

Knowledge Transfer of Educational Programs in Public Management: Transfer-Inhibiting and Transfer-Enhancing Factors in the Belgian Public Sector

Bruno Broucker

Katholieke Universiteit Leuven, Belgium

ABSTRACT

This article provides insight on the knowledge transfer of long-term programs in public management within the Belgian public sector. Two basic questions are addressed: What does transfer of public management programs to the workplace mean? And which transfer-inhibiting and -stimulating factors can be identified? The *Learning Transfer System Inventory* is used as a methodological tool to conduct this study. Results reveal that the transfer from the studied programs is inhibited by factors within the individual, the transfer climate, and the training program. The main problems seem to be that (a) the climate towards transfer is passive or neutral, (b) respondents are insufficiently prepared to enroll, and (c) training shows a gap between theory and practice. Because of these inhibiting factors, the “use” of program knowledge is limited to knowledge-based, interactive, or political use of new information. This article, which provides an incentive to assess other programs, emphasizes that educational programs in public management will be improved if sufficient effort is put into the conceptualization and implementation phases of a program.

INTRODUCTION

Over the years, research has demonstrated that the return on investment (ROI) of educational programs for public and private organizations is insufficient because of their ineffective use of knowledge (Broad & Newstrom, 1992; Awoniyi, Griego, & Morgan, 2002). Yet, educational investments still are considered as important strategies for maintaining an organization’s competitive position in the market. Therefore, it is useful to gain insight into the mechanisms of educational effectiveness, and the transfer of this knowledge to the workplace. To capture this elusive concept, the study of “training transfer” has tried to

determine noteworthy transfer-stimulating and transfer-inhibiting conditions. These research results are valuable tools for conceptualizing theoretical models and categorizing transfer-enhancing and transfer-inhibiting factors, in the ongoing search for a valid transfer-measurement instrument. As a result, several theoretical models emphasize the important sequence of “learning,” “transfer,” and “performance,” and claim that knowledge transfer is a necessary, yet insufficient, condition of increased performance (Foxon, 1994; Thayer & Teachout, 1995; Kontoghiorghes, 2004; Pidd, 2004). In the previously noted sequence, three basic variables were identified and confirmed by a wide range of studies as highly influential for transfer: (a) The individual, (b) the training program, and (c) the transfer climate (Foxon, 1994; Thayer & Teachout, 1995; Kontoghiorghes, 2004; Baldwin & Ford, 1988). These variables represent, respectively, (a) the individual’s competencies and motivations, (b) the program’s coherence with organizational needs, and (c) the organization’s general climate of support for the transfer process. When looking at transfer climate, for example, its five different types (Kirkpatrick, 1994) are *preventing*, *discouraging*, *neutral*, *encouraging*, and *requiring* (i.e., transfer can be prevented, discouraged, tolerated, encouraged or required).

Even though there is a consensus on the importance of the three-part sequence and the definition of its main independent variables (Broad & Newstrom, 1992; Holton, 1996; Burke & Hutchins, 2007), the list of sub-factors that are linked to these main variables is extremely large, which, unfortunately, means that the subject runs the risk of theoretical vagueness. This article seeks to add a new perspective to the scientific state of affairs by studying the knowledge transfer of programs that often *haven’t* been studied in the past. Most transfer studies are limited to short-term training programs in the private sector (Gilpin-Jackson & Bushe, 2007). Therefore, it would be interesting to study the transfer of long-term management programs in the public sector, and their main inhibiting and enhancing conditions. The aim is to compare the significant variables of transfer in the public sector to those of the private sector. Studying long-term programs in management also could broaden the debate over what transfer actually means, because it is likely that the transfer process for what one has learned differs from program to program.

As a result, two objectives are defined in this article: (a) Providing insight into the knowledge transfer processes of long-term managerial programs in the public sector, and (b) defining the meaning of transfer in these programs. Consequently, the following explorative research questions are considered:

- Is there any transfer of knowledge from management programs for civil servants, and, if so, what does it look like?
- Do variables matter in the public sector the same way they do in the private sector?

To address these objectives/questions, the article is divided into three major sections. The first section provides a theoretical framework on transfer, its influencing variables, and the meaning of the word “use,” as it applies to the use of knowledge. The second section clarifies data collection and data analysis for this study. It delineates the starting point as a measurement instrument that has been developed and used since 2000, mainly in private organizations, called the *Learning Transfer System Inventory*. In the third section, results are analyzed and discussed.

DEFINING AND FRAMING THE MEANING OF TRANSFER

Definition

Transfer often is defined as “the effective and continuing application, by trainees to their jobs, of the knowledge and skills gained in the training, both on and off the job” (Broad & Newstrom, 1992). Even though this definition doesn’t distinguish between different types of training programs, it highlights several important aspects of transfer. First is the importance of time, implied by the term *continuing*. If the application was a single-moment phenomenon without any change in work methods, one could not speak of transfer as it is defined here. Second, although not emphasized by this quotation, transfer is characterized by the resemblance between learning and work situations: The greater the resemblance, the easier the transfer. This is the essence of transfer — translating acquired knowledge from one situation to another. Third, transfer must be considered as a step between the learning process and actual job performance. Several theoretical models emphasized this sequence of events, and claimed that transfer is a necessary condition for increased performance (Foxon, 1994; Thayer & Teachout, 1995; Kontoghiorghes, 2004; Pidd, 2004). Fourth, transfer is merely one educational effect among others. A frequently used, though much-criticized, typology for educational effects is Kirkpatrick’s four-level model (1994; Alliger, Tannenbaum, Bennett, Traver, & Shotland, 1997). He distinguishes the following levels:

1. **Reaction Level** How satisfied with the program are its trainees? A low satisfaction level could affect transfer motivation.
2. **Learning Level** Have the participants learned anything?
3. **Behavior Level** (Also called the transfer level.)
4. **Result Level** Effects on the organization, such as increased production, improved work quality, or cost reductions.

