

Training as the Principal Focus of Adjustment Policy: A Critical View from Northern Ontario

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Cette étude de cas régional porte sur les effets de la formation sur l'ajustement de marché du travail suite à des licenciements de grande ampleur dans la communauté minière d'Elliot Lake dans le nord de l'Ontario. À l'aide de données d'enquête longitudinales, nous montrons que les programmes de formation ont eu, pris dans l'ensemble, des bénéfices limités pour les travailleurs qui ont perdu leur emploi, même si les programmes de plus longue durée au niveau collégial semblent être plus efficaces. Ceci n'implique pas toutefois qu'il faille réduire les dépenses de formation car elles peuvent avoir des bénéfices sociaux et psychologiques importants pour les travailleurs qui ont perdu leur emploi ainsi que leurs familles. Cet article est une critique de l'approche contemporaine qui fait de la formation le principal outil d'ajustement, du moins de la façon dont elle a été utilisée dans les communautés qui dépendent d'une seule industrie comme Elliot Lake.

This is a regional case study of the effects of training on labour market adjustment following mass layoffs in a single-industry mining community, Elliot Lake in Northern Ontario. Based on longitudinal survey data we find that training programs as a whole had limited benefits to the laid-off workers, particularly in terms of reemployment, although longer-duration programs at the college level appeared more effective. This is not a call to cut funding for training, which can have important social and psychological benefits for laid-off workers and their families; but it is a criticism of the current approach that makes training the principal focus of adjustment policy, at least as it plays out in single-industry communities like Elliot Lake.

INTRODUCTION

Since the 1980s, governments in Canada, especially the federal government, have been shifting their labour market policies away from job creation programs, regional development strategies, and aggregate demand stimulus towards the supply side of the labour market, notably training. Training and the

development of a "training culture" is being touted in several federal labour market strategy reports,¹ as the fundamental means to reduce unemployment, particularly long-term unemployment. Indeed, the importance of training has been used as a means to legitimate major changes in unemployment insurance that aim to turn the UI system away from "passive" income maintenance to "active" training programs.

The concept of training as the principal focus of adjustment policy, with its underlying proposition that training (or retraining) leads to reemployment, deserves more serious questioning than it has been given. Questions also need to be raised about the goals of adjustment policy and about what constitutes “successful adjustment.” The shifting of priorities to training has marked effects in Canada’s regions, particularly in communities in the midst of mass layoffs that depend on labour market adjustment aid. This paper examines the experience of the workers from the Denison and Rio Algom mines at Elliot Lake in Northern Ontario following the mass layoffs that began in 1990. The data are taken from the Elliot Lake Tracking Study (see below) as well as from public documents and extensive interviews. We consider the conditions in Elliot Lake to be representative of those existing in many single-industry towns in Canada.

We argue that, if reemployment is taken as the primary goal of adjustment policy, then the existing training focus has limited benefits for the laid-off workers, their families, and the communities concerned. Further, and more generally, we argue that adjustment programs that fail to connect the conditions of training with the availability of employment will be neither effective nor credible. We note, however, that training can have important social and psychological benefits. But in terms of economic adjustment, particularly reemployment, training should be secondary to regional industrial strategy, community development, and direct job creation.

The following section looks at the regional labour market background in Northern Ontario, the layoffs at Elliot Lake, and the Elliot Lake Tracking Study. Next we outline the training situation as it existed both before and following the layoffs. The fourth section reports key results from the tracking study about workers’ participation in further training and the effects of training. The fifth section discusses various criteria for successful adjustment and training in relation to the Elliot Lake experience. Finally, there is a brief summary of the main conclusions.

NORTHERN ONTARIO, ELLIOT LAKE, AND MASS UNEMPLOYMENT

Northern Ontario has major labour market problems, particularly because of sharp employment declines in its primary and related industries, especially hard-rock mining. The level of employment in Northern Ontario reached a peak of about 350,000 in 1985; thereafter, the number of jobs, especially standard jobs, tended to decline absolutely. Despite a massive amount of job loss and outmigration from many smaller communities to other Northern Ontario communities, there has not been a massive outmigration from the region as a whole. The total population aged 15 and over reached a peak of about 650,000 in 1987 but did not fall much below that level; by 1994, it was again increasing. Not surprisingly, there has been a considerable increase in unemployment. In 1992, the official measure of unemployment reached nearly 50,000 or about 13 percent. Despite some small cyclical increases in employment since 1992, official unemployment is now regularly over 40,000 or over 10 percent.²

Elliot Lake is the largest single-industry resource town in Northern Ontario. Developed as a planned resource town (construction of the town site began in 1956) and the “uranium capital of Canada,” Elliot Lake experienced its first major collapse in the early 1960s. From the mid-1960s until well into the 1980s — for over 20 years — employment in uranium mining was relatively stable, largely as a result of the expansion of nuclear power production and the use of long-term supply contracts. By the late 1980s, with accumulating problems in the nuclear power industry and adverse conditions in the world uranium market, Elliot Lake experienced some layoffs.

But it was not until 1990, largely based on procurement decisions by Ontario Hydro which were supported by the provincial government, that the full-scale closure of uranium mines was announced and mass layoffs began at Denison Mines and Rio Algom in Elliot Lake. In January 1990 the two companies had about 4,186 employees (including those

working above and below ground, office, technical, and supervisory employees). By the end of September of that year over 1,500 workers had been laid off, the largest layoff in Northern Ontario and perhaps the largest initiated in Canada in 1990. By the end of May 1992, about 3,500 workers had been permanently laid off.³ One mine remained open, the only producing uranium mine left in Ontario.

The Elliot Lake Tracking Study conducted a census of all employees. The first round of interviews (Time 1), took place between September and November 1990, and obtained 1,182 valid interviews. Efforts were made to interview both those who had left Elliot Lake and those who had stayed. The second round (Time 2), carried out between late December 1991 and March 1992, followed up on those interviewed at Time 1 and yielded 1,073 completed interviews; 32 percent of interviewees were still employed at Denison or Rio Algom at Time 2.

Based on the workforce employment levels in August 1990 the response rate was about 33 percent.⁴ As for the second interview, almost 91 percent of those who responded at Time 1 responded again at Time 2. The response rate for those laid off was higher than it was for those still employed at Denison and Rio Algom.

