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**Panel: ‘Education and Training in Public Management’**  
**\* Experiences with linking education and practice**

**The use of PA knowledge and skills in the practice of PA: a view from alumni**

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**Abstract**

Programmes on public administration and/or public management are continuously challenged to evaluate their programme content and didactical approaches. Much time and effort is invested in the adjustment of these programmes and courses to the needs of students. Equally important, however, is tuning in with external demands and in particular the public sector as current or future employer of the graduates. An important objective of programmes on public administration is the development of knowledge and skills that graduates can use in their working life. Therefore, the impact on the daily work in public organizations should be taken into account in the evaluation of the programme.

In this paper, we investigate the level of transfer of the training to daily work. This paper discusses part of an evaluation study of the Master of Science in public management and policy of the K.U.Leuven, Belgium. A survey was conducted with four cohorts of graduates, who all followed a similar programme since the time the new Bachelor-Master structure was fully put into place in the academic year 2007-2008. Instead of investigating the level of transfer on a general level – programme-wide – it was decided to analyze transfer at the course level: thus providing a complete overview of contents. We thereby focused on knowledge and skills and not on attitudes. Including the latter would have required a more complicated design, which fell outside the scope of our evaluation. The respondents were asked to indicate for each content how enriching and how useful it is in their daily activities. The results of this study indicate the utilization of our teachings and reveal a large level of transfer with the alumni. Almost 78% indicates that they use the contents from the master programme in their daily work. A general trend that can be derived, is the lower (average) scores for usefulness/usability compared to the scores for interest. Systematically, courses are found to be interesting and enriching, however, the specific topics are not easily used on or transferred to the work floor. Ideally, the results are a first input for teaching staff to consider adapting their programmes more towards the needs of employees.

## **Introduction**

Educational programmes in public administration are increasingly challenged to evaluate their contents and didactical approaches. Students are asked to evaluate the quality of existing courses through different methods and techniques. The results of these evaluations are used to adjust and improve programmes and courses to the needs of students. Notwithstanding the relevance of these adjustments to the demands of students, the pursuit of high quality programmes should take into account also demands that come from external actors such as the future employers of current students. Any educational programme of public administration should aim at the development of knowledge and skills that students will use in their working life, particularly in public sector employments. In other words, the evaluation of public administration programmes should include the impact of the knowledge and skills developed by these programmes on the daily work of public sector organizations.

In this paper, we first introduce the concept of transfer on the basis of a model developed by Kirkpatrick. We proceed with the Learning Transfer System Inventory (LTSI) as a tool of measurement. Second, we briefly describe the master programme on which the survey applies. The methodology used for this research is explained in a third section. We discuss the results in two parts. Part one discusses results on the levels distinguished in Kirkpatrick's model, with a focus on the behavioral level. Part two takes a closer look at the contents of course components. We end our paper with intermediate conclusions and directions for further research.

The results presented in this paper offer insights on the transfer of training in public administration and management. By answering specific questions on the programme analyzed (e.g., Are the topics covered by this master programme transferred to daily work in public sector organizations? Does this master programme have any impact on daily work in public sector organizations?), the analysis will suggest some directions for better tuning master programmes in public administration and management with the demands of employees, not only of students. Related to this, it should be noted that this research (and paper) are a work in progress. Ideally, we would have organized a focus group on beforehand in order to test the questionnaire and see whether an evaluation on the topic level of courses was realistic.

## I. The concept 'transfer'

Our paper falls in the domain of knowledge transfer. Transfer can be situated amongst a broad range of training effects. It needs to be distinguished from learning effects, training effectiveness and the effect of training on organizational performance. Where the learning effect can be defined as the extent to which one has learned something, training effectiveness could be seen as the extent to which the goals of the training were reached (so not the goals of the individual or organization) (Broucker, 2009, p.15). Transfer effects on the other hand are the application of learning on the workplace. Broad and Newstrom (1992, p.5) define transfer as "the effective and continuing application, by trainees to their jobs, of the knowledge and skills gained in training - both on and off the job". On the basis of this definition, we focus in this paper on transfer effects rather than on other effects. We also want to clarify that we analyze the effect of a specific training programme; other forms of learning are not considered in this paper.