Despite the insight that this typology offers for a quality evaluation of programs, the four-level model has fundamental counterarguments (Holton, 1996; Bates, 2005). For example, Kirkpatrick’s model is incomplete. It assumes that insight on the reaction, learning, behavior, and result levels makes it possible

to determine a program's effectiveness. However, educational effectiveness is influenced by a large number of other important factors. Factors that influence transfer before, during, and after a program (Holton, 1996; Bates, 2005) exist on the organizational level (Broad & Newstrom, 1992; Awoniyi et al., 2002; Van der Klink, Gielen & Nauta, 2001; Clarke, 2002; Ford, Quiñones, Segó, & Sorra, 1992; Gumuseli & Ergin, 2002; Quiñones, 1995; Olivero, Bane, & Kopelman, 1997), on the individual level (Quiñones & Holladay, 2003; Lim & Johnson, 2002; Ruona, Leimbach, Holton & Bates, 2002), and on the level of the program itself (Paek & Hawley, 2006; Ford et al., 1992; Broad & Newstrom, 1992). Second, Kirkpatrick presupposes a linear connection between the four levels, which assumes that satisfaction leads to learning, learning leads to transfer, and transfer leads to results. Until recently, there was no support to confirm this assumption (Holton, 1996; Bates, 2005). Finally, the model assumes that each level automatically yields more data about its effectiveness than the previous level did. Like Kirkpatrick's linear connection, this assumption also lacks proof (Bates, 2005). Limitations of the Kirkpatrick model are taken into account in this article by applying the *Learning Transfer System Inventory* (LTSI). This survey instrument was developed to counter the limitations of the four-level model, as will be explained.

Types of Transfer

The concept of transfer traditionally is divided into four segments:

1. **Direction** of transfer, which highlights the influence of knowledge application on individual performance: *Positive* and *negative transfer* assume a positive or negative influence, while *zero transfer* implies no influence at all (Van der Klink, et al., 2001).
2. **Complexity** of transfer, which is determined by the resemblance between learning and work situations. If the resemblance is strong, it creates *horizontal transfer*, and application of knowledge easily will take place. The opposite is a situation of *vertical transfer*, where, due to a smaller resemblance between learning and work situations, an application could occur in a larger number of situations (Bergenhengouwen, Mooijman, & Tillema, 1994). Both types of transfer can be positive or negative.
3. **Distance** of transfer, which encompasses *near* and *far transfer*. *Near transfer* restricts the application of what has been learned to a small number of cases or similar situations. *Far transfer*, on the contrary, is the application of what has been learned in situations that are greatly different from each other and from the learning situation (Smans, 2005). Notice that the difference between near and far transfer on the one hand, and horizontal and vertical

transfer on the other, is not always clear in the literature. In both cases it refers to the application of knowledge in a similar situation vs. application of the same knowledge in a different situation.

4. **Time** of transfer, where transfer can be *forward-* or *backward-reaching*. *Forward-reaching* transfer tries to use what recently has been learned, by anticipating its relevance to a new situation, while *backward-reaching* transfer applies previously learned knowledge to a new situation (Salomon & Perkins, 1989). The difference between them is located in the moment of the situation: When *forward-reaching*, one proactively tries to predict an event where knowledge can or will be used, and when *backward-reaching*, one reactively emphasizes the use of knowledge once the situation occurs.

Defining "Application"

Seldom discussed in the transfer debate is the meaning of the word "application" or the verb "use." Yet, the importance and relevance of discussing this issue reaches far beyond its linguistic character, because an organization's judgment about a program's ROI depends on it. For example, defining what it means to "use" the knowledge gained from a software program is easier than defining the use of acquired managerial knowledge. This means that the description of transfer is too general to capture the various possibilities of applying knowledge from different programs. In fact, it may be too broadly defined to clearly point to its meaning in everyday life. Therefore, as a theoretical analysis tool, literature about the use of scientific information in policy decision-making also applies to the transfer debate. In one way or the other, policy is confronted with scientific information, whereupon one bases decisions (or not).

Caplan (1979) distinguishes between the *conceptual use* and *instrumental use* of knowledge and information. *Instrumental use* represents the daily use of knowledge in all types of small operations, as well as in micro-level and incremental decisions. An example would be transfer of acquired knowledge in a Web site design program. Using this knowledge may enhance marketing of organizational products, without triggering fundamental organizational changes. *Conceptual use* is when knowledge transfer has a major impact on large decisions (Caplan, 1979). For example, the transferred knowledge of a Human Resources Management program could lead to the implementation of a new personnel evaluation system.

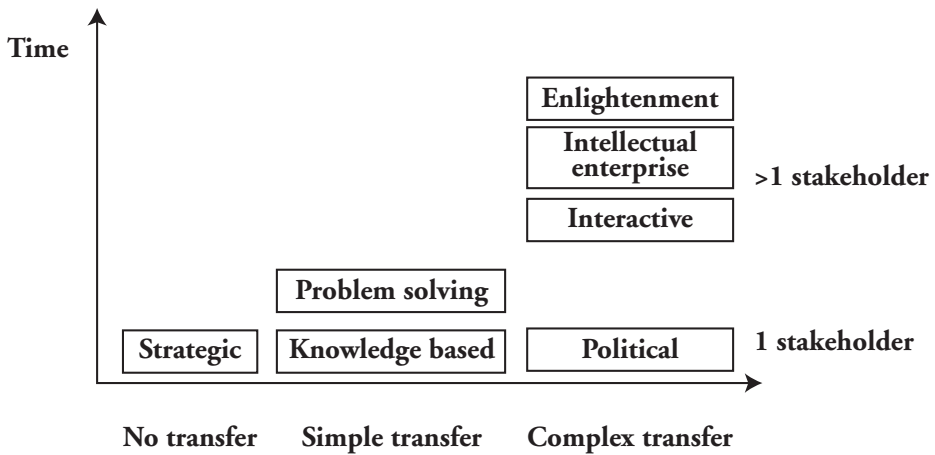
Weiss (1979) identified seven different possible forms of knowledge use. The starting point is that knowledge transfer rarely involves applying specific data in specific situations. Instead, it is knowledge use in the form of ideas and information (Neilson, 2001), which makes knowledge transfer a vague and difficult-to-observe process. The seven possible forms of knowledge use are as follows:

