

Toward a More Competent Labour Force: A Training Levy Scheme for Canada

À la recherche d'une main-d'oeuvre plus compétente : un programme canadien de formation professionnelle

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Volume 35, numéro 3, 1980

URI : <https://id.erudit.org/iderudit/029089ar>
DOI : <https://doi.org/10.7202/029089ar>

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Éditeur(s)

Département des relations industrielles de l'Université Laval

ISSN

0034-379X (imprimé)
1703-8138 (numérique)

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Citer cet article

Adams, R. (1980). Toward a More Competent Labour Force: A Training Levy Scheme for Canada. *Relations industrielles / Industrial Relations*, 35(3), 422–438. <https://doi.org/10.7202/029089ar>

Résumé de l'article

Une des principales recommandations de la Commission sur les congés éducatifs et la productivité (instituée par Travail-Canada en 1978 et dont le rapport a été remis en octobre 1979) consiste à imposer à l'industrie canadienne un prélèvement égal à un demi de pour cent de la liste de paie annuelle. Toute entreprise qui ne consacrerait pas cette somme à la formation professionnelle en remettrait la différence au gouvernement. Par ailleurs, les entreprises qui l'utiliseraient à cette fin bénéficieraient d'un abattement de l'impôt supérieur à l'argent ainsi dépensé. C'est la politique du bâton et de la carotte: on pénalise les entreprises qui n'assument pas leurs responsabilités; on récompense celles qui les acceptent.

Pourquoi une telle mesure? Comment peut-elle fonctionner? Quel en est le coût? Que peut-elle accomplir? D'abord, pourquoi une contribution de l'industrie à un tel projet? La capacité de production d'une économie dépend de plusieurs facteurs, mais l'un des plus importants est la compétence de la main-d'oeuvre. Beaucoup d'études ont permis de constater que l'éducation favorise la croissance économique et la productivité. Et ceci s'impose au Canada parce que la grande majorité des adultes n'ont pas reçu une formation professionnelle systématique à l'école primaire et secondaire, celle-ci étant repoussée au niveau post-secondaire. Bien plus, l'enseignement post-secondaire est loin d'être toujours orienté vers la formation professionnelle. On peut même affirmer que la moitié des diplômés des universités ne travaillent pas dans des emplois découlant de la discipline qu'ils ont choisie.

Puisque la plupart des Canadiens n'ont pas reçu de formation professionnelle, il faut faire en sorte que l'industrie prenne la relève, mais les faits démontrent que l'industrie n'offre que peu d'occasions aux individus d'acquiescer les connaissances nécessaires pour qu'ils soient pleinement efficaces dans le monde du travail actuel. L'enquête effectuée par la Commission en 1978 a révélé que vingt pour cent à peine des entreprises favorisent la formation, que quinze pour cent des employés y participent et qu'ils n'y consacrent en moyenne que sept jours. Même si beaucoup d'adultes souhaitent acquiescer une meilleure formation, de nombreuses barrières de temps, de coût et d'éloignement leur en rendent l'accès difficile. Les gens de la classe moyenne, déjà engagés dans des carrières intéressantes, en profitent tandis que ceux qui en auraient le plus besoin sont les derniers à y participer. D'autre part, le gouvernement dépense 600 millions par année, mais le programme ne répond pas aux attentes.

Résultat de cet état de choses: il y a un manque chronique de travailleurs qualifiés; les cadres des entreprises se font rares; les changements technologiques forcent une partie de la main-d'oeuvre à se retirer du marché du travail; dans l'ensemble, les travailleurs canadiens ne sont pas satisfaits de leurs chances de promotion et, finalement, le manque de formation pose des problèmes de discrimination et de productivité.

Dans les circonstances, la prescription d'un impôt à l'industrie aux fins d'éducation est la meilleure façon de corriger la situation actuelle, et cela pour plusieurs raisons. Les porte-parole de l'industrie se sont déclarés mécontents de l'enseignement secondaire tel qu'il est présentement donné. L'impôt leur fournirait le moyen d'obtenir des institutions d'enseignement des programmes qui répondent mieux à leurs besoins et les inciterait à investir dans le développement des ressources humaines. L'impôt aurait pour effet de répartir également sur tous le fardeau de la formation. Ce système permettrait de combiner les études scolaires et la formation en industrie.

Comment un tel projet peut-il fonctionner? D'une part, le gouvernement fédéral pourrait unilatéralement augmenter le fardeau des taxes des entreprises jusqu'à une somme égale à un demi de pour cent de leur liste de paie, tout en leur permettant de déduire plus de cent pour cent des montants qu'elles auraient consacrés aux fins d'éducation si le taux de un demi de pour cent est atteint. Chaque province pourrait voter une loi dans le même sens. En effet, la législation concurrente est désirable à la fois parce que l'éducation relève de la compétence des provinces et parce qu'il se peut qu'une province en particulier, si elle agissait de sa seule initiative, puisse hésiter à établir un nouvel impôt, de peur de placer dans une situation désavantageuse les entreprises qui se trouvent sur son territoire.

Une fois l'impôt établi, une grande firme pourrait entrer en contact avec une université ou un collège des environs et mettre au point un programme d'études qui serait en quelque sorte taillé sur mesure pour répondre à ses besoins en formation de main-d'oeuvre. Les entreprises de plus petites dimensions pourraient également se regrouper dans le même but.

