Position Description Analysis: A Method For Describing Academic Roles and Functions

K. EDWARD RENNERS and RONALD J. SKIBBENS

ABSTRACT

Similar to the 1960s, higher education is once again in a period of rapid social change in which new demands and expectations are being made on colleges and universities. This time, however, new money is not available for the transition to be achieved through additional growth. In this paper, the methodology of Position Description Analysis is presented using Dalhousie University as a case study. Position Description Analysis is a tool for assessing the discrepancy between the status quo and the specializations needed for colleges and universities to meet the new demands and expectations which are being made of them. It is concluded that there is a need for dramatic realignment of fields of specialization in order to shift from the emphases of the past to those of the future. However, because the faculty hired in the 1960s are now tenured, but not due to retire until after the year 2000, higher education must find internal strategies for change or face externally imposed solutions to their current lack of flexibility.

RESUMÉ

Tandis que les années soixante, l'éducation supérieure se trouve une nouvelle fois confrontée à des changements sociaux rapides qui imposent aux collèges et aux universités de nouvelles exigences, de nouveaux besoins. Toutefois, cette fois-ci, il n'est pas question de compter sur l'attribution de nouveaux crédits pour mettre en œuvre des mesures susceptibles d'assurer une transition satisfaisante. Dans cet article, qui prend l'université Dalhousie à titre d'exemple, on examine les méthodes d'analyse de postes, car nous croyons que ce genre d'analyse permet d'évaluer avec efficacité la différence entre la situation actuelle et celle, fondée sur une plus grande spécialisation dans les collèges et les universités, qui serait nécessaire pour répondre aux nouveaux besoins et aux nouvelles exigences. Nous estimons qu'il faudra absolument redéfinir les domaines de spécialisation. Toutefois, comme les professeurs embauchés dans les

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The 1960's were a period of growth and excitement for Canadian universities (Symons & Page, 1984). Wider access to higher education was seen as a tool for achieving greater social justice, and, at the same time, Sputnik triggered a capital investment in science and technology. Teaching and research thrived, the campus was a dynamic actor in a period of political and social change; a new generation of teachers and learners were united in a quest.

Twenty-five years later higher education is again being thrust into the centre of public awareness, but in a state of crisis, amid criticisms of failure and with demands for greater accountability in both the U.S. and Canada (e.g., Bloom, 1987; Bercuson, Bothwell & Granatstein, 1984). Now, an older generation of teachers struggle to protect their once valued roles and functions.

Similar to the 1960’s, we are again in a period of rapid social change. The transformations in the world since then have once again introduced new challenges to higher education: Accommodation to life-long learning (e.g., Campbell, 1984), knowledge that is more interdisciplinary and less specialized (e.g., Edgerton, 1989), universities that are more directly connected with both business and industry (e.g., Cordes, 1989), learning that is more relevant (e.g., Whipple, 1987) and learners that are better connected with the social and economic context (e.g., Newman, 1985). This time it is the products of those past investments in science and technology, and the human adaptation they are requiring, which have combined to provide the potential for the excitement of a new quest.

However, dissimilar to the 1960’s, the same faculty are now older, tenured and expensive, and they will continue in their positions for another 15 years (Pfaffenberger, 1989; Renner, 1986a, 1988a). Surveys of faculty by the Carnegie foundation in the U.S. have found them to be a "deeply troubled" profession (Jacobson, 1985a, 1985b) and similar data has been obtained in Canada (Renner, 1988d; Timmons, 1989). The economy no longer has the capacity to achieve change through growth; this time, change must be accomplished internally. Constrained by the inertia of the status quo, academia is finding itself on the periphery of that for which it reasonably may have been expected to be a principle actor.

The purpose of the present research is to measure the size of the discrepancy between the status quo and that which is necessary to be once again a dynamic and vital social force. The analytical task is to identify and assess the implications of this discrepancy for higher education. This paper reports the initial development of Position Description Analysis as an empirical tool for defining and measuring the gap between current academic roles and functions, and those that are required by the transformations of moving into a new era.
années soixante possèdent tous leur permanence et ne devront prendre leur retraite qu’après l’an 2000, il faudra que les institutions d’enseignement supérieur acceptent d’autres moyens de changement, soit internes, soit imposés de l’extérieur, pour compenser leur manque de flexibilité actuel.