1. **Knowledge-Based:** The use of knowledge on a basic level to make small decisions. This is similar to Caplan's (1979) definition for the *instrumental use* of knowledge and information.
2. **Problem-Solving:** When knowledge is used to solve a well-defined problem that is recognized by a program participant and a supervisor or colleagues. Depending on whether the defined problem is large or small, problem-solving could be, according to Caplan's typology, either an *instrumental* or a *conceptual use* of knowledge.
3. **Enlightenment:** The application of knowledge over time, by accumulation. For example, one employee's participation in changing a management program will not change the organization, but participation in the program by several generations of different employees over the years may make a major impact. Caplan doesn't explicitly emphasize the impact of knowledge accumulation. However, because time is an important aspect here, the complexity of transfer is stressed, which makes this a *conceptual use* of knowledge.
4. **Political:** The use of knowledge to strengthen a decision that already is made. This does not necessarily mean that the decision is rational, and it isn't discussed by Caplan in terms of the difference between *conceptual* and *instrumental uses*.
5. **Strategic:** An explicit decision *not* to transfer knowledge. This type of use requires extra knowledge and information in order, for example, to postpone a decision. Caplan doesn't discuss this possibility, either.
6. **Interactive:** In a competitive situation between someone who followed a program and someone who didn't, an interactive use of knowledge occurs when the organization's management investigates to find the most useful information. In this case, management would have to be convinced by both sides. Contextual aspects are important in this type of knowledge transfer. They are not stressed in Caplan's two main types.
7. **Intellectual Enterprise:** Using knowledge means finding one way to solve a problem, while intellectual enterprise is the process of considering several different solutions at one time. This isn't discussed by Caplan.

In this article, different types of knowledge use are proposed in a model that is characterized by three dimensions: (a) time, (b) the number of stakeholders, and (c) transfer complexity. Enlightenment, intellectual enterprise, interactive use of knowledge, and problem-solving are types of use that require more than one stakeholder to transfer knowledge. Except for problem-solving, they have a higher level of complexity. Strategic, knowledge-based, and political types of uses range from *no transfer* to *complex transfer*, and do not require more than one stakeholder (though multiple stakeholders also can initiate this type of transfer).

[See *Figure 1*]

Figure 1.
Types of Knowledge Use



In conclusion, as stated by listing the different types of knowledge transfers, it is clear that there also are different types of knowledge use. Vertical transfer can, for instance, be a knowledge-based, or an enlightenment-based type of use. It is important to be aware of possible differences between the types. The knowledge transfer process can be very subtle or very explicit, which makes it hard to decide whether or not a transfer has occurred, and whether or not knowledge has been applied. Therefore we suggest another definition for transfer: *Transfer is when acquired knowledge and skills add value that improves job performance.* This definition highlights the sequence of events and emphasizes the importance of job performance. The ultimate goal of transfer is to improve performance, not to apply knowledge. This added value to performance can take different forms. It can be a cognitive reflection that is necessary to the performance, or it may relate to concrete actions. This added value doesn't have to be systematic (as highlighted in the original definition); it may depend on different factors and it may not be systematic. Again, the ultimate goal is to have value added to the job; application alone isn't sufficient. This article will assess whether the data support this description of the transfer phenomenon.

MEASURING TRANSFER-ENHANCING AND TRANSFER-INHIBITING FACTORS

The methodological part of this research topic is rather young. In transfer studies, self-developed instruments frequently were used, according to the training program details and the specific research question(s). This was intriguing, given the fact that different instruments were used to measure the same concept. Once again, this is due to the fact that the "original" definition of transfer was too broad to be measured the same way in different programs.

In 1993, Rouiller and Goldstein developed a *Transfer Climate Instrument*, but it was proven to have doubtful validity (Holton, Bates, Seyler, & Carvalho, 1997; Chen, 2003). Tracey, Tannenbaum, and Kavanagh in 1995 developed the *General Training Climate Scale*, which tried to measure the broad organizational environment and to focus more deeply on the transfer climate as a group perception (Tracey & Tews, 2005). Other studies tried to combine different instruments. To measure different levels of the Kirkpatrick evaluation model (1994), researchers Lim and Morris (2006) put it through five tests, including (a) the *Perception Survey of Learning*, (b) the *Perception Survey of Application*, (c) pre-tests/post-tests to assess learning differences between, before, and after training; (d) the *Training Satisfaction Survey*, and (e) the *Organisational Climate Survey*.

The *LTSI* seems to be the only instrument that has been studied and used on a regular basis with successful results. As the name *Learning Transfer System Inventory* demonstrates, this instrument measures the “learning transfer system,” which includes all the factors within the individual, the training program, and the organization that influence transfer (Donovan, Hannigan, & Crowe, 2001). The first version of this instrument was developed in 1996, in order to counter problems of the previously described four-level model. It was introduced by Holton et al. (1997) in the article “Toward Construct Validation of a Transfer Climate Instrument.” The researchers’ aim was threefold: (a) To develop an instrument that could measure transfer-inhibiting and transfer-stimulating conditions in every organization and culture, (b) to focus on the question of *why* transfer happens instead of *whether* it happens, and (c) to contribute to the improvement of a conceptual model of transfer and educational effectiveness. The first version of the instrument, named the *Learning Transfer Questionnaire (LTQ)*, was based upon a model developed by Rouiller and Goldstein in 1993, which had a doubtful validity (Holton et al., 1997; Chen, 2003). The *LTQ* was improved between 1996 and 2000, and eventually became the *LTSI*. It measures 16 factors (Holton, Bates, & Ruona, 2000). Their descriptions are listed in Table 1 (Holton & Bates, 1998). In this study, the *LTSI* was used to measure transfer-stimulating and transfer-inhibiting conditions of two master’s programs in Belgium. This is interesting for (similar) programs in other countries, because contextual, organizational features are taken into account. As such, the factors in this table can be used to assess other programs. [See Table 1]

The *LTSI* has been translated and validated in several languages. Yamnill (2001) and Chen (2003) translated the instrument into Thai and Chinese, respectively. Both found a similar factor structure that was as valid as the original *LTSI* (Chen, 2003). The instrument also has been translated and validated in Arabic (Bates & Khasawneh, 2005) and French (Devos, Dumay, Bassart, Bodenghien, & Vallaey, 2006). The cross-organizational validity of the instrument also has been confirmed (Holton, Chen, & Naquin, 2003). Eleven of the 16 factors focus on the characteristics of a well-specified program. They include

1. Supervisor Support;
2. Transfer Design;
3. Negative Personal Outcomes;
4. Personal Capacity for Transfer;
5. Learner Readiness;
6. Perceived Content Validity;
7. Peer Support;
8. Opportunity to Use;
9. Motivation to Transfer;
10. Supervisor Sanction; and
11. Positive Personal Outcomes.