Although the survey was influenced by the categories used in Statistics Canada's labour force survey, we had to consider the appropriateness of existing categories for the situation at Elliot Lake. This was especially true in treating unemployment. The official category for unemployment, based as it is on active job search (which is itself influenced by actual employment conditions), is unhelpful in giving an accurate picture of the extent of unemployment in the Elliot Lake area. We have, instead, used the residual category for the Denison and Rio Algom workers of "not employed" as our unemployed category and as distinct from those who are "still employed" (at Denison or Rio Algom) or are "reemployed" (at other than Denison or Rio Algom).⁵

Thus, three categories are central to organizing the data: the still employed, the reemployed, and the not employed. The "still employed" are those workers who, at the time of the interview, were still employees of either Denison or Rio Algom; these employees had not (yet) been permanently laid off. The "reemployed" are those who had a job at other than Denison or Rio Algom at the time of the interview. The remaining category, those "not employed," comprises all those who were not currently employed at the time of the interview, either at Denison or Rio Algom or elsewhere.⁶

The effect of the layoffs on Elliot Lake's population and the local labour market has been dramatic. Although municipal population counts are somewhat unreliable, Statistics Canada has reported that between 1986 and 1991 Elliot Lake had the most rapid decline of population — 21.7 percent — of any small municipality in Canada.⁷ There are no official unemployment statistics for Elliot Lake or its vicinity, but there are reasonable estimates in the order of 50 to 60 percent, which include both those laid off by the mining companies as well as the unemployed in other sectors.⁸ The tracking study data suggest that, as of March 1992, about half of the workers laid off at Denison and Rio Algom, had not found work and could be considered unemployed. Many of the laid-off workers live in smaller communities adjacent to Elliot Lake, such as Blind River and Spanish, so unemployment levels have risen sharply well beyond the community of Elliot Lake itself. The second round of interviews also suggests that about one-third of those laid off had left the Elliot Lake area (Robinson and Wilkinson n.d., Table 4).

In short, there is a major, persisting unemployment problem in Northern Ontario which has been compounded by the mass layoffs in the Elliot Lake area. It is this regional reality of mass unemployment that sets the context for adjustment policy and training.

THE TRAINING SITUATION AT ELLIOT LAKE

During the 1980s, the Elliot Lake and adjoining North Shore (of Lake Huron) area were recognized as a high unemployment area.⁹ There was also increasing consensus about the possibility of mine closures but neither the government agencies nor the community prepared a strategic response in anticipation of the closures.

When the mass layoffs actually began in 1990, no fewer than five different committees were involved in training and adjustment, all directly or indirectly connected to Employment and Immigration Canada.¹⁰ But there was no coordination of these groups. This uncoordinated and potentially conflict-ridden situation was recognized to some extent by Employment and Immigration Canada which mandated the setting up of a Training Coordinating Committee in July just as the first wave of layoffs was about to hit. The Training Coordinating Committee brought together representatives of the five training funding groups (the Canada Employment Centre, the Community Industrial Training Corporation, the Denison adjustment committee, the Rio Algom adjustment committee, and the North Shore Community adjustment committee — for non-mining company employees) as well as a representative of the Elliot Lake Mayor's Committee on Training. There were no women involved: the adjustment policy structure like the mining industry made no serious provision for the interests of spouses or families as a whole. The six members of the Training Coordinating Committee made the main decisions about expenditure on training programs although, in the end, the Canada Employment Centre had to sign for expenditures since all of the trainees were UI recipients.

It is widely agreed that the training funds received by Elliot Lake were much larger than those later available to other communities facing adjustment crises. Elliot Lake was an "anomaly" and these were "crisis dollars." Over the three years covering 1990 to 1993, before a sharp tightening of the training

budget occurred, the Elliot Lake area spent approximately \$10 million on training.¹¹ Part of Elliot Lake's access to greater funding is explained by the fact that the mining layoffs hit a year before the full onslaught of the 1990 recession, although there is little doubt that the magnitude of the layoffs and political pressures also played a role.

Once the crisis hit, the existing training program criteria were loosened considerably, a process that was facilitated by the additional money as well as the training provisions of Bill C-21, which came into effect in November 1990. In particular, the Coordinating Committee approved full-time training programs lasting longer than one year (the previous UI standard). A significant portion of those taking training were given support to go into two and even three year programs, mainly in the Ontario community college system. There was no waiting requirement that laid-off workers had to meet before becoming eligible for training programs. One participant, commenting on the special funding and loosened administrative strictures, remarked that "there was nothing to hold us back — it was just go."

The extent and variety of the training program activity increased rapidly. For instance, in 1991-92, the Training Coordinating Committee approved training purchases of nearly \$3.3 million for approximately 1,000 program places with a total duration of 66,000 days. This included both individual and bulk courses (with as many as 24 trainees), from as short as six days to as long as three years, and varying greatly in cost (while upgrading courses with the School Board were virtually free, one commercially run heavy equipment operator course with 12 participants lasting 80 days cost \$195,000).

By and large, laid-off workers at Elliot Lake probably had much greater say over the types of training they could pursue than workers in many other regions or similar communities. However, several factors still limited training choices: the inadequate educational preparation of many laid-off workers to participate in training courses (especially those at

the college level), weaknesses in assessment and counselling, the decision of the Coordinating Committee to favour local training programs (to keep jobs in the Elliot Lake area), and inconsistent quality in the training programs. All of these and other factors affected the choices of laid-off workers and the results of their training experiences.

Despite the magnitude of the issues involved, there are almost no official short-term data and even fewer long-term data available to evaluate the success of training programs funded or conducted in the Elliot Lake area. The Community Industry Training Corporation (CITC) has estimated that, before 1990, they normally achieved a placement rate of about 84 percent. The CITC approach was largely employer-driven. Through mail and telephone surveys and personal contact, the CITC would learn of particular job needs, then purchase training courses to meet the demand. Typically, more persons would be trained than jobs available. If eight jobs were available, 12 persons would be trained ("it gives the business community an opportunity to pick and choose"). The Canada Employment Centre reports that, "in the good days," they could achieve between 50 to 60 percent placement after employment preparatory training, a type of institutional training. By contrast, there is widespread agreement that, whatever the exact level of short-term or long-term placement success existing before the 1990 layoffs, the situation after the layoffs was far worse.

Overall, there was a shift towards an employee-driven approach and relatively greater access to federal training funds. However, as we will see, the particular form it took did not produce significant or equal benefits for many of the unemployed. And, throughout the period, there were never any explicit criteria as to what constituted successful training or, indeed, successful adjustment.

THE TRAINING SITUATION AND ITS RESULTS

In this section we consider first the main educational and demographic characteristics of the Denison and Rio Algom workers, then their participation in further training, and, third, the relation of their training to reemployment and rate of pay. In the tables that follow "N" refers to the number of workers responding to particular questions; these figures vary and are lower than the figures for the total number of returned questionnaires, mainly because some workers chose not to answer particular questions.

