# School of Linguistics and Applied Language Studies

The Victoria Model: The First Four Years

A Cost/Benefit Analysis of the

Skilled Migrant Programme:

2005 - 2008

John Prebble

Language in the Workplace
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### The Victoria Model: The First Four Years A Cost/Benefit Analysis of the Skilled Migrant Programme: 2005 - 2008

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## Language in the Workplace Occasional Papers

This series of occasional papers is aimed at providing a wide range of information about the way language is used in the New Zealand workplace. The first paper outlines the aims and scope of the core project, the Wellington Language in the Workplace Project, and describes the approach adopted by the project team in collecting and analysing workplace data. The second describes the methodology adopted to collect workplace interaction, and its developments and adaptations to the very different demands of disparate workplaces. Subsequent papers provide more detailed analyses of particular aspects of workplace interaction as well as descriptions of methodologies for researching workplace communication.

#### These include

- an analysis of varied ways people get things done at work, or the forms which directives take in different New Zealand workplaces
- an exploration of the functions of humour in workplace interaction
- an analysis of the structure of formal meetings in relation to the way decisions are reached
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- an analysis of problem-solving discourse

The series is available in full text at this website: <a href="http://www.vuw.ac.nz/lals/lwp">http://www.vuw.ac.nz/lals/lwp</a>

The Research team includes Professor Janet Holmes (Director), Maria Stubbe (Research Fellow), Dr Bernadette Vine (Corpus Manager), Meredith Marra (Research Officer), and a number of Research Associates. We would like to express our appreciation to all those who allowed their workplace interactions to be recorded and the Research Assistants who transcribed the data. The research was supported by a grant from the New Zealand Foundation for Research Science and Technology.

#### Summary of cost/benefit analysis

Aggregate benefits to participants over 30-year careers discounted to present value: \$38,808,792.00.

Minus: gross costs to government (\$395,845) and opportunity costs to participants (\$294,185): \$690,030.

Difference (net benefit) \$37,722,917.00.

Net benefit for each year of teaching: \$9,430,729.30.

Return on each dollar of taxpayer expenditure: \$98.

#### **Preamble**

This paper attempts a cost/benefit analysis of the Victoria University of Wellington course, "Workplace Communication for Skilled Migrants", more formally described as "English for Professional Purposes—ELIN 941", and popularly known as "The Skilled Migrant Programme".

The Programme is a course at Victoria University of Wellington run as a partnership between the university, the Rotary Club of Wellington, and the Johnson Group Ltd. The course is described in detail in John Prebble, *Workplace Communication for Skilled Migrants* (2008), to which readers are referred. Its participants are foreign graduates of some years of professional experience who are immigrants to New Zealand who have not been able to find skilled work. The course has developed the "Victoria Model", five weeks of classroom work followed by a six-week supported internship, concluding with a final week in the classroom.

Course participants come from a variety of countries, including Bangladesh, Brazil, Cambodia, China, India, Indonesia, Japan, Malaysia, Nepal, the Philippines, Poland, Russia, Serbia, Singapore, South Korea, Sri Lanka, and the Ukraine.

Most professions are represented, with an emphasis on professions with a financial or IT focus. They include accountancy (general, financial, management), banking (central, commercial, and investment), civil servant (management), data analyst, economist (general and economic research), engineer (civil, specialist in health and safety), electrical, electronic, structural), finance (credit controller, financial and business analyst, investment analyst, stockbroker-investment analyst), food technologist and factory inspector, graphic designer, human resources specialist, IT specialists (hardware, programming, systems analysis, software development, web design), judge (general jurisdiction, maritime jurisdiction)

 $<sup>^{\</sup>rm 1}$  Occasional Paper No 6, Victoria University Language in the Workplace Project, 1 - 45.

lawyer, linguist (professor of English, teacher of English), marketing (event management, general marketing, marketing editor), medical doctor, public relations, project manager and logistics specialist, scientist (laboratory analyst, chemist-specialist in dyes), statistician.