The remaining five factors are more general, and focus on every program in an organization. They are

12. Performance Coaching;
13. Performance-Outcomes Expectations;
14. Performance Self-Efficacy;
15. Transfer Effort-Performance Expectations; and
16. Openness to Change (Holton et al., 2000).

Table 1.
LTSI Scale Definitions

Trainee Characteristics Scales
<i>Learner Readiness:</i> The extent to which individuals are prepared to enter and participate in a training program.
<i>Performance Self-Efficacy:</i> An individual's general belief in being able to change personal performance outcomes, when desired.
Motivation Scales
<i>Motivation to Transfer Learning:</i> The direction, intensity and persistence of effort towards utilizing in a work setting skills and knowledge learned in training.
<i>Transfer Effort-Performance Expectations:</i> The expectation that effort devoted to transfer will lead to changes in job performance.
<i>Performance-Outcomes Expectations:</i> The expectation that changes in job performance will lead to outcomes valued by the individual.

Table 1.
Continued

Work Environment Scales
<i>Feedback/Performance Coaching:</i> Formal and informal indicators from an organization about an individual's job performance.
<i>Supervisor/Manager Support:</i> The extent to which managers support and reinforce on-the-job learning.
<i>Supervisor/Manager Sanctions:</i> The extent to which individuals perceive negative responses from managers when applying skills learned in training.
<i>Peer Support:</i> The extent to which peers reinforce and support on-the-job learning.
<i>Resistance/Openness to Change:</i> The extent to which prevailing group norms are perceived by individuals to resist or discourage the use of skills and knowledge acquired in training.
<i>Personal Outcomes-Positive:</i> The highest degree of positive outcomes that can be achieved by using training on the job.
<i>Personal Outcomes-Negative:</i> : The extent to which individuals believe that applying skills and knowledge learned in training will lead to negative outcomes.
Ability Scales
<i>Opportunity to Use Learning:</i> The extent to which trainees obtain or are provided with resources and job tasks that enable them to use skills taught in training.
<i>Personal Capacity for Transfer:</i> The extent to which individuals have the time, energy, and mental space in their work lives to make changes required to transfer learning to the job.
<i>Perceived Content Validity:</i> The extent to which the trainees judge the training content as accurately reflecting job requirements.
<i>Transfer Design:</i> The extent to which training has been designed for giving trainees the ability to transfer learning to the application of job duties, so that training instructions match job requirements.

Note. Adapted from "Learning Transfer System Inventory: Administrator's Guide," by E. Holton & R. Bates, 1998.

RESEARCH METHODS

Case Selection

Two Belgian cases were selected for this study. It was not the primary purpose of these case studies to extrapolate results to a larger group of cases (Seawright & Gerring, 2008). Instead, the main goal was to gain insight into two selected educational programs, to explore what the meaning of transfer might be in that setting, and to explore findings from the private sector in a different

setting. Nevertheless, these case studies can be an inspiration for other cases, and help other educational institutes to ameliorate their programs, in order to enhance effectiveness and knowledge transfer. The Belgian context as such has not been studied, but, methodologically, it is important to mention that the organizational features that are emphasized may be influenced by “Belgian characteristics.” It would be interesting to study similar programs in other countries, in order to see whether the results presented here are valid for different cultures’ cases.

According to the typology discussed by Seawright and Gerring (2008), it can be assumed that this study is based on *influential cases*. They state that “the goal of this style of case study is to explore cases that may be influential vis-à-vis some larger cross-case theory, not to propose new theoretical formulations (though this may be the unintended by-product of an influential case analysis)” (p. 303). The case in this article is to study transfer of management programs in a different context, in order to see whether they differ from the transfer of short-term programs in the private sector. It is possible, as has been suggested, that the generally accepted definition of transfer may be refined in order to meet the specificities of programs and sectors.

Data Sampling and Topic Guide

The data that this study is based on were collected in two series of qualitative, in-depth, semi-structured interviews with Belgian federal civil servants.¹ All of them graduated from an educational program in public management between 2001 and 2007. Both series of interviews were distributed equally across gender, age, and work experience. The first group of interviewees graduated from an academic Master in Public Management and Public Policy program (MPP). By interviewing those respondents, we aimed to have a *broad picture* of transfer and transfer-inhibiting factors from this program in a *diversity of organizations*. A total of 13 people were interviewed, which represents a response rate of almost 40 percent. The respondents worked in the following organizations: Belgian Military; Court of Audit of Belgium; Federal Departments of Economy, Health, Internal Affairs, Justice, and Social Security; Federal Parliament; Federal Police; National Institute for Disease and Invalidity Insurance; and the National Office of Pensions.

The second group graduated from a Public Management Program (PUMP) that was limited to 50 federal civil servants, who were selected by their departments and the university. PUMP is commissioned by the federal government, and aims to create a pool of experts who are capable of supporting the administration’s modernization. This group of interviewees was limited to civil servants from the Federal Department of Justice, in order to gain an *in-depth* picture of transfer and transfer-inhibiting factors from a program in *one department*. Sixteen people (representing a 40 percent response rate) were interviewed from the following institutions: Correctional Institution for

Juveniles; Court of Appeal; Department of Homeland Security, Gambling Commission; Department of Penitentiaries, Prisons; and the National Institute for Criminality and Criminology. The PUMP can be considered as an executive program that only addresses professionals.

