for study in improving completions.

Second-semester courses overall had much lower completion rates than first-semester courses. Almost two thirds completed in semester 1 while less than half completed in semester 2. *5131 Loss, Grief and Dying* had higher rates in both semesters than other courses, with *5132 Stress Management* having the lowest rate in semester 1 and *73 197 Counselling Theory* having the lowest rate in semester 2.

Students seem to be struggling with *5132 Stress Management* and *73 197 Counselling Theory*, although the first semester *73 197 Counselling Theory* course had an anomalously high completion rate of over 70 per cent. However, it is not clear why this rate is so high.

Factors influencing completion rates

It was thought that students who transferred from semester 1 to semester 2 would be more motivated and more able to complete than other students who did not engage. As shown in Table 3, with the exception of *73 198 Human Development*, which had a completion rate of 60 per cent, this proved not to be

the case as there are very low completion rates for transferring students. The possible explanation for these low rates is that students who struggled with the level of the course material transferred to give themselves more time to study, but still found the material difficult to deal with and therefore failed to engage or complete. Transferring students are an obvious group for targeted academic intervention as it is possible they are not facing up to academic difficulties.

Managing workload may be a problem for students in the programme. It was expected that those students who were studying two courses simultaneously would do less well than those who were taking only one course at a time. Table 4 shows the completion rates for students taking one course per year, two courses per year in a semester and two courses per year with one per semester.

Students taking two courses in the year with one per semester show excellent completion rates with eight of the 12 courses having rates over 70 per cent.

In contrast, courses enrolled in by students studying two courses in a semester have poor completion rates, one course having no completions at all. An exception to this is *5131 Loss, Grief and Dying*, which had a completion rate of over 80 per cent. It is speculated that the personal nature of the course content may be capturing student interest and contributing to the high completion rate.

Students who enrol in one course in each semester may be the ones who are fully intending to successfully finish their diploma and are prepared to pace their study to achieve this end.

Secondary school qualifications have a marked effect on engagement and completion rates. Less than half of the students with no secondary school qualifications engage while almost all of those with an A or a B Bursary engage. A satisfactory completion rate is found only for students who hold an A or a B Bursary or equivalent. This suggests that those with minimal secondary schooling find the level of study too difficult. A preliminary certificate that gives unqualified students basic academic skills should prove to be effective in improving completion rates.

Māori and Pacific Islanders complete at significantly lower rates than their European counterparts. Ironically, anecdotal evidence from telephone interviews conducted by the Academic Guidance Centre shows that Māori are happier with their courses than European students. Ethnic anonymity is the reported reason for this high level of satisfaction. Māori students often feel intimidated in classrooms that are dominated by European students and are less satisfied with their courses as a result. Neither the lecturers nor other students in Open Polytechnic courses know the ethnicity of students.

Consequently, the level of discomfort experienced by Māori in contact classes is absent. However, while satisfaction with Open Polytechnic courses is not a predictor of course completion, or even of course engagement, it does provide a means of leverage for interventions aimed at improving the completion rates of Māori students. It indicates that motivation to engage is not the problem; rather the problem may lie in teaching support or methods of assessment. Further research in the area of supporting Māori students should prove fruitful.

Student impressions of their courses

Telephone interviews conducted by the Academic Guidance Centre have been undertaken for some of the programme's courses. Reports prepared by the Centre provide some insight into the ways students approach their courses.

The volume of course materials for *5130 Interpersonal Relating* is seen as being too much for the level of the course. This problem could be easily addressed by having an attractive textbook and far less learning material generated by the Polytechnic. A couple of suitable texts have been identified and the use of a text is expected to lead to a higher engagement level.

Many students taking *5131 Loss, Grief and Dying* discovered that the course materials touched on their own life experiences. As a result, they either gave up as their own issues were unable to be dealt with or were motivated to complete the course as a way of dealing with their own grief issues. The higher rates of engagement and completions in *5131* are speculated to be due to the intrinsic motivation generated from the course content.

5132 Stress Management is described as being the hardest course, largely because of its unavoidable physiological component. The textbook is also felt to be too difficult for the level of the course. The most recent edition of the text also leaves out key sections that were present in earlier editions, making it less relevant to the course.

Many young mothers enrol in *73 198 Human Development* and find the material interesting and helpful. This translates into a good level of engagement but not necessarily into a good completion rate, as the academic requirements of the programme also need to be satisfied.

Recommendations

The status quo could be maintained. This would ensure a healthy level of enrolments but an overall poor completion rate. If target completion rates are imposed, then interventions are required.

Applying minimum academic standards before allowing an enrolment has been demonstrated to be effective with the under-20 age group and this restriction could be expected to lead to acceptable completion rates with other age groups as well. If a restriction similar to this was introduced for all students, a lower level preparatory qualification may be needed. This would include study skills as well as an orientation to the discipline of psychology and would probably sit at Level 3 or 4 on the NZQA Framework.

One possible course of action that should lead to an immediate improvement of completion rates to the required target would be to advise students to limit their enrolments to one course per semester. This would create a problem for student loan- or WINZ-funded students as they would not be enrolled in a sufficient number of courses to qualify for their funding.

Students at risk can now be easily identified. Students who transfer may be signalling that they are willing to engage but unable to cope with the academic level of the course materials. Targeted lecturer or peer support for these groups could be arranged.

For the 513X courses, attractive textbooks and far less Polytechnic-generated learning material could make the courses less daunting to new students unused to studying at a tertiary level, making it easier for them to engage.

An introductory Level 3 or Level 4 certificate could be a way to give students who have not been previously exposed to tertiary study the skills necessary to enter any psychology programmes.

Plan of action

The following actions aimed at improving completions are planned:

- redesign of the 513X courses to reduce the amount of learning material and introduce student-friendly textbooks
- targeting of telephone support to at-risk students

- limiting of enrolments to one course per semester for at-risk students
- initiation of a process to create a Level 3 or Level 4 introductory certificate that will be a prerequisite for entry into other psychology programmes.