D'autre part, les employeurs déduiraient non seulement les dépenses relatives à la formation, mais aussi le coût de la rémunération de ceux qui obtiennent congé pour suivre des cours. Les employés suivraient ces cours à raison de deux semaines à l'automne et ils auraient entre-temps des travaux à faire à la maison. Le principal objectif de cet impôt est d'encourager le développement de programmes d'études appropriés.

Ceci, cependant, ne veut pas dire qu'on négligerait pour autant la formation en usine, car il se trouvera toujours des travailleurs qui seront dans l'impossibilité de suivre des cours.

Quel serait le coût d'un pareil projet? En 1978, le total des revenus tirés du travail au Canada s'établissait approximativement à \$130 milliards dont \$27 milliards pour les entreprises sans but lucratif. Étant donné que ce prélèvement est assimilable à un impôt qui ne s'appliquerait qu'au secteur privé, cela représenterait environ \$515 millions. On peut espérer, toutefois, qu'un projet supplémentaire serait mis au point qui obligerait le secteur public à assumer sa part de responsabilité en matière d'éducation, ce qui permettrait d'arriver à une somme globale d'à peu près \$650 millions par année. Le prélèvement fonctionnerait au départ comme une nouvelle taxe, mais la mesure stipulerait que si les employeurs dépensent aux fins d'éducation un demi de pour cent de leur liste de paie, leur revenu imposable serait abaissé de cent vingt pour cent de la somme qu'ils auraient déboursée.

Si l'industrie consacrait à la formation la somme totale du prélèvement, il lui en coûterait \$412 millions et la part de l'État serait de \$103 millions. La réaction initiale du gouvernement et des employeurs est de trouver le projet trop onéreux. Une enquête récente a révélé que l'absentéisme coûte \$21 millions chaque jour, soit \$5 milliards par année. En regard de ce chiffre, \$515 millions est une somme minime. Une réduction de dix pour cent de l'absentéisme rembourserait le coût du projet et il y aurait bien d'autres motifs pour démontrer que le fardeau financier est beaucoup moins lourd qu'il n'y paraît de prime abord, d'autant plus que plus de soixante pour cent du coût à absorber par les employeurs consisterait en du temps perdu qui ne se traduirait pas nécessairement par une baisse de la production.

Que peut-on accomplir grâce à ce système? À long terme, cette mesure permettrait d'avoir une économie davantage orientée vers les valeurs de l'éducation, d'ouvrir de nouvelles carrières aux jeunes et aux femmes, de mettre fin au manque chronique de travailleurs qualifiés, de favoriser la formation d'un corps de dirigeants plus compétents et, finalement, de faire réaliser à la productivité un bond marqué.

Pour conclure, il faut souligner que, s'il était judicieusement appliqué, non seulement ce programme serait-il payant en lui-même, mais il rapporterait aussi des dividendes aux individus, à l'industrie et à l'économie dans son ensemble.

Towards a More Competent Labour Force

A Training Levy Scheme for Canada

Roy J. Adams

A Commission of Inquiry on Educational Leave and Productivity recommended the establishment of a training levy scheme in Canada. In this paper the author discusses why such a scheme is necessary, how it might work, what it might cost, and what it would accomplish.

One of the principal recommendations of the Commission on Educational Leave and Productivity¹ was the establishment of a training levy scheme in Canada. The commission recommended that Canadian industry be required to spend .5% of payroll annually on training leading to legitimate certificates, diplomas and degrees. Any firm which spent less on training would remit the difference to government. Firms which spent the required sum would have their tax liability reduced by an amount greater than their expenditures. Thus, the proposal utilizes both the stick and the carrot. Companies which renege on their responsibility to train are penalized. Those which meet their responsibility are rewarded with tax relief.

In this paper I shall discuss why such a scheme is necessary, how it might work, what it might cost, and what it would accomplish. The views presented here are my own rather than the official outlook of the commission as a whole. I doubt, however, that the two would differ substantially.

WHY IS A TRAINING LEVY NECESSARY?

The productive capacity of any economy is dependent on many factors but one of the most important is the competence of the labour force. This

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¹ The Commission of Inquiry on Educational Leave and Productivity was established on May 31, 1978 by the Minister of Labour for Canada. The report of the Commission entitled *Education and Working Canadians* was released on October 23, 1979.

statement is, it would seem, self-evident. Nonetheless, it is supported by a good deal of research. Many studies have concluded that education and training contribute significantly to economic growth.² At the micro level there is a good deal of research which demonstrates that training has a large and consistent positive impact on productivity.³

Research carried out by the commission indicates that the Canadian system for providing the education and training necessary to ensure a high level of occupational competence is far from ideal. The great majority of Canadian adults have received little or no systematic occupational training. The most serious problem is the inadequacy of general vocational training designed to produce wellrounded craftsmen, technicians and managers. Consider the following observations.

A recent OEDC review of Canadian education found that little vocational training is provided in the primary and secondary schools. Such training is instead delayed to what is the post-secondary level.⁴ However, a good deal of post-secondary education is not vocationally oriented. Probably no more than 50% of university graduates accept employment in fields directly related to their university education.⁵ Most history majors, for example, do not become historians. The currently popular notion that university graduates are over-qualified for the jobs they are accepting, fails to take this basic observation into account.

Although general vocational education is offered almost exclusively at the post-secondary level, the large majority of Canadian adults have received no post-secondary education. According to the 1976 mini census, only 29% of the out-of-school population have received any post-secondary education. About 18% have completed the requirements for a post-secondary degree, diploma or certificate. Over nine million adult Canadians have not completed the requirements for a secondary school certificate.⁶

Since most Canadians have not been vocationally prepared by institutions of formal learning, one might expect that private industry would take

² See, for example, G. PSACHAROPOULOS, *The Economic Returns of Education in the Process of Development*, Elsevier, 1972.