Table 2 provides an overview of the interviews, along with core information on interviewees' respective programs. All interviewees graduated between 2001 and 2007. Although this is a large range of years, we thought it would be interesting to see if time made an impact on transfer. Given that these kinds of programs may have a different form of transfer, it was necessary to consider a large time frame, because transferring management programs may need more time than transferring short-term, technical training programs. The number of respondents was rather small in terms of absolute numbers, but in terms of the response rate, it was quite good. [See Table 2]

Table 2.
Overview of Interviews

	Public Management Program (PUMP)	Master in Public Management and Public Policy (MPP)
Main Objectives of Program	<ul style="list-style-type: none"> • Provide insight in public management and policy • Impart knowledge and skills concerning methods in public management and policy • Develop competencies for public sector managers • Create a pool of experts and generate managerial capacity within the federal administration • Support the modernization process • Generate an intradepartmental and interdepartmental network of experts 	<ul style="list-style-type: none"> • Provide insight in public management and policy • Impart knowledge and skills concerning methods in public management and policy • Develop competencies for public sector managers • Encourage networks among (future) civil servants from various public administrations
Target Group	<ul style="list-style-type: none"> • Civil servants from the federal administration 	<ul style="list-style-type: none"> • Civil servants (federal, Flemish/regional and local levels) • Regular students

Table 2.
Continued

<p>Specific Program Characteristics</p>	<ul style="list-style-type: none"> • Selection procedure • Commissioned by the federal administration • Focus on the federal administration • Supervisor's permission is requested • Participants are part time-released • Target group = Civil servants with high potential 	<ul style="list-style-type: none"> • No selection procedure • Civil servants from federal, Flemish/regional and local levels may participate • Focus on public sector in general • Supervisor's permission is advised • Time-release for classes and tasks depends on the organization's support • Target group = Everyone interested
<p>Target Group for Interviews</p>	<p>Graduates working in the Justice Department</p>	<p>Graduates working in different organizations of the Belgian federal administration</p>
<p>Aim of Interviews</p>	<p>Gain insight on knowledge transfer in one specific department (i.e. Justice Dept.); In-depth insight</p>	<p>Gain insight on knowledge transfer in many different federal organizations; Administration-wide insight</p>
<p>Number of Interviews Conducted (All respondents graduated between 2001-2007)</p>	<p>16 interviewees (response rate=40%) from:</p> <ul style="list-style-type: none"> • Correctional Institution for Juveniles • Court of Appeal • Department of Homeland Security, Gambling Commission • Department of Penitentiaries, Prisons • National Institute for Criminality and Criminology 	<p>13 interviewees (response rate=40%) from:</p> <ul style="list-style-type: none"> • Belgian Military • Court of Audit of Belgium • Federal Depts. of Economy, Health, Internal Affairs, Justice, and Social Security • Federal Parliament • Federal Police • National Institute for Disease and Invalidity Insurance • National Office of Pensions
<p>Interview Dates</p>	<p>July – August 2007</p>	<p>February – May 2007</p>
<p>Methodology</p>	<p>Semi-structured interviews were based on Learning Transfer System Inventory (LTSI) factors. Each factor was considered as a topic and divided into different subtopics. Because the LTSI only focuses on transfer-inhibiting and transfer-stimulating factors, a battery of questions about transfer was added.</p>	

RESULTS

The results described here are general conclusions from the interviews for each topic. Differences between the two categories of respondents are highlighted when necessary. Because this article has an explorative nature, it is more important to focus on the perception of the majority than on the individual differences between respondents. Of course, when the majority is small, an in-depth view of individual perceptions is necessary.

Transfer-Inhibiting and Transfer-Stimulating Conditions

Learner Readiness: Though both PUMP and MPP graduates enrolled on their own initiatives, more than 90 percent said they lacked a clear idea about the utility of the program towards their work. In other words, they weren't completely ready to enter the program, because they didn't know what they would do afterwards.

Performance Self-Efficacy: No respondent doubted his/her personal capacities to transfer knowledge. This self-confidence is strengthened by the fact that they all had high grades or obtained their graduation certificates quite easily. Nevertheless, most of the respondents doubted whether they would receive the opportunity from their organizations to transfer their acquired competencies.

Motivation to Transfer Learning: Each MPP graduate had a modest transfer motivation: There was transfer willingness, but they also were conscious about the fact that transferring these kinds of programs isn't straightforward. The PUMP graduates were extremely motivated to transfer, but once they returned to the workplace, some of them were confronted with organizational resistance, which decreased their initial motivation.

Transfer Effort-Performance Expectations & Performance-Outcomes Expectations: Both MPP and PUMP graduates believe that transfer will lead to increased job performance, and that it also may lead to career growth or change. Though the respondents are aware of the fact that transfer isn't a guarantee to success, they all expect some kind of positive consequence from their knowledge transfer.

Feedback/Performance Coaching & Supervisor/Manager Support and Sanctions: One MPP respondent claimed to have no support at all from his supervisor to enroll in the program. Though not obligatory, the other MPP participants had supervisor support. However, only a few were asked to provide feedback to their supervisors about the program and how things were going. Generally speaking, providing feedback to a supervisor was limited to job performance for both programs. This suggests that actual work performance receives more attention than transfer. Some PUMP graduates did receive more strategic tasks, which they perceived as a reward, but these merely were added to existing tasks and created extra work.

Peer Support: Peer support is non-existent in the MPP. In the PUMP,

peer support is limited to one's closest colleagues, even though there is some skepticism among the colleagues about the program's utility.

Resistance/Openness to Change: Fifty percent of the respondents in each program perceived their organizations as innovative, the other fifty percent perceived them as conservative towards change.

Personal Outcomes – Positive and Negative: For most of the MPP graduates, there was no outcome at all. Three of them declared that they would receive a premium, due to their graduation, but not because of any knowledge or expertise transfer. As for PUMP, the higher-ranked civil servants perceived the program as having a positive influence on their careers, which was contrary to perceptions in the lower ranks.

Opportunity to Use Learning: Almost nobody from the MPP graduates was subjected to a change in the responsibilities or tasks linked to their positions. The benefit of the program seemed to be limited to gaining extra insight into their personal jobs. PUMP graduates received more opportunities, because some of them were asked to do more strategic tasks, and others voluntarily changed their job content in order to use their newly achieved knowledge. However, generally speaking, it can be concluded that opportunity mostly comes by coincidence, rather than because it is specifically designed for a person's job. This means that the link between the program and the career is not structured.

Personal Capacity to Transfer: The graduates had to find their own necessary time and energy to apply newly acquired knowledge in the workplace. Even if they were asked to change their job content, they were fully responsible for knowledge transfer. The PUMP graduates were confronted with increased tasks, which gave them less time to try to transfer new knowledge.

Perceived Content Validity/Transfer Design: Though all participants were satisfied about the quality of the MPP, most of them (with the exception of one respondent) perceived a gap between theory and practice. The PUMP participants were unanimously positive about the program and perceived no gap.