#### Introduction

Educational institutions rarely conduct cost/benefit analyses of their programmes from the perspective of the government or of graduates because the value of education is so well documented that cost/benefit analyses often seem superfluous. For example, calculations ordinarily show that graduates' earning potential is so far ahead of non-graduates that specific analyses seem to be supererogatory.

On the face of it, the consideration just identified is likely to be particularly true of the Skilled Migrant Programme. The reason is that the programme enrols participants who have a minimum of 16 years' primary, secondary, and tertiary education. Many have one to three years of postgraduate or professional education in addition, and the majority have at least two years' professional experience, most have a great deal longer.

The Skilled Migrant Programme captures these many years of education and experience in only 6 weeks in the classroom and 6 weeks supported internship. That is, for a very small contribution of 12 weeks of costs the programme releases the benefit of many years of prior education and experience. One would expect, therefore, that the relatively modest outlay would be rewarded by very high benefits. That is indeed so, as the calculations in this paper show, even though the calculation intentionally over-accounts for costs and under-values benefits, in order to pre-empt the possibility of error and to avoid claiming too much.

#### Analytical framework: GDP calculation

This cost/benefit analysis attempts to estimate the benefits of the Victoria University Skilled Migrant Programme as a contribution to New Zealand gross domestic product. That is, it calculates benefits to the country as a whole rather than disaggregating them into benefits to individuals and benefits to the state via taxation.

The global GDP approach has two advantages over disaggregation. First, it avoids difficulties of separating a single benefit (an increase in salary) by referring to tax rates that differ between individuals according to personal circumstances. Secondly, aggregation is more accurate, in that all increases in productivity that come about because of the programme redound to increase New Zealand's GDP. That is, an increase in the salary of a graduate of the programme is a benefit to the economy, whether the benefit is taken by the salary-earner

(and family and society through the earner's expenditure) or by the government through taxes.

Some participants are drawing unemployment benefits when they join the course. However, the present cost/benefit analysis ignores unemployment benefits on the basis that the benefit to a beneficiary is balanced by a cost to the state of an equivalent sum. That is, an unemployment benefit is a redistribution or churn, which, apart from transaction costs, neither adds to nor detracts from GDP. When a graduate of the programme gains a salary and relinquishes an unemployment benefit, the salary constitutes a gain but the change to the unemployment benefit is neutral, being a loss for the beneficiary and a corresponding gain for the state.

If the cost/benefit analysis were to focus solely on costs and benefits to the state, then, when a graduate of the course finds a position and ceases to draw unemployment benefit, the calculation should include the state's saving in unemployment payments as a benefit to the state. From this perspective, the present analysis understates the benefits of the programme.

Even from a GDP perspective, ignoring savings in unemployment expenditure understates the benefits of the programme to some extent, in that when an unemployment benefit is terminated the state saves transaction costs and the beneficiary saves compliance costs.

#### Measurement in money

This present analysis measures costs and benefits in money, and takes account of contract payments only. For instance, if the programme enables one of the programme's graduates to obtain work that pays \$30,000 more per annum than the graduate was able to earn before, there is a benefit of \$30,000. But, presumably, the employer would not have paid an extra \$30,000 in order to achieve only \$30,000 of benefit; the employer would expect that the employee's work would be worth more than \$30,000 to the employer. The cost/benefit analysis does not try to capture this extra value. To this extent it under-states benefits.

Further, benefits to individuals are hard to quantify. The calculation in this analysis allows no value for psychological, social, and family benefits gained from skilled migrants working in professional, commercial, and government environments and may thereby understate the benefits of the programme.

Costs, on the other hand, are mostly readily identified, being cash contributions by the Tertiary Education Commission and by the Ministry of Social Welfare and opportunity costs in wages foregone by participants in the course.