³ KATSELL, R.A., D. BIENSTOCK and P.H. FAERSTEIN, *A Guide to Worker Productivity Experiments in the United States 1971-1975*, New York, New York University Press, 1977.

⁴ *Review of national Policies for Education, Canada*, Paris, Organization for Economic Co-operation and Development, 1976.

⁵ See Horace D. BEACH, *Education and the Employment of Youth: A Background Paper*, Victoria, B.C., University of Victoria, 1978, pp. 28-29.

⁶ 1976 Census, Table 30.

up the slack. The evidence, however, suggests that industry offers very limited opportunities for individuals to acquire the knowledge necessary to be highly effective in today's complex world of work. A survey carried out by the commission indicated that in 1978 only about 20% of the enterprises surveyed reported any training. Only 15% of the employees in the surveyed firms were reported to be recipients of training. Other surveys suggest that these estimates may be high rather than low. For example, a more extensive Statistics Canada survey carried out in 1973 indicated that only about 8% of paid workers received training in that year.⁷ Moreover, the training provided by industry is largely short term and job specific. The commission survey indicated that on average only 7 days training were provided to each trainee. Of those who were beneficiary to training in 1978, 75% received 5 days or less. These data corroborate the findings from other surveys.⁸

A significant and growing number of adults do attempt to improve their occupational capabilities and prospects through participation in programs of continuing education but there are numerous unnecessary barriers to post-secondary education which make access difficult. Adults are often thwarted by the unavailability of courses at convenient times and places, by distance, by costs, by inflated entrance requirements, by residency requirements, and by their inability to have relevant experience recognized. Some institutions do make serious efforts to lower or remove these impediments but much more could be done. The barriers which exist are obviously less formidable to some. Middle class people already launched in solid careers are the big users of continuing education opportunities.⁹ Those most in need of additional education and training are often the ones least able to participate: women, those who do not live within reasonable commuting distance of educational institutions, dropouts, and people who work irregular schedules.

The Canadian federal government spends approximately \$600 million each year on labour market training but the design of the program is not adequate to the needs.¹⁰ In order to ensure a high level of occupational com-

⁷ *Education and Working Canadians*, Tables 3-1 and 3-4; Statistics Canada, *The Labour Force*, January, 1975.

⁸ *Education and Working Canadians*, Table 3-5; Statistics Canada, *Training in Industry, 1969-70*, Ottawa, February, 1973; *Training for Ontario's Future, Report of the Task Force on Industrial Training*, Ontario Ministry of Colleges and Universities, 1973.

⁹ *Education and Working Canadians*, chapter 2. See Also, Elizabeth HUMPHREYS and John PORTER, *Part-Time Studies and University Accessibility*, Ottawa, Carleton University, Department of Sociology, October, 1978 and David A.A. STAGER and Alan THOMAS, *Continuing Education in Canada*, A Report to the Education Support Branch, Department of the Secretary of State for Canada, Ottawa, 1972.

¹⁰ Employment and Immigration Canada, *Annual Report for 1977-78*, Ottawa, 1978.

petence two to four years of systematic training is necessary. However, the Canadian Manpower Training Program, which is available primarily to unemployed adults, does not provide for more than one year of occupational training and development.

As a result of these inadequacies there are chronic shortages of skilled workers. Despite high levels of general unemployment and youth unemployment in particular Canadian firms continue to vigorously recruit skilled people from abroad. In 1979 approximately 40,000 Canadian youngsters secured apprenticeship positions. To put that figure in perspective it may be noted that during the same year about 1.3 million West German youngsters participated in the German apprenticeship system.¹¹

The recent sector task force reports sponsored by the Federal Department of Industry Trade, and Commerce indicate serious problems with the level of relevant knowledge possessed by supervisors and managers. Among those industries with the most serious managerial deficiencies are textiles and clothing, commercial printing, construction, food and beverage, footwear, furniture manufacture, and restaurant and food services.¹²

There are also portability problems. Job specific skills cannot be easily transported from one organization to another. Thousands of Canadians are susceptible to obsolescence caused by technological change. There are quality of worklife problems. A survey carried out by the Federal Department of Employment and Immigration revealed that working Canadians were more dissatisfied with their opportunities for promotion than with any other aspect of their jobs.¹³ There are discrimination problems. The large majority of women in the labour force, for example, continue to be bottled up in low paying job ghettos.¹⁴ Last, but certainly not least, there are productivity problems. It is extremely difficult to estimate the productivity loss created by the inadequacy of training in Canada. However, it is certainly substantial. One need only look to countries like West Germany and Japan to see what may be accomplished as the result of a serious national commitment to vocational excellence.¹⁵

11 *Education and Working Canadians*, p. 89 and p. 52.

12 *Ibid.*, pp. 92, 93. See also, D.J. DALY, "Canadian Management: Past Recruitment Practices and Future Needs", Downsview, York University, September, 1979.

13 BURSTEIN, M., N. TIENHAARA, D. HEWSON and B. WARRANDER, *Canadian Work Values*, Ottawa, Information Canada, 1975.

14 See Morley GUNDERSON, "Work Patterns" in Gail C.A. Cook (ed.) *Opportunity for Choice: A Goal for Women in Canada*, Ottawa, Information Canada, 1976.