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A Catalogue of Knowledge

Position Description Analysis requires the creation of a catalogue of everything that is now done or could be done within a university, regardless of whether or not it is a good idea to do so at any particular university. The purpose of the catalogue is to be able to clearly differentiate the current roles and functions of a university, and those towards which it may aspire. Although formidable, the task is not impossible. Libraries do, after all, put a number on each book and place them in a logical order on a shelf. Our granting agencies divide research proposals into major areas on the basis of shared characteristics and send them to even more specialized panels to be evaluated. Our professional associations divide themselves into interest groups which bring like-minded people into the same room at their annual meetings. Our published abstracts organize research into categories which allow us to find similar material. Although none of these reflect the “true” hierarchy of knowledge, and all are open systems in a state of change, they all work well enough to satisfy the immediate needs for which they were created.

A working catalogue was developed which used as a starting point the classification system of the Federal research granting agencies. A two level system was created, first dividing the specializations of knowledge into 41 areas, with each of these divided into a finite number of subdivisions. Each of these two levels was represented by a two digit number. In addition, space was provided for two further subdivisions, each of these to be represented by an additional two digit number. This additional free-response information was used to edit the working catalogue and develop a revised edition for future use. Thus, a potential four tier “tree” was created, in which any area of knowledge could be identified by a unique 8-digit code number.

Classification of Existing Faculty

As a demonstration case study, the catalogue was used to classify all of the current faculty members in the Faculty of Arts and Science at Dalhousie University (n=372 individuals, accounting for 351.17 FTEs). Some faculty members fit into a single category; others required multiple categories to cover their diverse teaching and research specializations. This process provided a descriptive inventory of the actual faculty resources.

A senior faculty member from each department was asked to participate in our study. An appointment was made for an individual face-to-face interview. Each person was shown the catalogue and asked to select, from the list of 41 major areas, those specializations appropriate for their unit. To our two-tier catalogue, they added what ever further differentiation they felt to be appropriate, thus providing us with a four-level knowledge tree for their discipline. They then categorized every individual in their department, using up to three different codes for any given individual, by dividing the person’s FTE value among the
categories, thus providing an arbitrary, but illustrative, description of the department.

A second set of ratings was collected from a sample of 15 departments, accounting for a total of 224.52 FTEs, to provide preliminary data for evaluating the reliability of the judgments made using the first edition of the catalogue. These additional judgments and the content of the free response content for the final two levels of differentiation have provided information for compiling the revised edition of the catalogue.\(^3\)

**Defining the Ideal**

The third step was to use the same catalogue to describe how many faculty positions ideally should be in each descriptive category for any particular department to do its job. The ideal distribution was to reflect a department that would capture "... emerging areas of specialization, minimize appointments in dying areas, and would generally make the department relevant for the period from the present to the year 2000." For this ideal distribution, the person was asked to allocate the same number of FTEs that actually existed in the unit, thus insuring, for this demonstration exercise, that the actual and ideal distributions were based on the same total number of FTE faculty. Although such a balanced ledger may not be a realistic possibility in practice, it is a useful procedure for analytical purposes. Changes in the total number of FTEs raise competitive issues of power and self-justification which, while they can not be avoided, can be separated from the analytical task of conceptualizing roles and functions. When a subject insisted that more than the current number of FTEs were required, the rationalization for the extra FTEs and the distribution of them among the already identified ideal categories was collected as a separate step, but only after the current number was allocated according to the instructions.

**Data Analysis**

A large spreadsheet underlies Position Description Analysis. The actual and the ideal sets of data, based on a common catalogue, measured the degree of similarity between the actual and ideal FTEs in areas of faculty specializations. Each department was represented by a major column heading composed of three sub-columns: (1) the actual number of FTEs for each code, (2) the ideal numbers of FTEs for each code, and (3) the difference between them, obtained by subtracting the ideal from the actual. Thus, a positive difference reflected an excess and a negative difference a shortage in the ideal distribution. The absolute value of these three column totals, summed over all areas of specialization, provided a descriptive summary of each department.

Each row was identified by a unique eight digit number representing an area of either an actual or ideal specialization. The total for each row was the sum of all of the FTE values which used the same eight digit code. These marginal totals provided a picture of the faculty as a whole by identifying the absolute amounts of over- and under-subscription for each category of specialization, regardless of departmental affiliation.

Within a department, the absolute differences reflected the sum of the excess and the shortage of particular specializations. However, across the faculty, wherever one department had a surplus in an area where another department had a shortage, these differences offset each other, indicating areas for potential departmental cooperation. Thus, the discrepancies within the faculty were less than the sum of the discrepancies within departments.