#### No double counting

The analysis takes account only of inputs by government contribution and by participant opportunity cost and only of outcomes by way of increased earnings. It ignores intermediate transactions. For instance, it ignores payments of government contributions to Victoria University and disbursements of this money by Victoria University by way of teachers' salaries and so on. To take account of these payments would be to count government contributions twice, once when handed over to Victoria University and again when paid to teachers. Looking at the same factor from another perspective, Victoria University receives funds (benefit) and pays out the same funds (costs) in transactions that balance.

#### Independent benefits to education and to society

One criticism of the method of measurement just described is that it ignores benefits to Victoria University and to society in general that are independent of direct benefits to graduates of the Skilled Migrant Programme. These benefits include an increase in Victoria University's teaching experience and skills; a significant boost to Victoria University's Language in the Workplace Research Programme; and the development of the Victoria Model.

The Victoria Model is the teaching and partnership pedagogic/internship model for imparting professional workplace skills to skilled migrants that Victoria University's programme employs. The Victoria Model is designed to be replicable and is carefully documented for that purpose. In that the present cost/benefit analysis does not account for the benefits described in this paragraph it understates the benefits of the programme.

#### **Income facts and assumptions: summary**

Average New Zealand full time wage \$40,000.

Minimum wage per hour \$13.

Minimum wage per week, x 40 = \$520.

Minimum wage per year, x 52 = \$27,040.

Assume, as explained below, average annual earnings of skilled migrants entering the programme of \$15,000.

Assume, as explained below, average annual earnings of skilled migrants employed after graduating from the programme of \$45,000.

Therefore, average annual increase in earnings from participation in the Skilled Migrant programme.

Average age of graduates: 35; therefore expected career: 30 years.

#### Characteristics and income of participants

For privacy reasons, Victoria University does not question participants about their income before or after the course. Instead, in this paper, pre- and post-course income figures are estimated from knowledge of pre-course occupations of migrants (or lack of pre-course occupations) and knowledge of post-course appointments. Migrants who join the course are usually unemployed or live on very low incomes. Many have been unemployed or underemployed for two years or more. A typical participant is the unemployed partner of a couple, being a person who has had no favourable responses or interviews in response to many job applications and who is not welcome as a client of recruitment agencies. Younger, single participants often work at minimum wage shift-work jobs in supermarkets or fast food enterprises. That is, annual earnings range from zero to about \$27,000, with an estimated average of \$15,000. This sum is very much an average. Before joining the course, most participants' annual earnings are near the outer boundaries of the range mentioned, that is, either at or near zero or near the statutory minimum wage.

Post-course appointments are typically at entry level or one step up in occupations where the migrant can exercise his or her professional skills. Conservatively, this analysis assumes an average annual income of \$45,000 for graduates in skilled employment, that is, an increase of \$30,000 per annum over pre-course annual earnings.

#### **Employment classification**

For purposes of present calculations graduates are classed as "employed" if they find skilled professional, administrative, or commercial work after graduating from the course. Some graduates classed as "not seeking work", and therefore left out of account on the benefit side will no doubt enter the professional workforce in due course. Examples include graduates who have returned to university for further qualifications and graduates who are not seeking work at the moment because of maternity. In omitting an allowance for such returners to the workforce the analysis understates the benefits of the programme.

#### Calculation of gross benefit

Assumed average wage of graduates: \$45,000.

(This figure is an under-estimate because (a) some graduates of the course start considerably higher and (b) some salaries will increase over the course of a career by annual or other

increments, and (c) some salaries will increase through promotion to higher ranks or positions.

Deduct from \$45,000 the assumed earnings at the point of going into the course: \$15,000.

The benefit per graduate per year of his or her career is the difference, namely \$30,000.

Thirty years at \$30,000 (that is, the equivalent of a 30-year annuity of \$30,000) discounted at  $3\% = \$30,000 \times 19.6004 = \$588,021.00$ .

(Undiscounted calculation for comparison: multiply \$30,000 by 30 for years of career, which yields an undiscounted career benefit per employed graduate of \$900,000.)

#### Cost incurred by government

Duration of study: 2005 – 2008, 2 intakes per year, total graduates: 85.