It is important to stress the difference between these terms. A training programme can surely be effective without transfer occurring, or transfer can occur without any effect of the training on the organization (Broucker, 2009, p.16). To distinguish between these effects, the four-level evaluation model of Kirkpatrick (1994) is often used<sup>1</sup>. This model distinguishes between four levels of training effectiveness: reaction, learning, behavior and results. At the **reaction level**, programmes measure the reactions of students, such as for instance customer satisfaction. It is assumed by Kirkpatrick (but refuted by others (Broucker 2009: 16-17)), that students who are not satisfied with the course, will neither be willing to learn. At the **learning level**, one would investigate the extent to which learning has occurred. Without learning, without the acquisition of skills and attitudes, no transfer can occur. A focus on learning measures whether students have actually learned and what they have learned (Kirkpatrick, 1994). In our paper, we assume that all graduates have learned the content of our programmes, after having successfully completed the exams.

For the purpose of our paper, we are most interested in the third level of Kirkpatrick's model. Hence, we focus on **behavior**, behavioral improvement and the application of acquired knowledge and skills. Kirkpatrick's fourth level, the **results level**, where one would investigate the effects in the organization that have occurred because of the training (ex. increased productivity, improved quality of work, decrease of costs, improved policy design,...), are, like the first and second level, not addressed in this paper.

The **behavioral level** is the transfer level: to what extent does one use the programme contents? The behavioral level concerns the extent to which participants transfer the gained knowledge and skills from the training to the workplace. In this paper we have used the definition of Broad and Newstrom (1992).

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<sup>1</sup>The Kirkpatrick-model – although appealing and often used because of its simplicity – was also criticized for two main reasons.

Firstly, according to Kirkpatrick insight into the reaction, learning, behavior and result level of a training allows to determine the effectiveness of the training. This however neglects multiple other factors that can influence training effectiveness: organizational, individual and training characteristics can influence effectiveness before, during and after the training (Broucker, 2009, p. 28; Donovan, Hannigan & Deirdre, 2001, p. 221). Secondly, Kirkpatrick supposes a relation between the four levels. Satisfaction with the training will lead to a learning effect, which will lead to a transfer effect, which in his turn will lead to an effect in results. To conclude, a positive result on one level is necessary in order to obtain a positive result on the next level. Moreover, he supposes that information on a certain level has higher value than the information obtained on a lower level. However, for neither of these assumptions empirical evidence was found (Holton, 1996, Bates, 2005).

The wording "continuing application" highlights the time aspect of transfer and implies that it is a sustainable use of the content learned (Broucker, 2009, p. 15; Meeus, 2010, p. 40). However, it can be debated what is meant by "application" of the participant? Caplan (1979) distinguishes between "conceptual use" and "instrumental use". An instrumental application of the contents involves daily use in all kinds of acts that are of less importance. A conceptual application of the contents, however, is the use in important decisions with significant impact (Broucker, 2009, p. 20). "Knowledge and skills" can be seen in the broad sense whereby, knowledge refers to what one knows and understands. Skills refer to the "how" of something and refer to the processes used to act (Broucker, 2009, p. 13). The addition "both on and off the job" indicates that the concept of transfer can apply both to knowledge gained in the workplace (ex. through contact with colleagues) and knowledge gained in training (Broucker, 2009, pp. 15-16). This paper clearly deals with off the job learning.

According to Thayer and Teachout (1995) transfer is a vital link between the learning process and increased organizational performance (Broucker, 2009, p. 16, p. 28 and p. 36). When the benefits of the training are limited to the learning level, this may have advantages for the individual (in the sense of personal enrichment or a broadening of vision), but not for his employer. For organizations, it is only sensible to invest in training when their employees also use the contents learned in their daily job.

Applied to our study, the central question is 'which behavioral change has occurred in the workplace after participants have completed the master programme?'. To measure this change, we used the *Learning Transfer System Inventory* (LTSI) of Holton et al (2000), which measures the fostering or obstructive conditions for transfer, both on the level of the individual and programme as on the level of the organization. It is a questionnaire that participants fill in after the training (Broucker, 2008, p. 6, 2009, p. 16). Through exploratory factor analysis the LTSI identified 16 factors, including 11 factors that focus on the specificity of a course (supervisor support, transfer design, negative personal outcomes, personal capacity for transfer, learner readiness, perceived content validity, peer support, opportunity to use learning, motivation to transfer learning, supervisor sanctions, positive personal outcomes) and 5 factors that are more generic (performance coaching, performance-outcomes expectations, performance self-efficacy, transfer effort-performance expectations and openness to change) (Broucker, 2009, pp. 161-162). Holton (2003) groups these factors into 4 clusters: ability, motivation, work environment and secondary influences. *Ability* refers to the ability to use knowledge and expertise. This category includes a number of factors that may prevent transfer, such as "lack of opportunity to have learned to use" and "lack of personal capabilities." The factors "content validity" and "design transfer" fall under this heading. These two relate to the content and setting of the course. *Motivation* refers to the willingness of the participant to transfer to the workplace. The motivation is strongly influenced by the extent to which the individual is confident that his transfer efforts have a positive influence on his situation. *Workplace* reflects on whether the work environment permits the use of knowledge or rather is against it. This group includes items that relate to the relationship between employees and management, the colleagues and any rewards or penalties that come with transfer. Finally, *secondary influences* include participant characteristics. In our research, a modified version of the LTSI was used. We started from the translated (into Dutch) and expanded (with scales on transfer specifically) version, as created by Broucker (2009) and then slimmed it down to the purposes of our research. Including all necessary scales (for example those on trainee characteristics and transfer), but leaving out less relevant