The results which follow describe the development of the catalogue of knowledge and the methodology of Position Description Analysis. They are not intended, nor do they provide, an actual description of Dalhousie University because they are based on descriptions provided by individuals of their own departments. Data on the specific nature of a particular university must, of necessity, arise from a conscious commitment by that university to develop an internal self-description. Otherwise the information can only reflect an unofficial illustrative picture provided by willing research subjects, as is the case in the present study.

**RESULTS**

**The Working Catalogue**

*Levels of Differentiation*. For our preliminary work, we chose to provide only the first two levels of differentiation and to let the content and degree of differentiation at the third and fourth levels reflect the strategies that different individuals adopted when presented with the task. The purpose of this procedure was to obtain additional data for evaluating and revising the working catalogue. The primary problem with the working catalogue was some inconsistency in the level of differentiation of similar content across disciplines. As an example, psychometrics (tests and measurements) appeared as a second level sub-division of psychology, but also appeared as a third level heading within education, which had psychology as a second level heading. Thus, in the results which follow, the degree of convergence has been underestimated due to similar descriptive categories being used at different logical levels.

*Reliability*. Reliability requires that different raters agree on which categories should be used to describe each person. At the first two levels of differentiation, the two raters classified 162.89 of 224.52 FTEs (73%) using the identical categories for each person and, when an individual had more than one specialization, the same division of a person's FTE value between them. Most disagreements (117 out of 135, 87%) were over the allocation of a fraction of a person's FTE between specializations and reflect, in part, the extent to which one of the raters used a more detailed differentiation strategy than the other. All disciplines have major divisions and raters simply did not confuse, for example, physiological and social psychologists. This second level of differentiation typically parallels the specialization of journals within the field.
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### TABLE 1A
#### Biochemistry

<table>
<thead>
<tr>
<th>CODE</th>
<th>DESCRIPTION</th>
<th>ACTUAL</th>
<th>IDEAL</th>
<th>DIFFER</th>
</tr>
</thead>
<tbody>
<tr>
<td>5000000</td>
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<tr>
<td>5050000</td>
<td>Biochemistry</td>
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<td>5050100</td>
<td>Protein</td>
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<td>3.00</td>
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<tr>
<td>5050200</td>
<td>Lipid</td>
<td>6.00</td>
<td>6.00</td>
<td>0.00</td>
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<td>5260000</td>
<td>Molecular biology</td>
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<td>16.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**TOTALS**

16.00  16.00  0.00

### TABLE 1B
#### Psychology

<table>
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<tr>
<th>CODE</th>
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<th>IDEAL</th>
<th>DIFFER</th>
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</thead>
<tbody>
<tr>
<td>5290000</td>
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<td>1.80</td>
<td>0.00</td>
<td>-1.80</td>
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<tr>
<td>3600000</td>
<td>Psychology</td>
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<td>0.00</td>
<td>-1.00</td>
</tr>
<tr>
<td>3602000</td>
<td>Child/adolescent psychology</td>
<td>0.80</td>
<td>2.00</td>
<td>1.20</td>
</tr>
<tr>
<td>3603000</td>
<td>Clinical</td>
<td>1.40</td>
<td>3.00</td>
<td>1.60</td>
</tr>
<tr>
<td>3604000</td>
<td>Community/environmental psych</td>
<td>0.50</td>
<td>1.00</td>
<td>0.50</td>
</tr>
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<td>3608000</td>
<td>Experimental (animals)</td>
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<td>3.00</td>
<td>-0.30</td>
</tr>
<tr>
<td>3609000</td>
<td>Experimental (humans)</td>
<td>3.60</td>
<td>4.00</td>
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<td>3610000</td>
<td>History of psych</td>
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<td>Personality</td>
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<td>1.00</td>
<td>0.30</td>
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<tr>
<td>3614000</td>
<td>Physiological</td>
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<td>Social psych</td>
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<td>23.00</td>
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<td>11.00</td>
</tr>
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</table>

Because our third and fourth levels were open ended, and thus unique to each of the two raters, percentages of agreement in applying these categories could not be calculated. However, on the basis of the content of their answers, reliability should not be a problem at the third level of differentiation which described interest areas within a specialization, e.g., conflict resolution or prejudice as content areas within social psychology. However, at the fourth level, the vocabulary became quite specialized so that agreements were more difficult. Thus, reliability must be considered with respect to the level of differentiation and to how the information is to be used. Rarely will the classification of a person be a matter of dispute when the intended purpose is general, such as identifying areas of potential convergence and cooperation between departments (e.g., tests and measurements are common content areas in both psychology and education).
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The Departmental Cell