Transfer

As stated above, the perception of the respondents towards transfer was questioned during the interviews: Did they sense that the program had an influence on their jobs? Did they sense a use of their knowledge?

Two MPP graduates stated that they actually used the program: One of them worked for the study group of a political faction, where advice had to be formulated on topics like administrative reform and governmental relations. Obviously, a Master in Public Management and Policy would have added value to this kind of work. The other person worked for a public sector educational institute. What she transferred was more focused on what she had learned about the academic educational system, rather than on course contents, which, ironically, is not an expected type of transfer. All other respondents from both

programs stated that transfer was vague or indirect. Yet, it seemed that the PUMP group achieved some kind of transfer more often than the MPP group. Respondents easily confirmed the application of their programs, and had more of a feeling that they could be better at doing their jobs. It could be assumed that executive programs are more likely to obtain transfer, because they have a more specific target group, and, as such, more specific goals and expectations.

One MPP respondent stated that his supervisor was not interested in the program, and that he didn't want him to use newly learned models, theories, or skills. Other respondents stated that they got the opportunity to participate in modernization projects because of the program. But they did not necessarily use newly acquired knowledge in this new work. It seemed that the positive image of having completed these programs sometimes had a bigger impact on a job than its specific content did.

DISCUSSION

Because the main inhibiting and/or stimulating transfer conditions stem from the individual, the transfer climate, and the educational program, they will be discussed in this section and presented within the context of the most recently described results.

The Individual: Based on the results, it seemed that all respondents were interested in the program, and that they enrolled on their own initiatives — with or without supervisor support. Consequently, it can be assumed that transfer motivation was present. It also can be assumed that they all had the necessary intellectual capacities to increase their learning levels and to transfer their knowledge. In addition, the respondents believe that they have the necessary capacities to do so, which of course is an important condition for transfer. Satisfaction with the program was high, which was essential, according to the moderating effect of this variable.

However, not everything was positive on the individual side. An important transfer-inhibiting aspect was the lack of preparedness by the majority of respondents. The major consequence of this aspect is that civil servants had no clear idea about how they could use the program. Theoretically, participants first should question themselves about the competencies they have, and the ones they need to acquire. A program can be used to fill the gap between the two. It is highly doubtful that the respondents had a clear picture about the role of the program in developing their competencies. And, of course, this was not only the responsibility of the individuals, but also that of the supervisors who agreed with their enrollment. Those problems can be countered when the program doesn't remain isolated from other organizational processes. Central questions in that respect were: How can the organization benefit from these competencies? Which projects could be carried out after the program by the person in question? How can the organization and the individual benefit from efforts that have been made

in the program? Can the individual be rewarded by the organization? In sum, it is crucial to consider the program as one of the HRM mechanisms that can increase performance. Kessels, Smit, and Keursten (1996) highlight this aspect in their pedagogical model: After describing the “as is” phase of the organization, and defining the “to be” situation, it became necessary to find out which competencies were needed to achieve organizational goals. The educational program must encounter these goals by giving identified skills and knowledge to the employees. It also is the responsibility of the program to ensure that its participants have a clear picture of the role of the program in developing their competencies. The difference between PUMP and the MPP was that PUMP specifically had been designed for the federal administration, which was not the case for the MPP. Logically, PUMP participants should have had a clearer picture about the utility of the program for themselves and their organizations, because PUMP is explicitly designed to benefit the federal administration. However, this assumption is not supported by data. The fact that the PUMP respondents got permission to enroll in the program, but did so (a) without any vision of competency development as an integral part of organizational function and performance, and (b) without knowing what they could expect from the program, indicates that their enrollment was based only on the perception of interest and usefulness, and not on an actual, well-defined, organizational need.

The Training Program: Interest in and satisfaction with the programs was high. However, one major transfer-inhibiting aspect was the perceived gap between theory and practice in the MPP. Most of the respondents experienced a large gap, which made knowledge transfer more difficult. From a theoretical perspective, transfer in this situation seemed to be that of *far transfer*. The participants from PUMP didn't estimate a gap as large as those from the MPP did—which seems obvious, given the fact that the program is specifically designed for the federal administration.

The Transfer Climate can be described as neutral. Most supervisors gave respondents permission to enroll, but none of them requested feedback during the program. In most cases, information that the respondents were participating in the program was not even provided to their colleagues. Although only one supervisor was explicitly against the use of acquired knowledge, nobody stimulated or required transfer. One possible explanation for this neutral attitude is that most of the supervisors didn't have a clear idea about the program's utility for their departments. Some graduates wanted to use their knowledge, but didn't get the opportunity, while others got opportunities, but didn't use the program. Fifty percent of the respondents perceived their workplaces as conservative, and none had the feeling that active steps were being taken to let transfers happen with ease. The transfer climate of the PUMP group seemed to be less passive than that of the MPP group, even though the main transfer responsibility remained with the individual.

Transfer: In conclusion, the data demonstrated that an optimal level of transfer was not reached, because of the presence of transfer-inhibiting conditions within the individual, the transfer climate, and the training program. However, the general conclusion was not completely negative. There still seemed to be some kind of transfer, but it is important to consider which transfer was the case here. Tying back to this article's central question on the nature of transfer of public management programs, the following conclusions can be made, according to the Weiss' (1979) typology explained in the section on defining "applications."

- **Knowledge-Based:** The data seemed to support the idea that received knowledge sometimes is used for small, incremental decisions. Respondents clearly stated that the programs helped them in daily work.
- **Problem-Solving:** Given the lack of preparedness by the participants, it is highly doubtful that acquired knowledge was used to solve a well-defined problem.
- **Enlightenment:** The results of this study didn't reveal any results about enlightenment. First, the study was based on a small sample of participants. Enlightenment may happen after a while, if a larger group follows the same program. The number of participants was too small to state whether there was transfer to the federal administration as a whole. Second, this study didn't address group processes. If one wanted to measure enlightenment, transfer must be moved from the individual to the group level. As such, we cannot state that enlightenment was achieved, but it still could be achieved in the future.
- **Political or Strategic:** It seemed to be observed that information was used to give a decision more weight.
- **Interactive:** There was competition between those who participated in the program, and those who didn't. The specific position of the participant seemed to be important in such situations. In the PUMP data, it was made clear that there was a difference between higher- and lower-ranked civil servants.
- **Intellectual Enterprise:** This was not supported by the data, because the acquired knowledge from the PUMP or MPP groups wasn't considered as one of the possible ways to deal with certain problems. In addition, the data didn't support a problem-solving use of knowledge, which made it even harder to assume that intellectual enterprise would be observed.