scales (especially those on work environment, since we are not focusing on transfer climate, and also some on motivation, which started from professionals going back to study and are less applicable to the regular students who studied without prior working experience).

Of course, when answering the question 'which behavioral change has occurred in the workplace after participants have completed the master programme?', several issues were not studied in detail. Since we do recognize the importance of them, they need to be taken into account. In a first respect, the transfer climate the alumni experiences in the organization plays a major role. Although we are aware of its importance, it does not fall within the primary scope of this research. Second, we must realize that students/alumni can change their behavior in a first instance, but afterwards fall back into old habits. Third, given there are four cohorts of students, not everybody has had equal changes of applying the studied contents. Recent graduates might not have had many opportunities yet to apply what was learned. Therefore, we provided in the questionnaire also a statement which verifies the extent to which participants believe that the training will pay off in the long term. Perhaps the training so far has not yielded much for them, but they are convinced that the training is a maturation process and in the future will yield more benefits. Finally, from the definition of transfer, it is important to note that there is a difference between the various meanings of use of knowledge and skills. Using knowledge from courses in public management is probably of a different kind than the use of knowledge from a course on software. There might also be difference in the timing: a management training may not be immediately useful, compared to a training on presentation skills? In that respect, we will have particular attention for knowledge- vs. skills components in each course, assuming that skills components will be more easily transferred than others.

We shall now first present the Master programme and its contents, to then embark upon the analysis of transfer of this programme.

## **II. About the Master of Science in Public Management and Policy**

The mission of the Master of Science in Public Management and Public Policy is to provide a research-driven and practice oriented graduate education, with a continuing concern for enhancing communication skills as well as adequate analysis, decision making and evaluative skills, for individuals wishing to broaden and deepen their knowledge in public administration, management and policy.

The programme has an explicit policy and management orientation, with specific attention for the relationship with society, thereby preparing graduates to be effective in a dynamic and diverse professional environment, either in the public, private or non-profit sector. Moreover, students are expected to be equipped with a strong theoretical luggage and a basic methodological knowledge allowing them to conduct applied and fundamental research in the field of public administration, management and policy.

In promoting comparative approaches (both in place and time) the master also fosters an open mind and critical thinking as well as reflective skills. Committed as we are to the ideals of public service and advancing the public interest, we seek students who share the same enthusiasm.

The entry into the Master of Science in Public Management and Public Policy is bound to admission conditions. Three categories can be distinguished: students who can enter the master directly, those students who have to take the preparatory programme (to be followed beforehand or at in parallel with the master programme) and those students who first have to take a transitional programme of one year. The student body is quite diverse. On the one hand, the programme hosts students with a variety of academic backgrounds. On the other hand, there are students who have only just obtained their bachelor degree and others who already obtained a master degree. Finally, there is the difference between novices (no work experiences) and professionals/ civil servants. This creates diversity, both in age, in foreknowledge and in experience.

The programme is structured around four clusters of courses: management, policy, administration and methods and techniques: the student is obliged to take minimum one course from each cluster. Moreover, there is the master dissertation in the framework of which a compulsory research seminar is created, in which students develop the necessary research skills.