The Denison and Rio Algom workforce in 1990 reflected a varied level of educational attainment. Respondents had an average of 11.6 years of formal education. As Table 1 shows, the single largest group of workers interviewed at Time 1, about 56 percent, had some high school or had completed high school. Over 20 percent of the workers had obtained postsecondary diplomas or degrees, while fewer than 13 percent had only elementary or junior high education. The table appears to confirm the view that those with less education tend to suffer higher levels of non-employment.

As is well-known, the mining industry has very high levels of male relative to female employment. About 4.2 percent of those interviewed were women, which suggests that the proportion of women in the mining industry in Elliot Lake was lower than the average (about 12 percent) for the mining industry in Canada as a whole (Statistics Canada 1990). Women were more likely than men to be laid off and less likely than men to be reemployed at the time of the second interview although the data indicate that the women on average had both higher levels of educational attainment and were as likely as men to be actively searching for work.

We found the Denison and Rio Algom workforce to be younger than is sometimes conveyed in impressions of "mature" industries. As shown in Table 2, at the time of the first interview, the mean age was 40.4 and the median age was 39 years. The

TABLE 1
Highest Level of Educational Attainment at Time 1 (1990)

		<i>Employed</i>	<i>Reemployed</i>	<i>Not Employed</i>	<i>All</i>	<i>All</i>
		<i>percent</i>	<i>percent</i>	<i>percent</i>	<i>N</i>	<i>percent</i>
Elementary	incomplete	1.8	0.3	3.3	20	1.9
	complete	2.1	1.5	3.1	24	2.3
Junior high	incomplete	2.1	0.9	4.9	29	2.8
	complete	6.4	4.6	5.6	58	5.5
High school	incomplete	29.4	32.8	36.6	347	33.1
	complete	21.8	27.6	19.7	239	22.8
Postsecondary	incomplete	6.4	7.7	6.6	72	6.9
	complete	20.6	15.6	15.1	178	17.0
University	incomplete/ diploma/certificate	3.9	5.8	3.6	46	4.4
	bachelor's or professional degree	5.5	3.1	1.5	34	3.2
All levels of education (percent)		100.0	100.0	100.0		100.0
N		330	326	391	1047	
$\chi^2=44.85$	d.f.=18	p<.0001				
<i>Mean Years of Education</i>		<i>11.91</i>	<i>12.03</i>	<i>11.02</i>		<i>11.61</i>
<i>S.D.</i>		<i>2.9</i>	<i>2.18</i>	<i>2.67</i>		<i>2.6</i>
<i>N</i>		<i>297</i>	<i>312</i>	<i>367</i>		<i>976</i>
$F_{2,973}=15.64$		p<.0001				

TABLE 2
Ages of the Three Employment Groups at Time 1 (1990)

<i>Age Groups</i>	<i>Employed</i> <i>percent</i>	<i>Reemployed</i> <i>percent</i>	<i>Not Employed</i> <i>percent</i>	<i>All</i> <i>N</i>	<i>All</i> <i>percent</i>
21-24	1.2	3.1	1.3	19	1.8
25-29	3.4	12.1	9.3	86	8.3
30-34	17.0	29.7	21.6	235	22.7
35-39	24.1	21.7	16.0	210	20.3
40-44	20.4	14.9	13.9	168	16.2
45-49	13.0	9.9	8.8	108	10.4
50-54	15.5	4.0	11.3	104	10.0
55-59	5.6	2.8	10.8	69	6.7
60-64	0.6	1.9	6.2	32	3.1
65 and over	0.3	—	0.8	4	0.4
All age groups (percent)	100.0	100.0	100.0		100.0
N	324	323	388	1035	
Mean	41.5	37.2	42.1	40.4	
Median	40	35	40	39	
$\chi^2=105.13$	d.f.=18	p<.0001			

mean age of those who had been laid off was 39.9, only 1.6 years younger than the mean age of those who continued at Denison and Rio Algom. The mean age for those who were laid off but managed to obtain jobs elsewhere was 37.2, which was 4.3 years younger than for those still at Denison and Rio Algom and nearly five years younger than those not employed.

The distribution of the age groups shows that only a small portion (4.6 percent) of those laid off were near a retirement age of 60 or 65. Taking the lower age of 55, only 11.8 percent of those laid off were 55 and over. For both those who were reemployed and those who were not employed, the earlier and later 30s were the largest age groups. Thus, there is actually a large pool of workers here with the

capacity for several, if not many, more years of productive employment before normal retirement.

Another significant feature of the Denison and Rio Algom workforce is language. While nearly all those interviewed spoke English (some of the interviews were conducted in French), 34 percent had French as their mother tongue and 20 percent spoke French at home. The data also reflect what is generally known, that is, that levels of educational attainment are generally lower among the francophone population in Ontario.¹² We emphasize this point because training services have not been adequately available in French, which puts francophone workers at a disadvantage in many training programs and probably reduces the overall effectiveness of training programs, especially in Northern Ontario. However, in terms of who was laid off or reemployed at the time of the second interview, there appeared to be no significant difference between francophone and anglophone workers.¹³

Finally, it is useful to note that the Denison and Rio Algom workforce has had a fairly established or settled character, contrary to some views of mining communities as being full of single, highly mobile men. At Time 1, about 86 percent of the workers were married or in common-law relationships, and family units had an average of 2.3 children. About 25 percent of the workers had been employed at Denison or Rio Algom for 14 or more years, while only 9.6 percent had worked there for five or fewer years; 40 percent had never had another full-time job previous to their work at Denison and Rio Algom. Of those interviewed, 50.2 percent said their spouse was working for pay and, of these, a majority were working full-time. About 69 percent owned their own home.

Now, in turning to participation in further training, Table 3 reveals that only about 53 percent had taken any additional training. As might be expected, those who were not employed at Time 2 were significantly more likely to have participated in a training program during the period since their layoffs.

However, even in this group, the proportion of those opting for further training by Time 2 was fairly low, only about 59 percent.¹⁴ This and related findings are generally consistent with the work of Picot (1987) on the participation of unemployed adults in training.¹⁵

The most substantial difference among the laid off was that the non-employed tended more towards college-level courses, which are generally longer in duration. This difference may signify less than first appears because the longer term training programs could have reduced the workers' availability for reemployment. On the other hand, such longer term programs can facilitate contacts with employers, and students can withdraw to take up a job should one become available or accept a job conditional on completion. This dynamic needs to be probed in future research, though our impression in the case of Elliot Lake is that early reemployment probably inhibited training take-up, but being engaged in training probably was not itself a major inhibitor to reemployment.¹⁶

To examine the key factors affecting the participation in further training, we ran a logistic regression. The dependent variable, a binary variable indicating who did or did not take further training, was derived from the question: "Have you taken any education program since your last interview?" The estimated model, whose results are presented in Appendix Table A.1, correctly predicted 71.5 percent of the observations. Age, gender, and employment status are statistically significant predictors of the probability of taking training. That is, in general, younger workers, males, and those who were not employed were more likely to have participated in training programs. However, caution should be exercised in interpreting the coefficient for gender, given the very small number of women in the sample. Neither years of education, pay at Time 1, job type (manual versus non-manual), or job search activity appear to exert significant effects on the probability that a worker would sign up for training.