15 WEIERMAIR, K., "Industrial Training and Industrial Excellence: Canada's Record in International Perspective" Paper presented at the Ninth Annual Management Research Forum, Wilfrid Laurier University, September 30, 1978.

Of course, a good deal of informal learning does go on in industry. Learning from experience when not complemented with systematic education is, however, inefficient and spotty. The inadequacy of experience as the sole source of occupational knowledge led to the establishment of apprenticeship schemes, formal professional training and the general development programs of associations such as the Institute of Canadian Bankers, the Trust Companies Institute and the Canadian Institute of Management. Few would deny the necessity of combining experience and formal training if high levels of work effectiveness are to be the norm.

The above observation would seem to clearly indicate that something needs to be done. But why a training levy on industry? The commission concluded that a training levy would be the best way to address the problems for several reasons.

Most education and training in Canada is organized without serious input from industry. Educators offer programs which they believe to be most appropriate whether or not industry agrees. Industrial spokesmen who appeared before the commission expressed considerable dissatisfaction with post-secondary education.¹⁶ The levy would provide industry with clout vis a vis educational institutions. Companies would be able to negotiate programs that met their needs rather than depend upon educators and governments to decide what is best for them. However, since the commission proposal requires that the levy money be spent on legitimate programs leading to certificates, degrees and diplomas considerable leverage would remain with educational institutions to maintain high standards. New programs should be the product of negotiation rather than dictation by either party to the other.

In order to be effective in negotiations companies would have to assess more carefully their training and development needs. Because the current system is largely outside of their control and because of other pressing day to day business needs, training is often given low priority at present. The potential loss of income would force industry to move training up on its list of priorities.

There are many industrial organizations which do little or no training because they fear that their investment in human resource development will be lost to a competitor. Many firms see no net advantage in doing training as long as they can pirate from other firms, recruit abroad, or make do with the products of the formal educational system.

¹⁶ See, for example, the brief of the Canadian Manufacturers Association to the Commission of Inquiry on Educational Leave and Productivity.

To a large extent training, and especially general training, is a public good. Even though the evidence suggests that more training would be in the interest of all firms, it does not necessarily follow that more training would be in the subjective self interests of the individual employer. In such situations it is necessary to place an equal burden on all so that all may benefit.¹⁷

Smaller firms often cannot afford to provide systematic long range training individually. If they pooled their resources with other similarly situated organizations considerable progress could be made. The levy scheme would provide the incentive for the development of joint approaches to training.

Finally, as suggested above the combination of on-the-job and in class training is superior to either type of training done singly. The levy proposal would specifically encourage industry-based co-operative education.

It is very doubtful that alternatives to the levy scheme would be as responsive to the problems which currently exist. Government might, for example, increase the grants provided to industry but there are two good reasons for not doing so. First, the current grant system is a nightmare of bureaucratic red tape. Many companies shy away from the grant route because it consumes too much time and energy with uncertain results. Although the grant system might be streamlined, I am a skeptic. The concern of the government about abuse and wastage of tax dollars is real and as long as it exists there will be red tape tying up grants.

But there is another reason for not going the grant route. Government already pays for 85% of the cost of post-secondary education and by doing so it has made industry dependent on the post-secondary system.¹⁸ That dependence tends to dull any business enthusiasm for training. In effect government is saying to business: "Don't train, we will do it for you". Business responds: "We don't like what you are doing. We need steak and you provide us with hamburger. But since we may make do with your hamburger we won't invest in steak". What is needed is less dependence by industry on government rather than more.

It would also be socially inequitable to provide additional financial subsidies to industry. Financial subsidies would have to come out of tax dollars. At present working people are paying a disproportionately high

¹⁷ See OLSON, Mancur, Jr., *The Logic of Collective Action*, N.Y., Schockes Books, 1968.

¹⁸ *Education and Working Canadians*, p. 97.

share of educational expenses while they are receiving disproportionately low benefits. A levy scheme would be a move towards a more equitable situation; increased grants would exacerbate an already undesirable distribution of public revenue.

As another alternative Government might apply pressure to educational institutions to expand their vocational offerings. To some extent this course would be desirable. Surely it is possible to build a system which provides more credible options. Nevertheless, as a singular strategy, political pressure to change educational institutions is less desirable than the levy scheme.

At the secondary level vocational education has acquired a poor reputation and vocational programs have had a difficult time attracting the better students. Although business spokesmen have argued for decades that the schools should be more vocationally oriented, liberal education has persistently been emphasized. It is likely that political pressure for radical change would be resisted. At the post-secondary level governments must contend with the strong tradition of institutional autonomy which is considered an elementary feature of liberal democracy. Moreover, internal institutional change would do nothing to forge a stronger link between the worlds of work and education.

The levy scheme is more likely than political confrontation to bring about needed changes. In an era of declining enrolments, the educational system is prone to respond favourably to the prospect of new resources from the private sector. Hard bargaining over specific programs is likely to have a more effective result than general bureaucratic or legalistic guidelines.

In the context of liberal versus vocational education it should be noted that the dividing line is an arbitrary one. For many positions in our complex economy a good background in such liberal subjects as politics, history, sociology, english and mathematics is essential for success.

HOW MIGHT IT WORK IN PRACTICE?

Presumably the federal government could unilaterally pass legislation which would increase the tax burden of companies by an amount equal to 0.5% of payroll while simultaneously permitting employers to write off more than 100% of expenditures on acceptable training if the 0.5% level was reached. Each individual province also might pass such a law.