Cost per graduate from Tertiary Education Commission (teaching costs): \$1800.

Cost per graduate from Ministry of Social Development (supervised internship costs): \$2857.

Total government cost per graduate: \$4657.

Aggregate cost,  $85 \times 4657 = $395,845$ .

#### Opportunity costs incurred by participants

Average annual pre-course earnings: \$15,000.

Multiply \$15,000 by 12 and divide by 52 to discover average earnings foregone by attending the 12-week programme.

The result is \$3461.00 per participant.

Multiply \$3461.00 by 85 participants = \$294,185

That is, to calculate costs, include the input costs for all participants whether they seek or find work as graduates of the course or not.

#### Victoria University's knowledge of graduate destinations

Total number of graduates: 85

Known destinations: 77

Unknown destinations: 8. Of these 8, assume that 4 are employed and that 4 are seeking work

or otherwise not employed.

#### Analysis of unemployed graduates

Seeking work: 6.

Not seeking work: 9 (maternity, returned to home country, deceased, emigrated to a third

country, further study).

Unknown, assumed not seeking work: 4.

For purposes of this present calculation, conservatively assume that no benefit will be derived

in the future from the 19 graduates who are not currently employed, (though some graduates

currently not seeking work may later enter the professional workforce).

Analysis of employed graduates

Employed: 58

Self-employed: 4

Of the 8 graduates whose destinations are unknown, assume that 4 are employed.

Therefore total employed: 66.

For purposes of this calculation, assume a benefit from all 66 graduates who are employed in

skilled occupations.

Cross-check: no benefit from 19, but benefit from 66, 19 + 66 = 85 graduates in total.

(Calculation of course success rate)

The success rate of the course involves a different calculation from a cost/benefit analysis. A

course success rate calculation excludes from consideration graduates whose personal

circumstances change and who for one reason or another do not seek employment. In

calculating the success rate of the programme Victoria University does not treat course

graduates who are not seeking employment as either unemployed or employed. Instead, it

removes these graduates from the calculation. This success rate calculation is not part of the

cost/benefit analysis. It is interpolated here for purposes of comparison. The calculation is:

Total graduates, 85, less those not seeking work because of maternity, returned to home

country, decease, emigration to a third country, or further study, minus 9 = net number of

graduates for calculation purposes: 76.

Number employed (above) 66.

The success rate is therefore  $66 \div 76 \times 100 = 86.8\%$ .

For purposes of the present calculation, however, the cost/benefit analysis re-injects the 9

graduates whose personal circumstances changed and who therefore have not sought work;

that is, the government-borne costs and opportunity costs of their attendance at the course are

included as part of the total cost/benefit analysis.

Costs incurred by the Rotary Club of Wellington

Members of the Rotary Club of Wellington contribute to the course by voluntary work as

interview and conversation tutors, visiting lecturers, post-graduation mentors, advisers to

people seeking internships and employment, as employers of interns, and by administering

the Rotary element of the partnership. Quantifying the cost of these contributions is difficult.

For example, what is the appropriate sum for mentorship over several months by a former

chief executive officer of a major company now working as a professional company director?

Or a one-to-one tutorial in interview skills by a senior executive or employment consultant?

Another consideration is that if Rotary members were to substitute other voluntary work

for their skilled migrant work this other work would be unlikely to call on their professional

skills. That is, the opportunity costs of the Rotary contribution could possibly be valued

rather low, at the hourly wage of, say, a paid charity street collector.

A further possibility is to value the Rotary contribution at approximately the fees for

Victoria University of Wellington casual lecturers and tutors. On this basis, a rough

calculation returns a result of about \$25,000 per year, that is a total of \$100,000 over the four

years of the study.

The cost benefit calculation below does not account for any cost for the Rotary

contribution, in that it is a gift, but if a cost should be attributed it is between \$100,000 and,

say, three times that sum.

Cost/Benefit calculation

Costs

Incurred by government for 85 graduates: \$395,845.

Opportunity costs incurred by 85 graduates: \$294,185.