Next we consider the relationship of training to reemployment. Overall, less than half (43.3 percent)

TABLE 3
Training Undertaken Between Time 1 (1990) and Time 2 (1992)

<i>Type of Program</i>	<i>Employed</i> <i>percent</i>	<i>Reemployed</i> <i>percent</i>	<i>Not Employed</i> <i>percent</i>	<i>All</i> <i>N</i>	<i>All</i> <i>percent</i>
No training	58.0	45.3	40.9	467	47.5
Upgrading ¹	18.0	23.0	27.3	227	23.1
College, Academic ²	3.0	3.6	9.1	54	5.5
College, Trades ³	3.7	9.7	14.4	95	9.7
Common core ⁴	0.7	0.6	0.3	5	0.5
University	2.3	1.0	0.8	13	1.3
Non accredited courses ⁵	14.3	16.8	7.2	122	12.4
All levels of training (percent)	100.0	100.0	100.0		100.0
N	300	309	374	983	
$\chi^2=69.13$	d.f.=12	p<.0001			

¹Includes: courses to the Ontario Secondary School Diploma or equivalent.

²Includes: college certificate, college degree, and other college.

³Includes: provincially recognized college trades certificates.

⁴Mining company training modules for certification in certain mining skills.

⁵Includes: courses that are required as prerequisites for college programmes or miscellaneous courses that do not result in accreditation. These are largely private training courses, including company sponsored courses, such as heavy equipment operator, first aid, driving, real estate, mutual fund sales etc.

of those laid-off who took training were reemployed at Time 2. Table 3 above seems to suggest that those who were reemployed at Time 2 actually had had a lower participation in training programs than those who were not employed. However, it is not possible to say from this alone that training did not affect reemployment or affected it negatively. In particular, it could have been the case that some of the reemployed, those who were reemployed soon after their layoff, simply were first to get the available jobs and saw less need for training than those who were unemployed. Also, as mentioned, some of those

who were not employed at the time of the second interview could have been so because they were involved in full-time training, particularly one of the longer term programs at the college level.

To help throw some light on this question, we ran other logistic regressions, this time with the dependent variable being employment status (reemployed versus not employed) at Time 2. We limited the reemployed to those reemployed outside the mining industry, because virtually all training programs were oriented to jobs outside mining. The

model presented in Appendix Table A.2 correctly predicts 70.8 percent of the observations for employment status after layoff. We see that a younger age and job search at Time 1 are statistically significant predictors of reemployment after layoff. While training as a whole and most types of training are also statistically significant, the signs are negative, opposite the direction usually hypothesized for the positive contribution of training to reemployment. Obviously, how this apparently negative effect of training is interpreted is very important.

We are inclined to the view that the negative effect of training reflected demand conditions, the availability of jobs. Those laid off earlier or able to leave before the mass layoffs were first to get the limited jobs available; competition for available jobs intensified and the average probability of obtaining them declined as the mass layoffs worked their way through the labour market, particularly as the 1990 recession arrived and deepened. In this context, training could have delayed job take-up, with the longer training programs having the most adverse effect (as suggested by the values of the beta coeffi-

cients). Weighing against this effect, as noted above, is the fact that workers could have (and some did) quit training programs to take up jobs. We think that some training programs, such as those with a publicly recognized credential or with deeply felt non-economic benefits, may have sustained a higher level of motivation to complete the program, though this too is a matter for further research. Whatever the case, the apparently negative effect of training does not mean that, had no one taken training, or had training benefits been shortened (as urged by some critics of UI), all those laid off would have obtained jobs. Nor does it imply that there were no workers whose training helped them obtain reemployment by Time 2, though they must have been a distinct minority. Our point here is simply to raise the possible effect of training on relative positioning in job queuing, at least in the short term in conditions of mass layoffs.

The Tracking Study also asked the workers for their own views as to whether the training was important in getting a job. In particular, it asked: "Did any of your training help you get a job?"

TABLE 4
Of Those Who Took Further Education: Did Any of Your Training Help You Get a Job? At Time 2 (1992)

<i>Did Training Help?</i>	<i>Employed</i> <i>percent</i>	<i>Reemployed</i> <i>percent</i>	<i>Not Employed</i> <i>percent</i>	<i>All</i> <i>N</i>	<i>All</i> <i>percent</i>
Not at all	82.6	53.7	74.3	205	67.2
A bit		2.4	0.7	4	1.3
Somewhat	4.3	8.1	5.9	20	6.6
Quite a bit		14.6	9.6	31	10.2
It was essential	13.0	21.1	9.6	45	14.8
Percent	100.0	100.0	100.0		100.0
N	46	123	136	305	
Percent of total	15.1	40.3	44.6		
$\chi^2=22.15$	d.f.=8	p<.005			

As Table 4 indicates, at the time of the second interview, a considerable number of workers, 54 percent of the reemployed and 74 percent of the not employed, thought that their training programs were not at all helpful in obtaining employment. The survey also asked workers: "Did lack of training or education make it hard for you to get a job?" Here we found that only about one-third (N=489) stated that lack of education made it hard to get a job. These results could be in part a reflection on the quality of particular training programs or of training in general, but our impression is that it is a comment about the lack of jobs and the futility of training in the absence of jobs. We would like to do more probing in the area of perceptions of the value of training.

Finally, in order to see if there were economic benefits other than reemployment, we looked at the changes in the rates of pay of the Denison and Rio Algom workers in relation to further training. Using rates of pay gives a more direct indication of changes in job quality as opposed to total earnings which are affected by the quantity of hours worked. Table 5

indicates there was a major drop in pay for those laid off. These are *rates* of pay stated in annualized terms, not actual total earnings; even if a worker was employed only a short period, such as one week, the pay is stated in annual terms in order to make a standardized comparison. Hence, given the short duration of many jobs, these figures are an underestimate of the actual decline in total earnings during the period, particularly for those who had been laid off. Further, we have excluded overtime and bonus pay, which would significantly increase the mean for a portion of those at Time 1, but a smaller proportion at Time 2, mainly among those still employed at Denison and Rio Algom. Note also that for those not employed we have indicated the rate of pay in their last job (if they had one) after layoff from Denison or Rio Algom but before Time 2.