There are two reasons why a joint approach would be desirable. Since such a scheme would impinge upon educational institutions, and since education is within provincial jurisdiction it would seem to be improper for the Federal government to act on its own. Nevertheless, any individual province might be reluctant to establish a levy scheme in fear of placing provincial business at a cost disadvantage with businesses in other provinces. One would not predict this outcome in the long term since more training should result in a net gain in productivity and therefore a net advantage to businesses operating under the scheme. Still, in the short term it is conceivable that some companies would flee from the initial marginal tax disadvantage.

Once the levy was in place the implementation process might work in any of the following ways. A large company might contact a nearby university or college and work out a tailor-made training and development scheme. Several small companies might pool their levy requirement and establish a joint training service. Needed programs might then be negotiated with colleges and universities. A company might decide that current university and college programs are adequate to its needs and designate selected individuals to enter those programs. Universities and colleges might redesign programs to make them more attractive to industrial firms and then market the new programs themselves. Apprenticeship programs should be greatly expanded.

Against the levy employers could write off not only the training expenses per se but also remuneration costs of those who leave work to enter training. A few concrete examples might prove to be useful.

The Saskatchewan government recently developed a scheme whereby clerical people, primarily women, could prepare for advancement to higher level administrative jobs. Those selected for the program are permitted time off from work to attend post-secondary courses. A multi-national firm with a branch in southern Ontario has negotiated a tailor-made Master of Business Administration program with a U.S. university. Employee participants attend classroom sessions full-time for two weeks during both the Spring and the Fall. During the interim periods they work on various projects and assignments at home. Because of a shortage of meteorologists the federal government from time to time selects employees for full-time training in meteorology at university.

A major objective of the levy proposal is to encourage the development of more creative schemes based on the day release and block release principles. Long term leave is also to be encouraged where necessary but it is more expensive. A greater impact can be made through day and block release.

By recommending the spread of day and block release programs the commission did not mean to denigrate training during non-working hours. Where out of work schemes can be developed which are equitable and effective they should be encouraged. However, day and block release programs are capable of overcoming problems with night school. Working women, for example, often cannot easily attend evening sessions. Nor can people with irregular work schedules or those who live beyond commuting distance. More education can be delivered in a shorter period of time utilizing day and block release and such schemes provide an added incentive to those who might not otherwise participate.

One potential negative outcome of the proposal is the creation of a fly-by-night training industry. To avoid this possibility the commission specified that the training had to be offered by legitimate educational institutions. On the other hand, the intention was not to exclude quality in-house training. Presumably some form of agency will have to be established to decide border line cases. It might also be possible for a company to submit its training plans to the agency for evaluation as to their acceptability.

WHAT WOULD IT COST?

In 1978 total labour income was approximately \$130 billion of which about \$27 billion was earned in the not-for-profit industries. Since the levy scheme is tax based it would only apply to the private sector resulting in a liability of about \$515 million.¹⁹ It is to be hoped, however, that a supplementary scheme could be developed which would require the public sector to shoulder its share of training responsibility. If that could be accomplished the total amount available for training would be approximately \$650 million.

Initially the levy would function as if it were a new tax. However, the proposal specifies that if employers spend the required amount on training their tax burden would be reduced by an amount greater than their expenditures. Ideally all firms would spend the required amount on training but inevitably some will pay the levy/tax rather than train. These funds plus any other savings made by government on currently existing programs should be recycled back to the private sector through the tax system. At this point the amount of return cannot be estimated with any accuracy. For illustrative

¹⁹ See Statistics Canada, *Estimates of Labour Outcome*, Vol. 32, No. 2, April — June 1979.

purposes, however, I will assume that all employers do meet the training requirement and that the write off amounts to 120%. In such circumstances employers would spend \$515 million on specified training, their tax bill (including their new liability under the levy/tax scheme) would be reduced by \$618 million, and government revenues would actually decrease by \$103 million. Thus, if industry spent the entire levy requirement, its share of training costs would be \$412 million and government's share would be \$103 million.

The initial reaction of both government and employers to these figures is likely to be that the scheme is too expensive. But how much is too expensive? A recent report in the *Globe and Mail* quoted a study made by the now disbanded Centre for the Study of Inflation and Productivity which indicated that absenteeism costs Canada \$21 million each day.²⁰ That adds to over \$5 billion per year. In contrast, the \$515 million is a small figure. If absenteeism could be reduced by ten percent, the levy scheme would be paid for.

There are additional reasons why the real cost burden will not be as onerous as it seems at first glance. Let us assume that all of the new instruction is provided by universities or colleges and students are released during working hours to attend the courses. Let us further assume that all of the new students will require sufficient time off to complete 10 post secondary courses — the number of courses typically taken by a full-time university student in one year. In fact many students may take only two or three courses per semester under the scheme, but for illustrative purposes it is useful to assume that all students are "full-time". The figures generated may be thought of a "full-time equivalents."

How much time off would the student need? A university level course typically consists of 39 hours of in class instruction. Ten such courses would require 390 hours. The students might also need time to get to the course and return to work and might be granted additional time to prepare for final exams. Lets allow them another 290 hours. Total hours required per student would then be 680 or 17 weeks.

²⁰ "Absenteeism Costs Canada \$21 Million Daily, Study Says", *The Globe and Mail*, October 4, 1979.