	<b>Cluster</b>	<b>Courses</b>	<b>ECTS</b>
From each cluster students choose min. one course	<b>Management</b>	Financial management in the public sector	5
		Personnel management in the public sector	5
		Organization of public tasks	5
	<b>Policy</b>	Design and strategy of policy	5
		Policy Implementation	5
		Policy Evaluation	5
	<b>Administration</b>	Government and Citizen	5
		Administrative Law	5
		Governance in the European Union (formerly: Institutions & policies of the EU)	6
	<b>Methods &amp; Techniques</b>	Management skills	5
		Management & Information Technology	5
		Qualitative Research Methods	5
		<b>Subtotal</b>	
	<b>Dissertation</b>		20
	<b>Total</b>		<b>60/61</b>

### III. Methodology

The paper assesses transfer of a master programme in public management and policy offered by the University of Leuven (Belgium). A survey was conducted with four cohorts of graduates from the abovementioned master programme. All graduates have followed the same programme since the full implementation of the Bachelor-Master structure (academic year 2007-2008). Transfer has not been assessed at a macro-level, i.e. the whole master programme, but at the meso- and micro-level, i.e. courses and course topics. The paper assesses transfer of knowledge and skills, rather than attitudes for reasons of constraints in measurement within the scope of this research. The survey consists of two parts, first we used the modified LTSI to measure transfer. For each course topic, respondents indicated the use they make in their daily work. The initial results of the survey provides a broad snapshot on the knowledge and skills mostly used by the graduates. In a later stage, the survey material will be analysed with a view to investigate links between nature of transfer and the characteristics of graduates and their employment in different kinds of agencies and functions. It is also planned to organize a series of focus group interviews, to get a better understanding of the nature and context of transfer of course contents in different public agencies.

### IV. Discussion of results

Out of 161 graduates since 2008, we were able to send the questionnaire to 138 alumni<sup>2</sup>. 56 have responded (response of 40.8%), of which 12 were incomplete.

Given the focus of this paper on the behavioral level of the Kirkpatrick model, we will discuss the use of the acquired knowledge and skills from the Master programme. Therefore we first highlight the results on the different scales measured with the modified LTSI. Since this gives us an indication of transfer encouraging and discouraging factors. In a second part, we then focus on the course contents itself.

#### 4.1 Discussion of transfer scales

For this limited research we selected the most relevant scales from each factor of the LTSI. Moreover, we added the factor of transfer (as developed by Broucker, 2009). Each scale is measured by multiple questions. For our analysis we have added the results on each question in order to determine the overall results. We end this section with some general conclusions.

##### *Trainee characteristics scales*

**Learner readiness:** the extent to which people are prepared for a training programme. The extent to which the individual (1) had the opportunity to give input to the training, (2) knew what to expect from the training and (3) knew how the training was related to job performance and developments on the floor.

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<sup>2</sup> Updating the contact details of our alumni is a difficult issue. When alumni change (e-mail)addresses but do not inform us about it, we lose track of them and cannot reach them anymore.

Questions: (1) I knew beforehand how the training could be useful for my job situation. (2) I knew beforehand what to expect from the Master. (3) The goals of the Master were clear to me from the beginning. (4) I knew beforehand how the Master would fit in my (future) job situation.

	Average Frequency	Percentage
Totally disagree	1	1.8%
Disagree	5.75	10.9%
Neither agree, neither disagree	13	23.6%
Agree	30.5	54.5%
Totally agree	4.75	9%
Total	55	100%

**Performance self-efficacy:** the extent to which an individual believes he is capable to change his performance whenever he wants to. The extent to which people have confidence in the application of new skills in their job and the extent to which they can cope with problems impeding the use of knowledge and skills.

Questions: (1) In general, I have confidence to take new initiatives, even when there is resistance. (2) In general, I feel confident enough to try something new at work. (3) I was sure I had the capacity to use the acquired knowledge and skills from the Master training in my job.

	Average Frequency	Percentage
Totally disagree	0	0%
Disagree	1.3	2.4%
Neither agree, neither disagree	8.66	15.75%
Agree	35.6	64.7%
Totally agree	9.3	16.9%
Total	55	100%

*Motivation scales*

**Transfer effort - performance expectations:** The expectation that the efforts for transfer will lead to changes in job performance. The extent to which people believe that using new knowledge and skills will improve performance. This also includes the belief that making an effort to use knowledge will make a difference and impact future productivity and effectiveness.

Questions: (1) I believe that training in general mostly leads to personal performance improvement. (2) The more someone applies training to the job, the better the job is executed. (3) Anyone who does the effort to learn, will do a better job in the end.