Table 5 not only shows the decline in average rates of pay of those having lost their jobs at Rio Algom or Denison but reveals the widened, statistically significant, gap between those reemployed and not employed, on the one hand, and those still

TABLE 5

Annualized Average Rates of Regular Pay at Time 1 (1990) and Time 2 (1992) for Those with a Job at or Shortly Before the Second Interview

	<i>Employed</i>	<i>Reemployed</i>	<i>Not Employed*</i>	<i>All</i>
	\$ / year	\$ / year	\$ / year	\$ / year
Time 1 Mean	42,189	41,441	41,510	41,696
25% cutoff	38,459	38,168	37,690	38,085
N	306	315	381	1002
			$F_{2,999}=1.05$	$p=.35$
Time 2 Mean	44,215	38,209	37,272	40,528
25% cutoff	41,600	31,200	32,375	36,400
N	248	268	90	606
			$F_{2,603}=28.35$	$p<.0001$

* These workers had been reemployed before, but not at, Time 2.

working, on the other. While those still working reported an average pay rate increase of 4.8 percent, the other two groups lost 7.8 percent and 10.4 percent respectively. The table also reveals that the cut-off for the lowest 25 percent of earners fell sharply for those laid off but actually increased for those still employed.

Now, to determine whether participation in training programs affected rates of pay we ran several ordinary least squares regressions for those laid off. This time the dependent variable was the differences of the log annualized rates of pay between Time 1 and Time 2.¹⁷ The models tested showed that training did not have a statistically significant effect on changes in the rates of pay. We also took into account the generally contrasting pay conditions of those laid-off workers who obtained reemployment in the mining industry (where pay rates are considerably higher) compared to those who obtained jobs outside mining. The model presented in Appendix Table A.3 shows that, controlling for whether reemployment was in mining or not, is extremely important and, at the same time, the four main types of training were individually insignificant as well as jointly insignificant in affecting pay-rate changes. Among the remaining variables, only age appears to have had an effect: comparing pre-layoff and post-layoff pay rates, older laid-off workers generally lost more.

Of course, the above results could show that participation in training, the very strategy assumed to enhance a job-seeker's short-term employment and income, may take a long time to affect reemployment and income — longer than the 16 months between the two interview periods. From this perspective, it may be too soon to say what the end results of the training programs at Elliot Lake will be. Perhaps this will be the case for the longer, college-level programs and, certainly, further interview rounds need to be analyzed. However, for training as a whole, the known problem of skill decay among unemployed workers coupled with persistently high unemployment could reduce or negate positive longer term effects.

It might be said that the data have self-selection problems or biases, first, in who responded to the survey and, second, in who signed up for training. On the first, a criticism could be that the survey did not interview the more highly motivated workers (for instance, because they left town earlier than the others to seek or take up jobs); hence, the survey respondents could be disproportionately less motivated and our results unrepresentative. It is true that the survey may have missed a disproportionate number of early leavers; on the other hand, we believe there were people seriously depressed and immobilized by the layoffs who, as a result, were less likely to be highly motivated in job search and did not respond. We also believe that those with lower levels of literacy and education, who would be at a competitive disadvantage in the labour market, would have been less inclined to respond. At the same time, we know that many who were interviewed were making strenuous efforts to get work. On the second possible self-selection problem, if motivation is at issue, we consider, given the voluntariness of choosing training, that if there were differences in motivational levels, those who chose training would be more likely to have been more motivated. But this would reinforce our point that training generally had little effect. A probit selectivity regression with regressors TOTY1, AGE, SEX, JOB, SEARCH1, and the training levels ACADEM, TRADES, NACCRD, and UPGRD as well as INDUSTRY was run but the variables were found not to be (jointly) significant so that the sample selectivity term in a Heckman (1979) selectivity-adjusted equation had no statistically significant effect.¹⁸

Thus, we are aware of the possibility of some self-selection bias in the data. What we emphasize, though, is that at least for these workers in a single-industry community, in the current economic and policy context, the take-up rate for training was not high and most of the training programs appeared to be of little benefit in obtaining employment. We do not believe that lack of motivation was a central problem, or even a major problem, after considering anecdotal evidence and administrative data from

organizations in the community, the unions involved, and the workers themselves. Indeed, our experience leaves us exceedingly sceptical of any explanation of the training or reemployment situation following the layoffs based on subjective factors such as motivation.

THE CRITERIA FOR SUCCESSFUL TRAINING AND ADJUSTMENT

Has adjustment policy with its principal focus on training been successful at Elliot Lake? There are no explicit, official definitions or minimum standards of what constitutes successful adjustment.¹⁹

First, we can consider the possible criterion of maintaining productivity or avoiding disruption. In fact, at Elliot Lake the mining companies speeded-up production after announcing the closures, to the point that the mines were closed earlier than expected. There were no strikes, slowdowns, or other major disputes. This might be an adjustment success, though credit for this is due not to federal adjustment policy but mainly to the companies' bonus incentive system.²⁰

Perhaps the most obvious criterion of successful adjustment is reemployment. But this criterion also indicates the most obvious adjustment failure at Elliot Lake, particularly if reemployment success is understood simply to mean that those previously employed are reemployed. Among those laid off at Denison and Rio Algom, fewer than half were reemployed at the time of the second survey (March 1992). Even among those who had left Elliot Lake, 38 percent reported they were not employed; as well, a number of workers who had left Elliot Lake later returned.

Further, the criterion of reemployment does not consider the pay or quality of the new employment. Given the decline in mean rates of pay for those laid off, any additional criteria such as reemployment at the pre-closure pay would make even more evident the lack of adjustment success.

However, it is not at all clear that full or near-full reemployment is viewed by federal or provincial authorities as a crucial criterion of successful training and adjustment. It might be that the criterion of successful adjustment is the less stringent criterion of a return to "normal" or average levels of unemployment, whether defined regionally or nationally. Of course, lower regional levels of unemployment can be achieved in ways other than by increasing employment or reemployment, particularly by outmigration and by workers dropping out of the labour force to become the hidden unemployed or "inactive seekers." This has happened to some degree in the Elliot Lake area and, insofar as the official standard definition of unemployment is used, there might be a somewhat higher level of adjustment success (or less failure). But much of this is dependent on the measurement and interpretation of unemployment data, and neither Statistics Canada nor other federal or provincial bodies actually collect sufficient data in the region to make this type of evaluation a serious possibility.