From this perspective, the data support the fact that transfer is limited to a knowledge-based, interactive, or political use of new information. It is clear that

a higher level of transfer would have been a problem-solving use of knowledge, or enlightenment.

CONCLUSION

Although the type of knowledge transfer found in the data was rather amorphous, it doesn't mean that no transfer occurred. Because the concept was broadened in the theoretical part of this article, it was made clear that a whole range of transfer possibilities could have occurred, even if they were difficult to observe in everyday life. We can assume that those programs had an added value of performance. From this perspective, it is extremely important to further investigate the nature of transfer, since this also could stimulate the development of transfer-enhancing strategies. This article demonstrated that (a) programs and employers need to encourage the awareness of specific goals for degrees, (b) it is important for programs to tailor degrees more explicitly to their audiences, and that (c) it is possible for "executive" master's degrees to be more successful because they specifically address their goals to a certain audience. This is useful for other institutions, because their roles are extremely important to the success of a program and its use afterwards. Therefore, it would be interesting to study other programs in other countries, in order to see whether the same conclusions would be made, and to help ameliorate a program's weak points.

Academics and practitioners are focusing more and more on public management programs. Therefore, it is necessary to broaden the transfer debate from the private sector to the whole labor market. The public sector in itself needs specific strategies to enhance the ROI of educational programs. The reason for this is the specific nature of the public sector. The following three examples detail this nature and its potential to create transfer-inhibiting or transfer-enhancing behaviors.

1. Because it seeks public rather than private profit — and because the goal of public profit is vastly different from the private sector's goal — it becomes extremely difficult to hold an employee accountable for a certain percentage of gained or lost profit. In other words, if the ROI of an educational program itself is difficult to measure (Kirkpatrick, 1994), it becomes even more difficult to measure the ROI of public sector programs.
2. In Belgium, civil servants mostly are appointed for life, which means that their personal investment after the program is difficult to compel. Their engagement is merely a personal choice. This makes it important to emphasize the opportunities that individuals receive from following a program for their careers or for their job duties. Although this factor wasn't addressed by the model, it would be interesting to take into account for further research.

3. In its role as accountable to the political world, the public sector always is connected to those specificities. This means that a governmental shift could cause changes within the public sector. From a normative point of view, it stands to reason that educational investments made in the past would continue to generate positive effects for the future, even in a changed political climate. Similarly, every developed competency should have a positive impact on an organization, despite political contexts.

Finally, two questions remain: What can other countries learn from this? And how can this knowledge improve the teaching of programs in public management? It is crucial to be aware that the effectiveness of educational programs can be partly foreseen. Indeed, what happens before the program takes place is of high importance for what will happen after its completion. In other words, the conceptualization and implementation of a program have a transfer-predictive nature, and may be even more important than the actual transfer phase. Organizations — whether in Belgium or elsewhere — should take into account that, if the involved parties (the participants, the organization, and the training institute) clearly discuss (a) preparedness, (b) the link between the program and its benefit to the organization, (c) program goals, (d) supervisor support, and (e) participants' expectations about the program and about their jobs afterwards, then different transfer inhibiting factors already will have been encountered. In sum, organizations should discuss the knowledge transfer issue before sending an employee to a program. And the discussion must not remain as a bilateral debate between supervisors and participants. It instead should be a joint effort with the personnel unit of the organization, the training institute, and in some cases the participants' colleagues.

Public management programs automatically will be improved if sufficient effort is put into the conceptualization phase. It absolutely is necessary that these kinds of programs be aware of the educational needs of organizations, and integrate enough realistic case-material for participants to easily link theory with practice. Educational goals also must clearly be defined for organizations, so that they know what can be expected. As such, goals and needs can meet, and create a program with a high utility rate.

REFERENCES

- Alliger, G., Tannenbaum, S., Bennett, W., Traver, H., & Shotland, A. (1997). A meta-analysis of the relations among training criteria. *Personnel Psychology, 50*, 341- 358.
- Awoniyi, E., Griego, O., & Morgan, G. (2002). Person-environment fit and transfer of training. *International Journal of Training And Development, 6*(1), 25-35.

Knowledge Transfer of Educational Programs in Public Management:

- Baldwin, T., & Ford, J. (1988). Transfer of training: A review and directions for future research. *Personnel Psychology*, 41, 63-105.
- Bates, R. (2005). A critical analysis of evaluation practice: The Kirkpatrick model and the principle of beneficence. *Evaluation and Program Planning*, 27, 341- 347.
- Bates, R., & Khasawneh, S. (2005). Organizational learning culture, learning transfer climate and perceived innovation in Jordanian organizations. *International Journal of Training and Development*, 9(2), 96-109.
- Berghenhenegouwen, G., Mooijman, E., & Tillema, H. (1994). *Effectevaluatie Van Opleidingen. Strategisch opleiden in organisaties*. [Effect evaluation of educational programs. Educating strategically in organisations]. Deventer: Kluwer Bedrijfswetenschappen.
- Broad, M., & Newstrom, J. (1992). *Transfer of training: Action-packed strategies to ensure high payoff from training investments*. Reading, MA: Addison-Wesley.
- Burke, L., & Hutchins, H. (2007). Training transfer: An integrative literature review. *Human Resource Development Review*, 6(3), 263-296.
- Caplan, N. (1979). The two-communities theory and knowledge utilization. *American Behavioral Scientist*, 22(3), 459-470.
- Chen, H. (2003). *Cross-cultural construct validation of the learning transfer system inventory in Taiwan*. (Unpublished doctoral dissertation). Louisiana State University, Baton Rouge.
- Clarke, N. (2002). Job/work environment factors influencing human transfer within a human service agency: Some indicative support for Baldwin and Ford's transfer climate construct. *International Journal of Training and Development*, 6(3), 146-162.
- Devos, C., Dumay, X., Cassart, B., Bodenghien, A., & Vallaey, P. (2006). *Evaluation des facteurs susceptibles d'influencer le transfert des acquis de formation*. [Evaluation of factors capable of influencing transfer of knowledge]. Unpublished manuscript, Department of Humanities & Social Science, Katholieke Universiteit Leuven [Universite' Catholique de Louvain], Louvain-la-Neuve, Belgium.
- Donovan, P., Hannigan, K., & Crowe, D. (2001). The learning transfer system approach to estimating the benefits of training: Empirical evidence. *Journal of European Industrial Training*, 25, 221-228.
- Ford, J., Quiñones, M., Segó, D., & Sorra, J. (1992). Factors affecting the opportunity to perform trained tasks on the job. *Personnel Psychology*, 45, 511-527.
- Foxon, M. (1994). A process approach to the transfer of training. Part 2: Using action planning to facilitate the transfer of training. *Australian Journal of Educational Technology*, 10(1), 1-18.
- Gilpin-Jackson, Y., & Bushe, G. (in press). Leadership development training transfer: A case study of post-training determinants. *Journal of Management Development*.
- Gumuseli, A., & Ergin, B. (2002). The manager's role in enhancing the transfer of training: A Turkish case study. *International Journal of Training and Development*, 6(2), 80-97.