	Average Frequency	Percentage
Totally disagree	0.33	0.6%
Disagree	1.66	3%
Neither agree, neither disagree	9.66	17.56%



Agree	31	56.4%
Totally agree	12.33	22.4%
Total	55	100%

*Work environment scales*

**Supervisor/manager support:** the extent to which managers support the use of new knowledge and skills. The involvement of management in clarifying the expectations after training, identifying opportunities to use the new knowledge and skills, putting forward realistic targets, etc.

Questions: (1) My supervisor remains open for what I have learned in the master. (2) My supervisor encourages me to make maximum use of my master studies. (3) My supervisor is interested in what I have learned in the master. (4) My supervisor expects that I use the knowledge from the Master as much as possible.

	Average Frequency	Percentage
Totally disagree	2.75	5.5%
Disagree	12.5	25%
Neither agree, neither disagree	18.75	37.5%
Agree	14	28%
Totally agree	2.25	4.5%
Total	50	100%

**Resistance/ openness to change:** the extent to which existing group norms are looked upon by individuals as being discouraging towards the use of new knowledge and skills. Resistance to change by the group, the willingness to invest energy in change and the extent of support towards individuals wishing to use the learned.

Questions: (1) There is a lot of resistance to change on the job. (2) People are open towards change, on the condition that it improves performance in the organization<sup>3</sup>. (3) In my organization, people prefer to use existing working methods rather than applying newly learned methods. (4) In my job, people don't want to make efforts in order to change things. (5) Employees who try to use new methods, are discouraged.

	Average Frequency	Percentage
Totally disagree	3.4	6.8%
Disagree	14	28%
Neither agree, neither disagree	17.2	34.4%
Agree	12.4	24.8%
Totally agree	3	6%
Total	50	100%

<sup>3</sup> In order to calculate the total score, the answers on question 2 were scored inversely (1=totally agree; 5=totally disagree).

*Ability scales*

**Personal capacity for transfer:** the extent to which people have time, energy and space to make changes to the work environment in order for transfer to take place. The extent to which workload, own energy and stress on the job impede or promote transfer.

Questions: (1) I have the impression that I can't do my job according to the principles learned in the master programme. (2) I do not have time to think about my working methods, nor do I have time to adapt them.

	Average Frequency	Percentage
Totally disagree	3	6%
Disagree	21	42%
Neither agree, neither disagree	20	40%
Agree	4.5	9%
Totally agree	1.5	3%
Total	50	100%

**Perceived content validity:** the extent to which participants agree that the content of training reflects properly the demands on the job. The extent to which knowledge and skills correspond to the expectations and needs of the individual in view of his job. It also refers to the extent that what has been seen in training is similar to what happens on the job.

Questions: (1) The examples shown and assignments given during the Master training, appear to correspond with situations I face in my job. (2) The content of the master programme is in line with practice. (3) What I have learned in the master programme, is in line with what I do in my job.

	Average Frequency	Percentage
Totally disagree	1.66	3.32%
Disagree	6.33	12.66%
Neither agree, neither disagree	16.33	32.66%
Agree	22.33	44.66%
Totally agree	3.33	6.66%
Total	50	100%

*Transfer*

**Use of the master training in daily job.**

Questions: (1) I notice a change in my way of working since the master programme. (2) The master programme helps me to better substantiate my decisions. (3) What I have learned in the master programme, helps me in my work. (4) One way or another, I use the knowledge and experience from the master on a daily basis. (5) The master programme has had an added value in some projects. (6) I dare to say that I use the master training in my job.

	Average Frequency	Percentage
Totally disagree	0	0%
Disagree	1.66	3.32%
Neither agree, neither disagree	9.66	19.32%
Agree	31.83	63.66%
Totally agree	7	14%
Total	50	100%

**The extent to which the Master contributes to career.**

Questions: (1) The master programme means a step forward in my career. (2) The master training will help me in my future career whether it is in or outside the public sector. (3) The master degree is an asset on my cv.

	Average Frequency	Percentage
Totally disagree	1.33	2.66%
Disagree	2.33	4.66%
Neither agree, neither disagree	10	20%
Agree	25.66	51.32%
Totally agree	10.33	20.66%
Total	50	100%

**The extent to which the master leads to new responsibilities.**

Questions: (1) I am quickly approached in my organization to take up new responsibilities. (2) What I currently do as a job, is because of having acquired the Master degree.