As for training, one can suggest at least two possible success criteria. First, if training is viewed as important, or not necessary for reemployment, then the participation of workers taking programs — the take-up rate — is one criterion. In a context where training is the principal focus of adjustment policy, training is bound to fail if only because a small proportion of laid-off workers actually pursue training.²¹ But the adjustment authorities appear to have no explicit criterion of success in terms of training program take-up. In Elliot Lake, as indicated earlier, the take-up rate for those laid off was only about 53 percent. While this is much higher than aggregate take-up rates (such as reported in Picot), it is not at all clear that it is high enough to warrant the present emphasis on training in adjustment policy. Our impression is that the pursuit of training, like job search, is affected by the perceived availability of post-training employment, though this needs to be probed further in future research.

Second, for those participating in training, it would seem that obtaining reemployment as a result

of the training would be a criterion of success. But here again, there are virtually no operational measures established or data collected on which to base a serious evaluation. From what we have learned through the Elliot Lake Tracking Study, however, there is little evidence of overall effectiveness in increasing reemployment, as discussed earlier. In one well-known case, at least five heavy equipment operator courses were purchased and trained a total of about 60 students. So far, there is no evidence of any of the trainees ever obtaining regular employment as heavy equipment operators.²²

This said, there probably has been a small proportion of the workers who have genuinely benefited from some training programs. This may indicate a sort of limited success. As noted above, it is not insignificant that about 15 percent of those laid off who took training courses felt the training was essential in getting a job. The tracking study data suggest that there may have been greater effect from a few college training programs. (Some individual trainees in environmental technology and computer training have been cited as reemployment successes.) As well, some training programs may have provided general education that was of long-term personal or social benefit to the well-being of the workers. This was probably the case in the upgrading courses, particularly for literacy training, despite the lack of a short-term or even medium-term employment payoff. However, we have been unable to find any evidence of adjustment policy explicitly establishing, as success criteria, certain literacy or educational levels or certain broader development objectives. Nor has there been any operational reporting or data collection that could address this dimension. In any case, it is to these (possibly more effective) longer duration training programs that the most cuts are being made. Indeed, the crisis advantages briefly seen at Elliot Lake are now being rolled back. This suggests that training effectiveness, like reemployment, may not be the overriding criterion for federal adjustment policy.

At the same time, there may have been some elements of non-economic success in training. For

instance, Sault College found a drop-out rate of only 16 percent on the first wave of its retraining programs, much less than the 50 percent expected. This occurred at least in part because of “the development of each class into a support group similar to those formed to help people facing other traumas in life” (Sault College 1992, p. 4).²³ These circumstances suggest that at least some training programs also provided socially useful activities beyond pure skill development, though we have not been able to find these discussed explicitly in any official treatment of training or adjustment success.

Equality of benefits might be considered a possible criterion for successful training or adjustment policy. But the training programs appear to favour those who are younger, as is indicated by our data on participation in training. This discrepancy could have been counteracted to some degree by strong assessment and counselling programs. But many of those involved in the adjustment process indicate that there were serious weaknesses at this level, especially in the early wake of the first wave of layoffs. One problem was that many trainees had difficulties in training programs because of literacy problems or other inadequacies in preparation. Such problems could have been reduced by better assessment and more attention to preparatory programs.²⁴

It deserves to be emphasized that the training programs considered so far are virtually all-UI related, so that funding goes only to UI recipients and not to family members of UI recipients. This has meant that the existing framework of adjustment policy has not taken adequately into account the training or child-care needs of the families of laid-off workers, particularly of women doing unpaid work in the household.²⁵ There is no adjustment or training success here: the spouses or children of the workers do not seem to have figured at all seriously in adjustment policy.

In the absence of success criteria related directly to the economic well-being of the workers and their families, one has to consider that adjustment activity

serves mainly a political stabilization purpose, as a means of “letting people down gradually” or smoothing potential disorder. In this respect, the employment effectiveness of training or adjustment policy is not so important as its effectiveness in diffusing or managing short-term political instability. We can say this much has been achieved in the Elliot Lake area so far. But as one observer commented, “things will run smooth — no problem — but that doesn’t make it good.”

CONCLUSION

This paper has argued, based on the experience of the Elliot Lake layoffs, that the current concept of training as the principal focus of adjustment policy has limited benefits for laid-off workers, their families, and for their communities, particularly in high unemployment regions. Some training programs, particularly longer programs, may have had somewhat greater social and perhaps employment benefits, but overall the take-up rates were not high and there is no evidence of significant, positive employment or income effects for those who did participate in training programs.

The argument against the training focus of existing adjustment policy is *not* an argument for the reduction of training expenditures. The expenditures per worker on training under federal adjustment programs have actually been very limited²⁶ and there is an evident need for improvements in planning, in assessment, in pre-layoff training, in support of upgrading, in the expansion of longer duration programs — including at the university level — and in support for spouses. Indeed, we consider that, even in the most difficult unemployment situations, some types of training, especially upgrading and general education, can at least offer the potential of personal or group empowerment.

Rather, the central argument here is that training as the *principal* focus of adjustment policy, however well-administered, is going to run into serious

problems as a result mainly of high unemployment, especially in the regional context. If the effectiveness and credibility of federal programs are important, then it is time to reconsider the policy shift away from regional industrial strategy, community development, and direct job creation programs; in other words, to put the principal focus on employment creation. As one participant commented, “It’s jobs that is the engine of recovery — training tags along.”

Of course, the evaluation of adjustment programs depends on what is considered successful adjustment. There are very few criteria, particularly those directly related to the well-being of the laid-off workers or their families such as the reemployment of those laid off, that indicate adjustment success at Elliot Lake. Perhaps, only criteria related to pre-layoff economic stability and post-closure political stability could suggest a measure of adjustment success.

Whatever the case, those concerned with the fate of such communities as Elliot Lake need to argue, at an absolute minimum, for basic standards as to what constitutes successful adjustment and training, and to reject the concept of training as the principal focus of adjustment policy — a concept not only ill-founded but of limited value for those whom it is widely professed to serve.

NOTES

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¹See, in particular, the 1989 report of the Advisory Council on Adjustment, *Adjusting to Win* (the “de Grandpré Report”), the 1989 Employment and Immigration Canada document of the Labour Force Development Strategy, *Success in the Works*, and the 1991 Prosperity Initiative consultative papers, particularly *Learning Well... Living Well*. The evolution of federal labour force adjustment policy has been discussed in Prince and Rice (1989), Mahon (1990), and Campbell (1992).