Knowledge Transfer of Educational Programs in Public Management:

- Holton, E. (1996). The flawed four-level evaluation model. *Human Resource Development Quarterly*, 7(1), 5-21.
- Holton, E., & Bates, R. (1998). *Learning transfer system inventory: Administrator's guide*. Retrieved February 2, 2007, from http://www.edholton.com/_private/New%20EdHolton/LTSI.htm
- Holton, E., Bates, R., Seyler, D., & Carvalho, M. (1997). Toward construct validation of a transfer climate instrument. *Human Resource Development Quarterly*, 8(2), 95-113.
- Holton, E., Bates, R., & Ruona, W. (2000). Development of a generalized learning transfer system inventory. *Human Resource Development Quarterly*, 11(4), 333-360.
- Holton, E., Chen, H-C, & Naquin, S. (2003). An examination of learning transfer system characteristics across organizational settings. *Human Resource Development Quarterly*, 14(4), 459-482.
- Kessels, J., Smit, C., & Keursten, P. (1996). *Het achtvelden instrument: Analyse kader voor opleidingseffecten*. [The eight-field instrument: Analytical framework of educational effects]. San Francisco: The Learning Company.
- Kirkpatrick, D. (1994). *Evaluating training programs: The four levels*. San Francisco: Berrett-Koehler.
- Kontoghiorghes, C. (2004). Reconceptualizing the learning transfer conceptual framework: Empirical validation of a new systemic model. *International Journal of Training and Development*, 8(3), 210-21.
- Lim, D., & Johnson, S. (2002). Trainee perceptions of factors that influence learning transfer. *International Journal of Training and Development*, 6(1), 36-48.
- Lim, D. & Morris, L. (2006). Influence of trainee characteristics, instructional satisfaction, and organizational climate on perceived learning and training transfer. *Human Resource Development Quarterly*, 17(1), 85-115.
- Neilson, S. (2001). *IDRC-supported research and its influence on public policy. Knowledge utilization and public policy process: A literature review*. [Review for Evaluation Unit of International Development Research Centre (IDRC)]. Ottawa, ON: IDRC.
- Olivero, G., Bane, K., & Kopelman, R. (1997). Executive coaching as a transfer of training tool: Effects on productivity in a public agency. *Public Personnel Management*, 26(4), 461-69.
- Paek, J., & Hawley, J. (2006, February). *A study of training program characteristics and training program effectiveness among organizations receiving training services from external training providers*. Paper presented at the International Research Conference, Academy of Human Resource Development, Columbus, OH.
- Pidd, K. (2004). The impact of workplace support and identity on training transfer: A case study of drug and alcohol safety training in Australia. *International Journal of Training and Development*, 8(4), 274-88.
- Quiñones, M. (1995). Pretraining context effects: Training assignment as feedback. *Journal of Applied Psychology*, 80(2), 226-238.

Knowledge Transfer of Educational Programs in Public Management:

- Quiñones, M., & Holladay, C. (2003). Practice variability and transfer of training: The role of self-efficacy generality. *Journal of Applied Psychology, 88*(3), 1094-1103.
- Ruona, W., Leimbach, M., Holton, E., & Bates, R. (2002). The relationship between learner utility reactions and predicted learning transfer among trainees. *International Journal of Training and Development, 6*(4), 218-228.
- Salomon, G., & Perkins, D. (1989). Rocky roads to transfer: Rethinking mechanisms of a neglected phenomenon. *Educational Psychologist, 24*(2), 113-141.
- Seawright, J., & Gerring, J. (2008). Case selection techniques in case study research: A menu of qualitative and quantitative options. *Political Research Quarterly, 61*, 294-308.
- Smans, S. (2005). *Transfer van training in arbeidsorganisaties: Een verkennende studie naar de praktijk*. [Transfer of training in labour organizations: An explorative study in practice]. (Unpublished doctoral dissertation). Katholieke Universiteit Leuven [Universite' Catholique de Louvain], Louvain-la-Neuve, Belgium.
- Thayer, P.W., & Teachout, M.S. (1995). *A climate for transfer model* (Report AL/HR-TP-1995-0035). Brooks Air Force Base, TX: Air Force Materiel Command.
- Tracey, J., & Tews, M. (2005). Construct validity of a general training climate scale. *Organisational Research Methods, 8*(4), 353-374.
- Van der Klink, M., Gielen, E., & Nauta, C. (2001). Supervisory support as a major condition to enhance transfer. *International Journal of Training and Development, 5*(1), 52-63.
- Weiss, C. (1979). The many meanings of research utilization. *Public Administration Review, 29*, 426-631.
- Yamhill, S. (2001). *Factors affecting transfer of training in Thailand*. (Unpublished doctoral dissertation). University of Minnesota, Minneapolis.

FOOTNOTE

- ¹ There are, basically, three government levels in Belgium: federal, regional (Flemish), and local.

Bruno Broucker is a doctor of Social Sciences and, until March 2010, was a senior researcher at the Public Management Institute, Katholieke Universiteit Leuven, Belgium. He is currently working at the Office for Educational Policy, Katholieke Universiteit Leuven. His research expertise focuses on educational policy, educational effectiveness, and transfer of knowledge.