Total costs \$690,030.

Gross benefits

Thirty-year career benefit per employed graduate \$588,021.00.

Multiply by number of employed graduates, x 66, = \$38,808,792.00.

Net benefits

\$38,808,792.00 minus \$690,030 = \$37,722,917.00.

Net benefit for each year of teaching from 2005 to 2008: divide by 4: \$9,430,729.30.

#### Return to taxpayer

The analytical framework for a return to taxpayer calculation varies from the wholly GDP framework of the rest of this paper. A return to taxpayer calculation compares total government expenditure with total GDP benefits. That is, the expenditure total in a return to taxpayer calculation does not include participants' opportunity costs because these costs are not part of government expenditure. A return to taxpayer calculation for the Victoria Model Skilled Migrant programme yields these results:

Aggregate gross benefits (\$38,808,792.00) divided by total government-incurred costs (\$395,845) = \$98.04. That is, for every dollar that the government contributed to the Skilled Migrant Programme from 2005 to 2008 the return to taxpayers, adjusted to net present value, was \$98.04.

#### **Estimates and possible inaccuracies**

Readers of this paper should bear in mind that data for some facts are not available; so some figures are based on estimates rather than on precise calculation. Bearing this consideration in mind, the paper should be treated as giving an indication of orders of magnitude rather than of exact costs and benefits. Since the paper calculates benefits as far in excess of costs, distortions in calculation of benefits are more significant than distortions in costs. Nevertheless, throughout the paper the writer has tried both to under-estimate benefits and to over-estimate costs. Particular estimates that should be viewed with caution include:

Costs: the opportunity costs for participants are probably *lower* than calculated because a large, but unknown, fraction of participants have no income from earnings before enrolling. Further, those that are in employment are often shift workers who maintain much of their earning capacity during the course. Government-incurred costs are accurate, and not estimates. Costs would be higher, but not so as to make a difference to the overall picture, if there were a financial allowance for the contribution of the Rotary Club of Wellington.

*Benefits:* Throughout, the paper mentions incidental or miscellaneous benefits as they are relevant to the discussion. More importantly, since many participants are not in employment or on unemployment benefit before starting the course the average pre-course earnings of \$15,000 per annum attributed to each participant is probably too high. For non-earners, *all* of their income as graduates of the programme is a benefit, estimated in this paper at \$45,000 per annum, and not merely the estimated increase of \$30,000 per annum. Further, although a starting salary of about \$45,000 per annum is a reasonable estimate, the cost/benefit analysis

assumes that no migrant employees ever receive promotion. This assumption greatly reduces the benefit calculation, which is intentional, to avoid over-estimates.

A related factor is that graduates of the course often progress faster in their workplaces than other new entrants. The reason is that as they become at home in the New Zealand workplace they discover how to deploy the skills and experience that they bring with them more effectively. A number of graduates have already had several promotions, but for purposes of this calculation everyone is treated as earning \$45,000 and thus receiving the same \$30,000 annual premium for skills throughout their career, with no increase.

The factors explained above minimize benefits as calculated. Two assumptions in the paper could be argued to work the other way. The first assumption is that all employed migrants will remain working in New Zealand for 30-year careers. It is possible that some will die or move to Australia. On the other hand, not taken into account, but balancing this assumption, is that some of the 19 graduates who have not yet found skilled work will do so.

The second assumption is the discount rate of 3% that the analysis chooses to calculate the present value of the increase in earnings of \$30,000 per graduate per year. Choosing a higher discount rate would reduce the aggregate present value of graduates' benefits. On the other hand, making no allowance for salary increases during migrants' careers dilutes this effect. Further, the great difference between benefits on one hand and costs on the other means that in the context of the present analysis benefits are so overwhelmingly greater than costs that if 3% is too low a discount rate the distortion has little effect on the total picture.