²The figures in this paragraph are from Statistics Canada, *The Labour Force* and from data published by the office of the Ontario Regional Economist, Northern Office, of Human Resources Development Canada. The Labour Force Survey data are probably a significant underestimate of the extent of unemployment in Northern Ontario both in absolute terms and relative to southern areas of the province. In particular, its coverage excludes First Nations territories, whose people generally suffer higher levels of unemployment yet form a more important component of the Northern population. As well, the number of “hidden unemployed,” which are also excluded from the official measure, tends to be relatively greater in hinterland areas where, and in periods when, official unemployment is higher.

³Rio Algom retained a workforce of approximately 600, mainly to continue operating its Stanleigh mine in order to fulfil its contract to supply Ontario Hydro with uranium. Stanleigh was closed in June 1996 and the remaining mine workforce was laid-off.

⁴Employment levels at the mines were continually changing. According to company monthly workforce re-

ports for August, Denison and Rio Algom employment totalled 3,626.

⁵This was done for at least three reasons. First, there are very few of the workers who were near retirement age. There were similarly a very small proportion (less than 8 percent) who opted for “voluntary retirement” and, of these, nearly one-half were actually reemployed at the time of the second interview. Second, the incidence of active search at Time 2 is so low (32.8 percent) and falling among those laid-off — even lower than the incidence of participation in training programs (which are geared to further employment) — that it is not credible as an indicator of willingness or availability to work, which is at least part of the reasoning behind the job search criterion. Third, while the use of the official unemployment category might provide consistency and even some realism in central, highly urbanized areas with moderate levels of unemployment, it is a less realistic indicator of the extent of unused labour supply, especially in remote, less urbanized, high unemployment regions.

⁶Because these categories refer to current status at the time of the interview, the resulting estimates do not necessarily indicate the duration of employment or unemployment. In particular, the reemployed include, on one extreme, some workers who had been continuously employed at another employer or employers, those who had some reemployment with intervening spells of unemployment, and, on the other extreme, those who were unemployed throughout the period but were only recently, at the time of the interview, reemployed. Similarly, the not employed include those who were continuously unemployed following layoff as well as some who had intervening employment. The Elliot Lake Tracking Study will be doing further work on these post-layoff patterns of reemployment and unemployment.

⁷Small municipalities were defined as those having populations ranging from 5,000 to 24,999, *The Daily*, 28 April 1992.

⁸In the spring of 1993, the Canada Employment Centre in Elliot Lake was reporting over 2,000 beneficiaries per month. Given this as a *minimum* indicator of the number of unemployed and allowing for a labour force of about 4,000 to 5,000, a figure of at least 50 percent unemployment is reasonable.

⁹The approval in 1987 of a Community Futures Program, which is a labour adjustment program oriented

towards rural and remote communities, was an official recognition of the area's high unemployment levels and its need for special adjustment assistance.

¹⁰The main provincial presence in training was the Sault College at Elliot Lake (affiliated to Sault College, Sault Ste Marie) which, before and after 1990, was the main provider of training programs in the area. The Elliot Lake School Board also played a limited role in training, particularly upgrading, which increased after the layoffs had begun. The two mining companies provided little in the way of training, particularly off-the-job training. The Steelworkers Union was able to obtain a clause in their collective agreement whereby workers would be reimbursed the cost of tuition and materials for courses successfully completed; however, because of the difficulty of combining full-time work with study, especially for those with family responsibilities, this clause was little used, and the companies, despite union requests, never accepted a contract clause for paid leaves for education.

¹¹These are the costs of training fees and some expenditures for materials and travel, which are supplementary to the UI benefits of trainees.

¹²The average educational attainment, as measured by number of years of formal education, was 11.9 for anglophones and 10.5 for francophones.

¹³Using a strong indicator of French language attachment, French spoken at home, we found that francophones were 21.9 percent of those still employed at Denison and Rio Algom, 21.6 percent of those reemployed, and 21.0 percent of those not employed.

¹⁴Our results may underestimate the level of the sign-up to training courses since there was a considerable lag in sign-up. Anecdotal evidence suggests that a significant number of workers, for some time after the mine closures, did not believe that the closures were permanent. Also, workers on severance may have tended to wait until their severance was exhausted and they were fully on UI before opting for a training program. In any case, laid-off workers were still continuing to sign on to training programs well after the second interview, though in diminishing numbers (the peak in program sign-ups came in 1991-92).

¹⁵Picot found that, other things being equal, unemployment increased the probability of taking full-time training or education programs, though this probability de-

clined with age, with level of education, and for married women. Picot also found that about one-half of the long-term unemployed belonged to groups with low probabilities of taking up full-time training.

¹⁶The overwhelming majority of respondents had completed training by Time 2. We have examined a subset of respondents known to have completed training courses by the time of the second interview. Among those laid off, the proportion of reemployed and not employed were similar to those in Table 3.

¹⁷We estimate that nearly 80 percent of those taking training had completed their programs by the end of 1991. This, together with the fact that workers could have and did quit training programs, suggests that taking training itself was not a substantial factor preventing workers from taking jobs by Time 2. Using annualized *rates* of pay reduces the effect of a short duration of employment, particularly for those who might have recently completed training just before reemployment at Time 2.

¹⁸Heckman's two-step procedure has been the source of vigorous debate among econometricians and statisticians. One of the most recent attempts to further the debate has been by Leung and Yu (1996).

¹⁹Sometimes one finds in a public document a vague phrase or an implied instance of success. For instance, an Industrial Adjustment Service brochure (Employment and Immigration Canada 1992a) offers to "ease the process of layoffs and closures" and suggests the Industrial Adjustment Service "can help make the disruption more manageable for both the employer and the affected workers." An example is given of the closing of a machine shop in Toronto with a loss of 39 jobs: "Within two months, 36 employees had found new jobs and two others had received job offers. Throughout the closure process, morale and productivity remained high."

²⁰In one of the unions involved there were some differences of opinion between the bonus miners, who were more inclined to speed up production, and other (non-bonus) employees, who were concerned they were working themselves out of a job earlier than necessary.

²¹This point has been emphasized by Picot (1987, p. 2) who argues "It is unrealistic to assume that adult training will play a major role in improving skills, employability, productivity and wages if only a very small percentage of a target group participates. Programs may help those

who do enrol, but without adequate representation they are unlikely to have an impact on the group as a whole.”

²²There have also been no systematic evaluations of the academic or pedagogical quality of training programs. There is some anecdotal evidence of low quality in certain training courses. In one case, trainees were given an institutionally based training, but when they were sent outside the Elliot Lake area for on-the-job experience, they were found to be inadequately prepared and sent back. This was probably an extreme case. However, little is known about the extent or severity of the problem of inadequate training quality.