The average cost of educating a post-secondary student in Canada may be estimated at about \$4,500 per year.²¹ Average weekly income per employed person in 1978 was \$251.²² Lost time cost per full time equivalent student under the levy scheme would be (17 weeks @ \$251 per week) \$4,267. Total cost of educating an employed person utilizing the educational leave principle would be \$8,767 per year.

Note that about 50% of the total cost or about 61% of the cost to employers will be lost time rather than hard money cost.²³ A critical question is whether or not the \$251 million of lost time will result in a production loss of \$251 million. There are good reasons for believing it will not. There are probably very few companies who make maximum use of the paid time available. In part this is due to the nature of the production process; in part it is, no doubt, also due to management deficiencies.

21 The estimate is for 1976-77 and was derived as follows:

1. In that year there were 603,700 full time post secondary students (Statistics Canada, *Education in Canada, A Statistical Review for 1977-78*, Ottawa, May, 1979).
2. There were also 2,530,428 course registrations by continuing education students. Dividing by 10, (The number of courses taken by a full-time student) these registrations were converted to full-time equivalent students (253,043). (*Education and Working Canadians*, table 2-7).
3. Thus in 1976-77 there were an estimated 867,543 full-time equivalent post-secondary students in Canada.
4. The 1976/77 total post-secondary expenditures in Canada amounted to an estimated \$3,962,000,000. (MORRISON, Ian, "Canadian Post-Secondary Education: Some Trends and Issues" in I. Morrison and P. Belanger (eds.) *Manpower Training at the Crossroads*, Toronto, Canadian Association of Adult Education, 1976.)
5. By dividing the number of full-time equivalent students into the total expenditures one derives the average cost of \$4,567. In fact, the cost to society of educating students on a full-time basis is considerably higher since these people are unproductive during the education period.

22 Total labour income in 1978 including benefits was \$129,884.6 million (Statistics Canada, *Estimates of Labour Income, op. cit.*) and average employment during that year was 9,972,000 (*Canadian Statistical Review*, August, 1979). Thus, average yearly income was \$13,025 or \$251 per week.

23 Total lost time cost = $4267 \times 515 \text{ million} = \251 million

Percent of employers' cost 251 = 61%
due to lost time 412

A few examples will illustrate the point. In 1974 British industry went on a three day week for three months. One would expect production to drop by 40%. In fact, at its lowest point, the production drop was only 10%. In short, people worked only 60% of normal hours but produced at 90% of normal output.²⁴ More to the point under discussion here, the French adopted an education and training levy scheme in the early 1970's. The result was a large increase in the number of people receiving instruction during normal working hours. There was, however, no noticeable loss of production. In Germany also, educational leave has been made continually more available during the 1970's with no noticeable adverse effect on productive output.²⁵

In our example government revenues decrease by about \$100 million. In practice such an outcome would be very unlikely even if all firms met their training responsibility. Many current training subsidy schemes could be drastically reduced or terminated. For example, the federal Employment and Immigration Commission now spends about \$100 million subsidizing in-house industrial training and another \$500 million on classroom training.²⁶ The Department of Industry, Trade and Commerce spends thousands of dollars on various entrepreneurial and management development schemes. A good deal of federal money goes into the subsidization of block release under currently existing apprenticeship training. These programs would become largely redundant if the levy scheme were put in place. Some of them might still be desirable but they could certainly be reduced substantially.

WHAT WOULD IT ACCOMPLISH?

The levy scheme should result in a significant expansion of the number of people receiving vocational education. By dividing the average cost per full-time equivalent student (\$8,767) into the amount available for training (\$515 million) we come up with 58,743 full-time equivalent students. Not all

²⁴ See, "Chronicle", *British Journal of Industrial Relations*, March, 1974 and July, 1974, from January 1 to 11 March 1974, British Industry operated a 3 day work week. In November 1973 the index of industrial production stood at 111.1. By January it had fallen to 99.7 but by March it had risen again to 104.7.

²⁵ *Education and Working Canadians*, chapter 1.

²⁶ Employment and Immigration Canada, *Annual Report for 1977-78*, Ottawa, 1978.

of these people will be new students but a substantial number will be. If the cost of instruction could be reduced and the public sector brought into the scheme the number of students could be greatly increased. Since industry will be trying to negotiate the best deal costs should go down. At present, as stated earlier, it costs about \$4,500 per year to educate a post-secondary student. However, the creative use of space and time can result in a substantial cost reduction.

Continuing education departments, which are often required to "break even" are able to offer courses in demand for as little as \$1.50 to \$2.00 per student, per hour.²⁷ For a full year of student instruction that works out to between \$600 and \$800 per year. Some will say that these figures do not take into consideration the administrative and physical infrastructure required to operate educational institutions and they have a case. However, to illustrate the point that education may be provided less expensively an example may be useful.

Wayne State University in Detroit manages to offer a regular university degree program to people working full-time at a cost of approximately \$800 per student. The program, complete with all of the required infrastructure, is sustained entirely by fees.²⁸

Although the Wayne State experience may not be generalizable, it is likely that if buying power is put into the hands of industry educational institutions would be able to develop packages considerable below current costs. If average costs per student could be held to \$6,500 per year and the public sector could be brought within the scope of the scheme thus making \$650 million available then, in our example, 100,000 working people could receive a year of post secondary education. That would be an increase of about 12% in the number of full-time equivalent post-secondary students in Canada.

The long run results of the levy scheme should be substantial:

1. A more training oriented Canadian economy.
2. New career routes and opportunities for women, young people and others caught in dead end jobs.
3. An end to the chronic shortage of skilled craftsmen.