#### Alternative discount factor

The point made in the last paragraph may be illustrated by taking a discount rate of 12%, far higher than one would contemplate for a cost/benefit analysis like the present exercise. Even at a discount to present value of 12%, the Skilled Migrant Programme yields a return of \$15,259,226.00 over four years, calculated as follows:

Take the estimated annual increase in earnings: \$30,000. Multiply by the 12% discount factor for 30 years, namely 8.05518 = \$241,655.40 per employed graduate.

Multiply by 66 earners, = gross benefits of \$15,949,256.00

Subtract aggregate costs, -\$690,030, to yield a net benefit over four years of \$15,259,226.00.

## Summary of benefits not taken into account and of assumptions that reduce the benefits calculated in this cost/benefit analysis

Salary increases by virtue of annual or other periodical increments.

Salary increases by virtue of promotion.

Graduates' starting salaries of more than \$45,000 (excess omitted).

Pre-course earnings of under \$15,000. (More entrants to the course than this paper assumes

are thought to derive zero or very low pre-course earnings.)

Benefit to employers of employees' work in excess of salary.

Psychological and social benefits to migrants, their families, and society.

Time-delimited break-even calculation

The calculation to follow responds to the question, "What return must there be in order for

those who contribute to costs to break even?"

Total cost incurred by government: \$395,845.

Number of employed graduates: 66.

Therefore additional salary that each employed graduate must earn to reach break-even is

 $$395,845 \div 66 = $5997.66$ , say \$6,000.

At a salary increased by \$30,000 per annum, it takes each graduate less than three months

to earn \$6000. That is, the payback period from taking up employment is under 3 months.

If one takes account of the opportunity costs for graduates as well as direct government

costs the total cost calculated above is \$690,030. Dividing by 66 yields \$10,455 as the

additional earnings that each of the 66 employed graduates must earn in order for this total to

be paid back. At increased earnings of \$30,000 per annum the graduates amortize this cost

just over 4 months after starting work.

**Employment-related break-even calculation** 

The calculations in the immediately previous paragraphs ask, "How long to payback?" An

alternative, and illuminating, question is, "How many graduates must find skilled

employment in order to cover (a) government costs and (b) government costs plus skilled

migrant opportunity costs? The relevant figures are:

Government costs alone: \$395,845

Government plus migrant costs: \$\$690,030

Career benefit per graduate migrant: \$588,012.

That is, if only one graduate over the four years of this study had found skilled

employment, the increased value of his or her work would repay the total government cost for

all participants (including those who never find work) by a factor of nearly 1.5 (precisely,

1.485). If only two graduates had found work, the increased value of their work would repay

both government expenditure and all opportunity costs of all participants over 4 years by a factor of nearly 2 (precisely, 1.93).

In contrast to the hypothesis in the previous paragraph of one or two graduates finding employment, this analysis uses the figure of 66 for those who have found skilled employment, namely 62 certainly in employment and 4 assumed to be in employment from the remaining 19 graduates, who were either not seeking employment when details were taken or whose whereabouts are unknown.

#### High net benefits

It is part of human nature to challenge any cost/benefit analysis whenever it appears. Three questions spring to mind about the present analysis: (a) Why do net benefits seem impossibly high? (b) Is there a better use of the government expenditure involved? (c) Would the migrants be better off doing something else?

As to (a), net benefits are certainly very high at \$37,722,917.00, or \$9,430,729.30 for each year of mounting the course, nearly \$10 million per annum. The ratio of total cost to aggregate gross benefit is \$690,030 to \$38,808,792.00, that is, 1:56. No business offers a return of 1:56 except unpunished bank robbery; is there a mistake? No, there is no mistake. The explanation is included in the introduction to this paper: the true cost of bringing participants in the programme to a point where they can participate in the professional workforce includes the cost of their 25 years or more of education, training, and experience before arriving in the country. But New Zealand does not have to bear that cost. This is an illustration of why people say that skilled immigrants are a net benefit to a country.