A departmental cell is composed of the catalogue codes used to describe the actual and ideal faculty complements and the differences between them. The resulting cells are easy to read and evaluate. For example, a contact in one science department used only 5 categories to classify 16 FTEs, with two to six individuals in each category, and the actual and ideal distributions were in perfect balance. This person had no intention of providing detailed information or of admitting that their department was anything less than ideal (see Table 1A). Whereas, a more typical departmental description used a variety of major headings to group faculty members and suggested that some re-alignment was required (see Table 1B). In contrast, a contact in a language department with 17 FTEs used a total of 28 categories to provide a detailed classification of the diverse interests of the faculty, with a modest misalignment between the actual and the ideal distributions (Table 2). Thus, if a given cell is too undifferentiated for planning purposes, additional refinement may be requested; and, if there are no discrepancies between the actual and ideal, the rationale may be explored and evaluated.

Over and Under Subscription

In all, 351.17 FTEs were catalogued, with each current faculty member described by up to three 8-digit code numbers. The same number of FTEs were allocated to an ideal distribution. The sum of the positive differences between the two distributions of FTEs (Actual – Ideal) was 85,405 FTEs. Thus, 24.3% of the faculty provide skills in excess of ideal needs. Or, stated alternatively, the sum of the negative differences indicated that 24.3% of needed roles and functions are not filled. This data is shown in Figures 1A and 1B, and is probably a conservative estimate of the degree of under- and over-subscription from the ideal because of the unwillingness of some of our respondents (e.g., see Table 1A) to report any discrepancy between the two distributions.

Overlapping Functions

Of the total of 475 codes used to catalogue the faculty, 82.7% were unique entries used by a single department; often more than one individual fit the category. The remaining 17.3% represented the use of the same code by different departments. These matches can be divided into 11.2% at the level of general headings (first four digits), and an additional 6.1% at the level of an exact 8-digit match of an FTE entry (see Figure 2A and 2B). Clearly, the more general the descriptive code (first four digits) used to identify “matches”, the larger the number of qualifying cases. However, if the test for convergence uses the more demanding test of exact specializations (i.e., the last four digits), then fewer “matches” will be identified. As noted above, this is a conservative estimate of convergence because of the open-ended nature of the last two levels in the preliminary version of the catalogue.

**DISCUSSION**

The purpose of this research was to illustrate and describe the methodology of Position Description Analysis as a functional tool, not to describe Dalhousie **University.** Thus, the results are interpreted in terms of (1) the methodological
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FIGURES

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issues of creating a catalogue of knowledge, (2) the policy implication for higher education, and (3) the procedure and politics of creating “actual” and “ideal” distributions.

Cataloguing Issues

Consensual Validity. If we accept the assumption that there is no true nature of knowledge, then disagreements between individuals about what descriptive categories to use at what level of differentiation reflect different philosophies of knowledge. While this is a genuine academic issue for scholarship in its own right, waiting for a more sophisticated epistemology need not inhibit the use of Position Description Analysis. The task is similar to what a library must do to classify a book. The tool need only to be logical, have a reasonable degree of consensus, and provide a shared vocabulary with no more complexity than will be needed for the actual decisions to be made.

The Revised Catalogue. From our preliminary work it is clear that a descriptive classification system which does not try to impose a logical hierarchy of knowledge is sufficient. We have revised our catalogue and the instructions for using it. We have used the information given by our subjects to provide a third fixed level in order to require similar descriptive categories (e.g., tests and measurements) to appear at the same levels. With this basic editing in place the catalogue is a functional tool. It is simple and transferable, permitting other universities to use the same basic structure, but allowing freedom for additional categories to be added at any level. The fourth level provides a free response for local specialty differentiation. From a practical point of view all that is required is for similar academic roles to yield the same code number at the first three levels, and for independent raters to reliably classify others.

Policy Implications

The need for dramatic realignment of the fields of specialization is clear in order to shift from past emphases to the emerging needs of the current challenges. Yet, as has been demonstrated (Pfaffenberger, 1989; Renner, 1988a) there is little academic flexibility; in Canada, a tenured and aging faculty will not reach the normal retirement age of 65 until after the year 2000. In addition, their salary cost will escalate as the majority of faculty reach the top of the salary scale, thus squeezing operating budgets for at least another decade. In this respect, as a case study, Dalhousie University had a growth and hiring pattern typical of other Canadian universities (Renner, 1986a).