	Average Frequency	Percentage
Totally disagree	3	6%
Disagree	10	20%
Neither agree, neither disagree	20.5	41%
Agree	11.5	23%
Totally agree	5	10%
Total	50	100%

**The extent to which the alumni actively seeks to transfer the master programme in their organization.**

Questions: (1) Because of the Master training I dare to take several initiatives in my job. (2) Since having completed the Master programme I regularly take initiative in several projects. (3) Since having completed the master programme, I try to sensitize my colleagues for several change initiatives. (4) The master training helps to initiate changes. (5) Thanks to the master training, I was able to make worthwhile contributions to several projects.

	Average Frequency	Percentage
Totally disagree	0.6	1.2%
Disagree	6	12%
Neither agree, neither disagree	20.6	41.2%
Agree	19.2	38.4%
Totally agree	3.6	7.2%
Total	50	100%

**Time.**

Questions: (1) The usefulness of the master programme is only noticed several years after graduation. (2) The use of the master programme requires a maturation process.

	Average Frequency	Percentage
Totally disagree	2	4%
Disagree	12	24%
Neither agree, neither disagree	18	36%
Agree	16.5	33%
Totally agree	1.5	3%
Total	50	100%

**Use –framework of reflection.**

Questions: (1)The public sector has a need for the application of insights taught in the master programme. (2) Government needs a training as the master to be able to reflect on the future of Belgian public sector. (3) The master programme has led to an important widening of horizon for me. (3) The master programme offers a framework to think about the future.

	Average Frequency	Percentage
Totally disagree	0.5	1%
Disagree	1	2%
Neither agree, neither disagree	9.25	18.5%
Agree	28.75	57.5%
Totally agree	10.25	20.5%
Total	50	100%

**Use – immediate usability.**

Questions: (1) The usefulness of the master programme is clearly evident in my daily work. (2) The master programme can be immediately used in daily activities.

	Average Frequency	Percentage
Totally disagree	0	0%

Disagree	4	8%
Neither agree, neither disagree	13.5	27%
Agree	29	58%
Totally agree	3.5	7%
Total	50	100%

### Support of other alumni

Questions: (1) The other alumni form a good professional network. (2) I contact other alumni when I need their experience. (3) I ask other alumni when I have specific questions in my job. (4) I get support from alumni when I have difficulties at work.

	Average Frequency	Percentage
Totally disagree	10	20%
Disagree	22.75	45.5%
Neither agree, neither disagree	10.75	21.5%
Agree	5.25	10.5%
Totally agree	1.25	2.5%
Total	50	100%

### *Preliminary conclusion on transfer scales*

The survey reveals a large level of transfer with the alumni. Almost 78% indicates that they use the contents from the master programme in their daily work. We shall discuss the results by means of the variables identified in the LTSI: trainee characteristics, motivation, work environment, ability, added by a fifth variable, transfer.

Regarding the trainee characteristics, we can see that there was a large *learner readiness* within the alumni. Almost 64% state that they knew beforehand how the Master programme would fit them. It is surprising that working students (students who combine the study with their job) have a slightly higher learner readiness than 'regular' students. A similar trend is visible in the *performance self-efficacy scale*. In general, alumni had the confidence to take new initiatives and apply new skills, but again, regular students slightly less than working students. This might be due to the fact that working students know how the education fits in their overall work description and have had experience in putting knowledge into practice.

The alumni showed a strong motivation for transfer and indicated they believe that training will lead to changes and improved performance (78.8%). This may not be a surprise, since people who think differently might not enroll in the first place. Here, regular students have higher expectations than working students, probably due to juvenile enthusiasm, whereas working students have experienced more drawbacks already.

For the work environment scales, no clear results were obtained. With regards to the *supervisor support*, we see roughly three types of transfer climate appearing. As much as 30.5% experiences a discouraging climate, where transfer is implicitly discouraged. 37.5% indicates a neutral climate, where indifference towards transfer is the key word. In an encouraging climate (32.5%), transfer of knowledge is fostered. These findings correspond well with the variety regarding *resistance to change*. 34.8% experience it is difficult to change the working habits, while only 30.8% notices an openness to change.

As a fourth variable, we looked into the perceived abilities by alumni. In a first scale they make a rather positive assessment of their *personal capacity for transfer* (48%). 40% is not quite sure. This might be because transfer often is not an exact application of knowledge and skills learned during training, but happens more by means of disseminating ideas and information, often also unconsciously (Broucker, 2009). As to the *perceived content validity*, the group falls in two parts. Slightly over 50% of alumni finds the examples, assignments and content in line with demands on the job. The other half is neutral or disagrees with it. When looking closer, we see that working students perceive a higher content validity. This might be because they can link what is seen in class with what happens on the work floor more easily.