Migrants join the programme because they are blocked from deploying the skills that they gained in their many years of education, training, and experience. They are blocked by cultural and linguistic disabilities that prevent them from functioning in the New Zealand professional workplace as surely as if they suffered from a disabling condition. Skilled teaching and an imaginatively supervised internship over 12 weeks remove the block for most skilled migrants. The programme releases the benefits not only of those 12 weeks but also of the previous 25 years of education, training, and experience, which the programme makes available to the migrants and to their employers. But the cost borne by the New Zealand economy is for only the 12 weeks of New Zealand training. That is the first reason why the cost: benefit ratio is 1:56. This paper returns to question (a) with a second reason after addressing questions (b) and (c).

#### Alternative uses of resources

As to question (b), when examining government expenditure it is always as well to ask: could the funds have been better spent on another programme? Taking government expenditure alone, the total cost to gross benefit ratio is \$395,845: \$38,808,792.00, that is, 1:98. Few government programmes have returns that yield nearly \$100 for every taxpayer dollar spent. Even at a valuation using the hypothetical discount rate of 12%, discussed earlier, the ratio of government expenditure to gross benefit is \$395,845: \$15,949,256.00 that is, 1:38. The answer, then, is no, the funds would not have been better spent on another programme.

As to question (c), would participants have been better off spending their 12 weeks doing something else? The sad fact is that again the answer is clearly no. Indeed, many participants had no other practical choice. Course graduates commonly say words to the effect of: "We had given up hope and were intending to return to our home country. The VUW Skilled Migrant Course was our last opportunity."

Posing the question from another angle, should participants have been left to their own devices in the expectation that professionally qualified people with their experience would eventually break into the New Zealand workforce? Again the answer is no. Many participants had tried for more than two years to gain skilled employment.

More poignantly, 6 graduates who are seeking work still have not found jobs. Considering that all the graduates studied in this cost/benefit analysis completed the course before the present recession bit, one interpretation of this fact is that for some of these 6 the course did not succeed in removing the cultural block that was disabling them. Their experience points to the conclusion that most of those who have found employment as a result of the course (migrants who are not very different from their 6 still unemployed colleagues) would not have lifted themselves over their cultural blocks without attending the course. So, no, participants in the course would not have been better doing something else or better left to their own devices.

#### Conclusion: career-long multiplier

Let us return to address question (a) from an arithmetical perspective. Arithmetically, a major reason for the very high net benefit that the analysis in this document reveals is the careerlong multiplier of 30. Is it appropriate to employ a multiplier that extends over the whole of a migrant's career after graduation from the programme, or should this paper allow for a

dissipation of the effect of the programme after some years? The answer is that a whole-career multiplier is appropriate for several reasons.

First, as explained, for participants on this course the cultural block that excluded them from the professional workplace was to all intents and purposes permanent. Their limited interactions in New Zealand society had not enabled them to overcome the block. Taking low-paying positions in non-professional environments is of limited help. If one comes from another society it is very difficult to work out what sort of behaviour is accepted or tolerated in one kind of workplace but is not acceptable in another. It is therefore appropriate to credit continuing, career-long benefits to the Skilled Migrant Programme's removal of the cultural blocks that course participants laboured under.

Secondly, a few skilled migrants give up after trying to break into the professional workforce for years and return home or emigrate to a third country. As mentioned, a few graduates had seen themselves as potentially in this category before they started the course. Had they left the country, New Zealand would have lost not merely the increase in earnings that they now command, but all their earnings and productivity. The programme must be credited with career-long benefits in respect of these graduates.

Thirdly, the phenomenon of the skilled migrant to a Western country whose whole career is locked into unskilled work is familiar enough. Who has not met an immigrant professional engineer or his counterpart who has been driving taxis for ten years or more? Once migrants have been in New Zealand for some years, the cultural block that excludes them from the professional workforce seems if anything to strengthen. Further, having made shift to earn a living as best they can they have made commitments that mean that the opportunity costs and risks of trying to find a professional position become unacceptably high. Participants in the Skilled Migrant Programme had such a future to look forward to if they did not return to their home countries. For them, it is entirely appropriate to credit the programme with career-long benefits.