Retrenchment through non-replacement, as the means for gaining financial flexibility, has characterized the response of Canadian universities to date, and further compounds the problems by increasing class size and decreasing offerings. Higher education is fast approaching a crisis unless massive new amounts of money are provided by government. Since this is unlikely, it will be impossible to maintain both the status quo and to meet the new challenges through new growth (Renner, 1988a).

The question, therefore, is whether the required reform will be dictated from without or from within. If universities continue to adopt a passive wait-and-see approach, with the expectation that more money is on the way, the likely outcome is externally imposed solutions. The alternative is to find internal responses.

External Solutions. Governments and the public are unlikely to tolerate for another decade or more, a higher education system which is expensive, overcrowded, and failing to meet the educational needs of a new clientele of learners and the national need to be technologically competitive in a world market. The external solutions, for which there are no shortage of warnings, include: First, imposed quality control and accountability, a process well underway in the United States with the assessment movement (e.g., Marchese, 1987). Second, a re-consideration of tenure as an out-dated concept which is no longer necessary as a protection for freedom of thought, and which is inappropriate as a protection against layoffs for financial and program needs. This is a process that has already begun in Great Britain (Simpson, 1985; Dennison, 1989) and has received popular attention in Canada and the U.S. with such books as the Great Brain Robbery (Bercuson, et al., 1984) and Prof-Scam (Sykes, 1989). And third, the introduction of management and business values, rather than academic values, as the bases of higher education, with the nature of programs to be directed by market forces (e.g., Cordes, 1989).

Some would welcome these changes as an improvement. However, the debate on the merits of these external solutions are moot if higher education does not forge an alternative in order to provide a choice. To continue the current passive strategy is to select, by default, increasing amounts of external intrusions.

Internal Responses. The alternative is to see the present circumstances as challenges, not as threats. Surely, the present time is no less urgent than were the 1960’s for beginning a new quest (Renner, 1988b). There are two types of responses which can be made to these challenges for which the tool of Position Description Analysis is relevant.

The first response is to view the identification of convergence between units as the basis for internal arrangements for cooperation. Departments often felt “over-subscribed” in specializations that used codes which corresponded to other related disciplines. Whether someone with a given specialization would be considered appropriate to fill an “under-subscribed” need in another department would probably have to be considered on a case by case basis. For example, a match at the four-digit level may be appropriate for teaching an introductory level, but not an advanced or graduate level course. Position Description Analysis, however, easily identifies areas where individual departments could be invited to consider cooperation as a way to offset areas of under- and over-subscription around the university. Position Description Analysis provides the required vocabulary of academic roles and functions to evaluate these issues on a department by department basis.
issues of creating a catalogue of knowledge, (2) the policy implication for higher education, and (3) the procedure and politics of creating “actual” and “ideal” distributions.

Cataloguing Issues

Consensual Validity. If we accept the assumption that there is no true nature of knowledge, then disagreements between individuals about what descriptive categories to use at what level of differentiation reflect different philosophies of knowledge. While this is a genuine academic issue for scholarship in its own right, waiting for a more sophisticated epistemology need not inhibit the use of Position Description Analysis. The task is similar to what a library must do to classify a book. The tool need only be logical, have a reasonable degree of consensus, and provide a shared vocabulary with no more complexity than will be needed for the actual decisions to be made.

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The savings from better internal cooperation, however, are not likely to be large enough to solve the financial crisis. Their primary value is of facilitating the process of departments becoming more inter-dependent and connected in a common cause.

The second response is to begin a Career Alternatives program, which is directed toward a younger age group than those typically offered early retirement (Renner, 1988a). There are considerable financial savings to be made by offering a viable incentive (Renner, 1986b) to the considerable percentage of mid-career faculty who are no longer happy in their work (Jacobson, 1985a, 1985b; Renner, 1988d; Timmons, 1989), but who are not due to retire until the years 2000 to 2010 (Renner, 1986a). By providing this age group with a variety of options (Renner, 1986c), it is possible to gain both the academic flexibility of new positions and to reduce the salary budget. In short, there is the internal capacity to replace the retrenchment process with one of "dynamism" where new people are hired to do new things (Renner, 1988a). Position Description Analysis provides a tool to guide the replacement policy.

Procedures and Politics

It is not sufficient simply to have a tool for the rational analysis of academic roles and functions. Universities, no less than other institutions, have internal mechanisms which protect the vested interests of the status quo and resist change. To be useful, a tool must be acceptable as well as feasible. In this respect, Position Description Analysis is more a "process" than it is a "product" waiting to be applied. Any strategy for confronting the crisis in higher education will be more or less useful depending on the organizational context in which it is applied, which will determine the degree to which it is acceptable.