²³The stronger mutual support and commitment may have developed in part because some instructors were themselves laid off or about to be laid off, which altered the classroom dynamic towards one where “we are all in the same boat.” Probably, another factor was the lack of jobs in the area, which limited the number of trainees who would have quit early to take up job offers.

²⁴Without further research it is difficult to determine the extent to which inadequate assessment accounts for the overall lack of training or reemployment success at Elliot Lake. In any case, there have been significant differences of opinion among participants as to who should be responsible for assessment and counselling and what its purpose should be. For instance, the union emphasis tended to be on job search and networking to find mining industry jobs, especially to overcome the “blacklisting” that workers in the uranium industry face (because of the perceived health liabilities of uranium miners), and on upgrading existing occupational skills. This is in contrast to other approaches that emphasized leaving the mining industry or changing occupations. In general, the labour view of assessment and counselling has been critical of approaches that would tend to lower incomes or skill levels or to reduce the expectations of workers.

²⁵Layoffs have a marked effect on families as a whole, not simply the laid-off workers alone. For instance, while UI has made available “dependent allowances” for training (a point emphasized by Human Resources Development Canada), the program has not provided for the participation of spouses and children in training unless they meet eligibility criteria similar to those for laid-off workers.

²⁶Even the approximately \$10 million allocated for training over three years to Elliot Lake is at most only \$5,000 per worker. This assumes 2,000 workers; the av-

erage is considerably less if one assumes training for every laid-off worker.

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APPENDIX

TABLE A.1
Logistic Regression of Training vs No Training on Selected Indicators

<i>Variable</i>	<i>b</i>	<i>s.e.</i>	<i>z</i>	<i>p</i>	<i>Odds Ratio</i>
TOTY1	0.0273	0.0321	0.85	0.395	1.03
AGE	-0.0611	0.0094	-6.52	<0.0005	0.94
ANNPAY1	-3.1-06e	0.00001	-0.27	0.790	1.00
SEX	0.7711	0.3810	2.02	0.043	2.16
JOB	0.4011	0.2901	1.38	0.167	1.49
OCCL(2)	0.5756	0.2067	2.79	0.005	1.78
OCCL(3)	1.3384	0.1950	6.86	>0.0005	3.81
SEARCH1	0.2273	0.1580	1.44	0.150	1.26
Constant	0.7138	0.7351	0.97	0.332	

Log-Likelihood = -543.608

Test that all slopes are zero: $G = 132.57$, d.f. = 8, $p < 0.0005$

	χ^2	d.f.	p
Pearson	878.880	876	0.466
Hosmer-Lemeshow	7.297	8	0.505

Where	TOTY1	Years of formal education
	AGE	Age of respondent at Time 1
	ANNPAY1	Annualized pay (40 hrs/ week) at Time 1
	SEX	Gender of respondent (coded 1 if male; 0 if female)
	JOB	Job at Time 1 (coded 1 if manual; 0 if non-manual)
	OCCL(2)	Reemployed (coded 1 if reemployed; else 0)
	OCCL(3)	Not employed (coded 1 if not employed; else 0)
	SEARCH1	Searching for work at Time1 (code 1 if searching; else 0)

TABLE A.2

Logistic Regression of Post-lay-off Employment Status (Reemployed vs Not Employed) on Selected Indicators

<i>Variable</i>	<i>b</i>	<i>s.e.</i>	<i>z</i>	<i>p</i>	<i>Odds ratio</i>
TOTY1	0.1502	0.0398	3.78	<0.0005	1.16
AGE	-0.0540	0.0101	-5.32	<0.0005	0.95
SEX	-0.0250	0.4067	-0.06	0.951	0.98
SEARCH1	0.6921	0.1756	3.94	<0.0005	2.00
LEVELTRN					
ACADEM	-1.6785	0.3804	-4.41	<0.0005	0.19
TRADES	-1.2529	0.2927	-4.48	<0.0005	0.29
NACCRD	0.1988	0.2908	0.68	0.494	1.22
UPGRAD	-0.6501	0.2293	-2.84	0.005	0.52
Constant	0.3006	0.6771	0.44	0.657	

Log-Likelihood = -379.92

Test that all slopes are zero: G = 104.178 d.f. = 8, p<0.0005

	χ^2	d.f.	p
Pearson	520.388	511	0.377
Hosmer-Lemeshow	8.757	8	0.363

Where	TOTY1	Years of formal education
	AGE	Age of respondent at Time 1
	SEX	Gender (coded 1 for female; 0 for male)
	SEARCH1	Searching for work at Time1 (coded 1 if searching; else 0)
	LEVELTRN	Level of training
	ACADEM	College and university training (coded 1 if training; else 0)
	TRADES	Trades training (coded 1 if training; else 0)
	NACCRD	Non-accredited programmes (coded 1 if training; else 0)
	UPGRAD	Upgrading programmes (coded 1 if training; else 0)

TABLE A.3

Regression of Annualized Pay Differences (ln\$) Between Time 1 and Time 2 for Laid-off Workers*

<i>Variable</i>	<i>b</i>	<i>s.e</i>	<i>t</i>	<i>p</i>
TOTY1	-0.005	0.009	-0.53	0.594
AGE	-0.009	0.004	-2.08	0.039
SEX	-0.088	0.164	-0.53	0.594
JOB	-0.223	0.147	-1.52	0.130
ACADEM	-0.292	0.165	-1.77	0.078
TRADES	0.043	0.100	0.43	0.668
NACCRD	-0.024	0.090	-0.27	0.790
UPGRAD	-0.088	0.077	-1.14	0.255
INDUSTRY	-0.375	0.064	-5.89	<0.0005
SEARCH1	-0.075	0.061	-1.23	0.219
Constant	0.748	0.305	2.45	0.015

N=722 (236 cases used)

R² = .190

s = 0.454

*Pay differences means the natural log of annualized pay at Time 2 minus the natural log of annualized pay at Time 1. The annualized pay at Time 2 includes pay of the reemployed at Time 2 as well as the pay in their last job of those not employed at Time 2 who had been reemployed prior to Time 2.

Where	TOTY1	Years of formal education
	AGE	Age of respondent at Time 1
	SEX	Gender (coded 1 for female; 0 for male)
	JOB	Job at Time 1 (coded 1 if manual; 0 if non-manual)
	ACADEM	College and university training (coded 1 if training; else 0)
	TRADES	Trades training (coded 1 if training; else 0)
	NACCR	Non-accredited programmes (coded 1 if training; else 0)
	UPGRAD	Upgrading programmes (coded 1 if training; else 0)
	INDUSTRY	Post-separation reemployed in mining or non-mining industry (coded 1 if non-mining; else 0)
	SEARCH1	Searching for work at Time 1 (coded 1 if searching; else 0)