²⁷ See, for example, "Fees and Instructor Salary Survey, Ontario Community Colleges, Feb., 1979" A survey conducted by the Dean, Continuing Education Division, Canadore College for the Ontario Provincial Committee of Continuing Education Officers.

²⁸ Correspondence with Professor Otto FEINSTEIN, Wayne State University.

4. A more creative and competent corps of managers.
5. A major boost to productivity.

There are also some potential negative effects which might be anticipated. Business might attempt to shift the increased cost of doing business to consumers by way of price increases. Companies might also shift towards high capital intensity thereby increasing the level of unemployment. Costs, however, must be assessed against the probable benefits. Micro and macro analysis suggests that well-designed education and training programs consistently result in net productivity gains which should in a competitive world lead to reduced prices. The removal of bottlenecks caused by skilled worker shortages should encourage investment and therefore more job creation.

Evidence from abroad suggests that the net advantages should far outweigh the potential negative effects. Within three or four years we would expect that the program will not only be paying for itself but will instead be resulting in dividends for individuals, for industry, and for the economy.

WHAT ABOUT THE INDIVIDUAL?

The levy scheme does not create new employee rights. Any individual employer could spend the entire requirement on management development or on apprenticeship or on other specific programs which would exclude the great majority of employees. This aspect of the scheme was of concern to the commission. We decided, however, that for the program to be most effective, bureaucratic and legalistic constraints on employers had to be kept to a minimum. A major strength of the proposal is that it has the ability to slice through the welter of red tape now surrounding government support to training. Companies would have to keep more accurate internal records but that should be to their own advantage. Better record keeping should lead to more careful consideration of training objectives and outcomes thereby improving the quality of internal programs.

The primary mechanism for ensuring that the funds available are spent in the interests of employees will be collective bargaining. It is to be expected that union members will apply pressure on leadership to negotiate collective agreements providing better education, training and promotion opportunities. Since the money will have to be spent on training or forfeited to government it will not be subject to a trade-off in the bargaining process for higher wages or better job security.

For those capable and motivated people who still find themselves left out, we recommended a subsidiary scheme. Such people would be able to

apply to a government fund for support to enter programs likely to significantly improve their economic and social status. Those granted support from the fund would be legally entitled to an unpaid leave of absence for the period necessary to access the program.

This entire package, we believe, would go a long way towards significantly improving the competence of the Canadian labour force.

À la recherche d'une main-d'oeuvre compétente: un programme canadien de formation professionnelle

Une des principales recommandations de la Commission sur les congés éducatifs et la productivité (instituée par Travail-Canada en 1978 et dont le Rapport a été remis en octobre 1979) consiste à imposer à l'industrie canadienne un prélèvement égal à un demi de un pour cent de la liste de paie annuelle. Toute entreprise qui ne consacrerait pas cette somme à la formation professionnelle en remettrait la différence au gouvernement. Par ailleurs, les entreprises qui l'utiliseraient à cette fin bénéficieraient d'un abattement d'impôt supérieur à l'argent ainsi dépensé. C'est la politique du bâton et de la carotte: on pénalise les entreprises qui n'assument pas leurs responsabilités; on récompense celles qui les acceptent.

Pourquoi une telle mesure? Comment peut-elle fonctionner? Quel en est le coût? Que peut-elle accomplir?

D'abord, pourquoi une contribution de l'industrie à un tel projet? La capacité de production d'une économie dépend de plusieurs facteurs, mais l'un des plus importants est la compétence de la main-d'oeuvre. Beaucoup d'études ont permis de constater que l'éducation favorise la croissance économique et la productivité. Et ceci s'impose au Canada parce que la grande majorité des adultes n'ont pas reçu une formation professionnelle systématique à l'école primaire et secondaire, celle-ci étant repoussée au niveau post-secondaire. Bien plus, l'enseignement post-secondaire est loin d'être toujours orienté vers la formation professionnelle. On peut même affirmer que la moitié des diplômés des universités ne travaillent pas dans des emplois découlant de la discipline qu'ils ont choisie.

Puisque la plupart des canadiens n'ont pas reçu de formation professionnelle, il faut faire en sorte que l'industrie prenne la relève, mais les faits démontrent que l'industrie n'offre que peu d'occasions aux individus d'acquérir les connaissances nécessaires pour qu'ils soient pleinement efficaces dans le monde du travail actuel. L'enquête effectuée par la Commission en 1978 a révélé que vingt pour cent à peine des entreprises favorisent la formation, que quinze pour cent des employés y participent et qu'ils n'y consacrent en moyenne que sept jours. Même si beaucoup d'adultes souhaitent acquérir une meilleure formation, de nombreuses barrières de temps, de coût et d'éloignement leur en rendent l'accès difficile. Les gens de la classe moyenne, déjà engagés dans des carrières intéressantes, en profitent tandis que ceux qui en auraient le plus besoin sont les derniers à y participer. D'autre part, le gouvernement dépense 600 millions par année, mais le programme ne répond pas aux attentes.

Résultat de cet état de choses: il y a un manque chronique de travailleurs qualifiés; les cadres des entreprises se font rares; les changements technologiques forcent une partie de la main-d'oeuvre à se retirer du marché du travail; dans l'ensemble, les travailleurs canadiens ne sont pas satisfaits de leurs chances de promotion et, finalement, le manque de formation pose des problèmes de discrimination et de productivité.