Implementing Position Description Analysis. The first step toward breaking the retrenchment cycle is to recognize that it is first and foremost a psychological and social process (Renner, 1988b). Psychologically, both faculty and administration must believe that we have both the capacity and the responsibility to break the cycle; neither now believes this (Renner, 1988c). Instead, both believe that higher education has been betrayed by government and that more money is the only solution (Smith, 1989). As a result, higher education is becoming defensive and entrenched. In an organizational context of protecting the status quo against significant changes in current roles and functions, no tool will provide an acceptable solution.

Only by providing individuals with security and new opportunities (i.e., the opportunity for those who want out to have a Career Alternative), and by providing departments with the freedom and safety to be less than the ideal (i.e., to identify roles and functions which are no longer needed and new ones which are needed) can we create the conditions for optimism and change. Both a "means" and an "end" are required to replace the destructive effects of retrenchment with dynamism. No department will identify any area as "over-subscribed" unless it is first safe to do so (Renner, 1988b).

Socially, as an organization, universities must stop trying to establish priorities over which programs are more important than others; our efforts to do so set our organizational units, usually departments, at each others throats as self-justifications increasingly replace problem solving. We must replace our competitive institutional structures with cooperative ones, and abolish competitive priorities. Each unit must be free to invest the flexibility it can generate into its own vision (Renner, 1988a). The crisis in higher education is largely about creating the psychological and social capacity to act (Renner, 1988b).

Defining the Vision. For Position Description Analysis, the central issue is how to evaluate the fact that two different individuals will provide different ideal distributions of FTEs. As with the catalogue, consensus is the appropriate criterion. There is no true ideal, only the visions of individual people as members of organizational units. The tool of Position Description Analysis is one means to articulate their vision with a shared vocabulary. It will allow internal debate, review and an institutional ledger of roles and functions. This, by definition, is a time consuming political process, but one with the clear function of directing change as an analytical process, independent of specific personnel decisions.

The rules used in this paper for creating the ideal distribution were open-ended. This is another reason why our results do not provide an actual account of what is ideal for Dalhousie. In actual use, institutional constraints need to be defined in advance. For example, if the university had made a commitment to adult education and life-long learning this would impose new obligations on departments and thus set additional constraints on the nature of their ideal distributions. Clearly, review would be required at each higher level to insure that the ideals were consistent with institutional goals and did not simply extend self-justifications of the status quo.

Position Description Analysis is an open process in which information is created which could guide decision-making that is aimed toward the future. The purpose of the tool is to allow each unit to create a vision of what it would become if the retrenchment cycle could be broken. As such, it must be seen as only one element in a larger policy strategy for higher education which includes the generation of flexibility through means other than retrenchment. Creating a new vision will require the courage to begin the process of change, although to do so will not be easy. The alternative, however, is to settle for the bottom line of externally imposed solutions, an outcome which is neither in the best interests of individual faculty members nor the university as a whole.

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3 We have revised the catalogue in light of the data obtained in the current study and are in the process of evaluating these refinements to the catalogue by obtaining additional ratings using the revised material, including having each person in a department rate every other person. A separate report will be published on the revised edition of the catalogue in which the psychometric properties of the instrument are described and standard instructions are provided for its use.
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Using Matching Grants to Facilitate Corporate-University Research Linkages: A Preliminary Examination of Outcomes From One Initiative

STEPHEN BELL*

Acknowledgements: I would like to thank my colleagues in the Higher Education Group, especially Michael Skolnik, for their helpful advice and critical commentary on various drafts, and the comments and suggestions of the anonymous reviewers.

ABSTRACT

In the 1980’s the issue of corporate-university linkages has received markedly increased attention from governments, corporations, and universities. From governments perspective, the drive to enhanced corporate-university linkages is derived from the belief that these linkages will contribute to economic competitiveness. One method that has been used by government to encourage this interaction is through the provision of matching grants. Using public finance theory as the conceptual basis, the paper examines the preliminary outcomes of one government’s matching grant initiative. Through a compilation of data on university research revenues on corporate contract research and a questionnaire to companies that placed the research contracts in universities, the paper shows that matching grants, in the manner provided by the BILD program, may not be an effective mechanism to promote corporate-university research linkages. The paper concludes with some suggestions for further research and discusses the conceptual and methodological hurdles that can be encountered when attempting to assess the outcomes of a matching grant program, particularly as applied to corporate-university linkages.

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