Finally, we asked more explicitly about transfer. In general, the alumni indicate that they *use the master programme content in their daily job* and/or find it helpful in their job activities. This result should be approached with precaution since influence of social desirability cannot be excluded. Moreover we should not neglect the 20% who were not sure of their use of the master programme. Indeed, it can be debated what is meant by 'use': are they referring to easily transferable skills or does it include a change of ideas and framework? In any case, a large majority does acknowledge that the master programme has *contributed to their career* (71.98%). This is much more so for regular students than for working students. They indicate that the master has contributed to finding a job. Some working students indicate it was beneficial for further promotions. This finding corresponds with the extent to which the *master leads to new responsibilities*. Most alumni remain neutral as to whether or not they take up new tasks because of the master (41%). 33% states this is the case. Nevertheless, we see a lot of alumni *actively seeking to transfer* the master content in their organization. 45.6% says to help initiate change and sensitize others for new initiatives. One could assume that transfer increases with *time*. The respondents show quite a diverse picture on that: 36% agrees, 36% is neutral and 28% disagrees. No difference could be found between those from an early generation and those from later generations. But when looking at the use of the master content in daily activities, 81% of the first generation indicates to use it, while almost 76% from later generations say to do so. So perhaps, the use does increase with time. When looking closer to this 'use', it is clear that to most alumni the master offers a *wider reflection framework* (78%). Also the *immediate usability* scores positive (65%), although several respondents do not really know (27%). Finally, not much *support from other alumni* is felt. 45.5% states not to contact other alumni when facing problems. This might not surprise too much, since the alumni organization is not optimal, and is an issue that requires quite some attention from the staff during the last few years.

## 4.2 Discussion of course components

In general, alumni clearly have a desire to transfer the acquired knowledge and skills from the master programme. What about the transfer of knowledge and skills offered by individual course and course components? We shall now have a closer look at the actually transferred contents of the courses. When viewing the results, it should be taken into account that students had the opportunity to choose their courses and thus filled out the questionnaire only for the course they have actually taken up.

### *Cluster “management”*

Financial management	Interesting (average)	Useful (average)
The practice of budgeting	3.76	2.43
Budgeting performances	3.62	2.38
Cost calculation	3.45	2.32
Investment analysis	3.50	2.10
Accounting systems	3.47	2.20
Audit in the public sector	3.90	2.70
Performance measurement systems	4	2.86
<b>TOTAL AVERAGE</b>	<b>3.67</b>	<b>2.43</b>

For the course of Financial management, we see that alumni found it interesting (with a medium range from 3.45 to 4), but hardly use it in their current working activities (with a large range of 0.76). This might be due to the specific nature of the contents. There are often specific offices assigned to budgeting activities. This is supported by the fact that the component ‘performance measurement systems’ (referring to the making of annual reports etc., which a lot public servants have to deal with) – which can be considered as the most applicable skills component in the course – is scored the highest for use. Also ‘audit in the public sector’, scores relatively high, which might be explained by the growing experience of public servants having their agencies and processes audited.

Personnel management	Interesting (average)	Useful (average)
From personnel administration to HRM	3.90	2.73
Specificity of public sector personnel	4.23	2.64
Management tools: function descriptions & competence profiles	3.91	3.32
Management tools: recruitment & selection	4.05	3.36
Management tools: personnel evaluation & development	4.05	2.82
Management tools: education & training	3.95	3.23
Management tools: rewards	4.09	2.55
People and organization: motivation	4.05	2.95
People and organization: career policy & age-related personnel policy	4.05	2.38
People and organization: diversity management	3.64	2.45

People and organization: organizational change	3.68	2.64
Organization strategy & HRM: strategic HRM and HR-indicators	3.95	2.91
Organization strategy & HRM: the organization of personnel function	3.73	2.55
<b>TOTAL AVERAGE</b>	<b>3.94</b>	<b>2.81</b>

A similar reasoning applies for the course of Personnel management. Alumni found it an interesting course (with a medium range of 0.59), but only sometimes use it in their current working activities (with only a large range of 0.98). Again, this should take into account that here are often specific offices assigned to personnel activities. For this, we should analyze further the relation between the current job position and the use of specific contents.

Furthermore, we must acknowledge that this is not so much a skills-course, but rather tries to transmit knowledge (assuming that skills are more easily transferred).