Dans les circonstances, la prescription d'un impôt à l'industrie aux fins d'éducation est la meilleure façon de corriger la situation actuelle, et cela pour plusieurs raisons. Les porte-parole de l'industrie se sont déclarés mécontents de l'enseignement secondaire tel qu'il est présentement donné. L'impôt leur fournirait le moyen d'obtenir des institutions d'enseignement des programmes qui répondent mieux à leurs besoins et les inciterait à investir dans le développement des ressources humaines. L'impôt aurait pour effet de répartir également sur tous le fardeau de la formation. Ce système permettrait de combiner les études scolaires et la formation en industrie.

Comment un tel projet peut-il fonctionner? D'une part, le gouvernement fédéral pourrait unilatéralement augmenter le fardeau des taxes des entreprises jusqu'à une somme égale à un demi de un pour cent de leur liste de paie, tout en leur permettant de déduire plus de cent pour cent des montants qu'elles auraient consacrés aux fins d'éducation si le taux de un demi de un pour cent est atteint. Chaque province pourrait voter une loi dans le même sens. En effet, la législation concurrente est désirable à la fois parce que l'éducation relève de la compétence des provinces et parce qu'il se peut qu'une province en particulier, si elle agissait de sa seule initiative, puisse hésiter à établir un nouvel impôt, de peur de placer dans une situation désavantageuse les entreprises qui se trouvent sur son territoire.

Une fois l'impôt établi, une grande firme pourrait entrer en contact avec une université ou un collège des environs et mettre au point un programme d'études qui serait en quelque sorte taillé sur mesure pour répondre à ses besoins en formation de main-d'oeuvre. Les entreprises de plus petites dimensions pourraient également se regrouper dans le même but.

D'autre part, les employeurs déduiraient non seulement les dépenses relatives à la formation, mais aussi le coût de la rémunération de ceux qui obtiennent congé pour suivre des cours. Les employés suivraient ces cours à raison de deux semaines à l'automne et ils auraient entre-temps des travaux à faire à la maison. Le principal objectif de cet impôt est d'encourager le développement de programmes d'études appropriés.

Ceci, cependant, ne veut pas dire qu'on négligerait pour autant la formation en usine, car il se trouvera toujours des travailleurs qui seront dans l'impossibilité de suivre des cours.

Quel serait le coût d'un pareil projet?

En 1978, le total des revenus tirés du travail au Canada s'établissait approximativement à \$130 milliards dont \$27 milliards pour les entreprises sans but lucratif. Étant donné que ce prélèvement est assimilable à un impôt qui ne s'appliquerait qu'au secteur privé, cela représenterait environ \$515 millions. On peut espérer, toutefois, qu'un projet supplémentaire serait mis au point qui obligerait le secteur public à assumer sa part de responsabilité en matière d'éducation, ce qui permettrait d'arriver à une somme globale d'à peu près \$650 millions par année. Le prélèvement fonctionnerait au départ comme une nouvelle taxe, mais la mesure stipulerait que si les

employeurs dépensent aux fins d'éducation un demi de un pour cent de leur liste de paie, leur revenu imposable serait abaissé de cent vingt pour cent de la somme qu'ils auraient déboursée.

Si l'industrie consacrait à la formation la somme totale du prélèvement, il lui en coûterait \$412 millions et la part de l'État serait de \$103 millions. La réaction initiale du gouvernement et des employeurs est de trouver le projet trop onéreux. Une enquête récente a révélé que l'absentéisme coûte \$21 millions chaque jour, soit \$5 milliards par année. En regard de ce chiffre, \$515 millions est une somme minime. Une réduction de dix pour cent de l'absentéisme rembourserait le coût du projet et il y aurait bien d'autres motifs pour démontrer que le fardeau financier est beaucoup moins lourd qu'il n'y paraît de prime abord, d'autant plus que plus de soixante pour cent du coût à absorber par les employeurs consisterait en du temps perdu qui ne se traduirait pas nécessairement par une baisse de la production.

Que peut-on accomplir grâce à ce système? À long terme, cette mesure permettrait d'avoir une économie davantage orientée vers les valeurs de l'éducation, d'ouvrir de nouvelles carrières aux jeunes et aux femmes, de mettre fin au manque chronique de travailleurs qualifiés, de favoriser la formation d'un corps de dirigeants plus compétents et, finalement, de faire réaliser à la productivité un bond marqué.

Pour conclure, il faut souligner que, s'il était judicieusement appliqué, non seulement ce programme serait-il payant en lui-même, mais il rapporterait aussi des dividendes aux individus, à l'industrie et à l'économie dans son ensemble.

The Current Industrial Relations Scene in Canada 1980 Edition

W.D. Wood and Pradeep Kumar, Editors

xv - 695 pp. — \$40.00

This annual reference volume provides an overview of major developments and emerging issues in the broad field of Canadian industrial relations. It includes summary highlights of recent trends and patterns and their implications supplemented by statistical and other reference material from a wide variety of sources to provide current and historical perspective.

The publication has been organized into seven sections: the economy, manpower and labour markets; labour legislation and public policy; trade unionism; collective bargaining; wages, productivity and labour costs; and the reference section. The reference section includes a comprehensive statistical summary of recent and historical trends, technical notes, a bibliography of information and data sources, and annotations of important books and articles published in 1979. A detailed table of contents is provided to assist the reader in identifying specific topics and subject areas. The 1980 edition has undergone substantial revision and updating. In addition to reviews of recent developments, it features an overview of the 1970's and a detailed analysis of key emerging issues in the 1980's in various areas of industrial relations.

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