Organization of public tasks	Interesting (average)	Useful (average)
Steering theories & - instruments	3.89	2.74
Reliable governance: management and control of policy, financial and contract cycle	3.84	2.84
Reliable governance: principles & instruments	3.94	2.94
Reliable governance: supervision through audit	3.78	2.72
Creation of agencies	3.63	2.33
Control of autonomous agencies: input-oriented vs. results-oriented	3.79	2.37
Outsourcing (forms, criteria)	3.74	2.68
Public-private cooperation (forms, criteria)	3.89	2.37
Involvement of third sector/ non-profit (forms, criteria)	3.58	2.47
<b>TOTAL AVERAGE</b>	<b>3.79</b>	<b>2.61</b>

In general, the course of 'Organization of public tasks' can be labeled interesting (with a medium range of 0.36). Again we see that most contents are only sometimes used (with a large range of 0.61). However, this does not surprise that much since also this course is a knowledge-course, rather than a skills course.



Cluster “policy”

Design and strategy of policy	Interesting (average)	Useful (average)
Problem analysis: analysis of policy problems (scope, division and timing of policy problems)	4	3.57
Problem analysis: causal field modeling of causes and effects of policy problems	4.10	2.80
Types of policy documents and guidelines for the drafting of policy documents	3.86	3.14
Policy instruments: types, advantages & disadvantages	3.95	3.20
Ex ante evaluation of policy alternatives	3.86	2.95
Dealing with strategic issues of policy adoption and implementation: feasibility analysis and acquisition of support	3.95	2.90
Decision models: deciding and monitoring under security and insecurity (risk and uncertainty)	3.81	2.55
PERT-planning	3.65	2.15
Design of performance measurement systems	3.80	2.62
Ethical decision making: guidelines for resolving ethical dilemmas	3.45	2.35
<b>TOTAL AVERAGE</b>	<b>3.84</b>	<b>2.82</b>

The course of ‘Design and strategy of policy’ is considered to be a true skills-course. In that respect, it is surprising that the scores for ‘use’ are rather low, although it should be noted that there is a large range (of 1.42) between the topics. On the other hand, it is found to be interesting (although again with a relative wide range of 0.65). It is further interesting to note, that the components that are most used, have also been practiced in a class assignment, where students were asked to draft a policy note on the basis of problem and solution analysis. Ethical decision-making is not used much, which in the most optimistic of interpretations, would have us believe that graduates encounter few ethical dilemma’s at work.

Policy implementation	Interesting (average)	Useful (average)
Coordination needs and instruments: Governance by hierarchy, market and networking	3.40	2.20
Inter-organizational coordination: theory, mechanisms, strategies and instruments	3.27	2.13
Inter-organizational cooperation in managing the public sector: integrated services (one stop shops, case management)	3.27	2.33
Coordination at one government level	3.40	2.47
Coordination between levels of government: multilevel governance and inter-governmental management: methods of integration, cooperation and consultation between lower and higher authorities in government	3.40	2.33
Coordination within policy domains: multilevel and multi-actor governance	3.27	2.40

Market as a coordination mechanism: types of markets, liberalization / privatization of markets	3.33	1.80
Market as a coordination mechanism: the role of government and market regulator	3.14	1.80
Networking and network management: characteristics, types of networks, government as network manager	3.43	2.27
Chains and chain management	3.13	2.00
<b>TOTAL AVERAGE</b>	<b>3.30</b>	<b>2.17</b>

The course of ‘Policy implementation’ is again a more knowledge-course. In that respect, it is not surprising that the scores for ‘use’ are low. Nevertheless, the course was found interesting (with only a small range of 0.30).

Policy evaluation	Interesting (average)	Useful (average)
The evaluation process: defining a policy evaluation	4.11	3.39
The evaluation process: policy theory: change model, implementation model, logical modeling	4.16	3.22
The evaluation process: data collection and analysis: policy indicators and monitoring	4.06	3.50
The evaluation process: data collection and analysis: data collection techniques	4.06	3.50
The evaluation process: analysis and assessment: measurement problems, standards setting, valuing and ranking	4.18	3.39
Evaluation types: ex ante evaluation	4.06	3.18
Evaluation types: ex post evaluation	4.05	3.33
Evaluation management, -capacity and -quality: scope, responsibility and budget, monitoring, reporting & feedback	3.74	3.22
<b>TOTAL AVERAGE</b>	<b>4.05</b>	<b>3.34</b>

Like ‘Design and strategy of policy’, the course of ‘Policy evaluation’ is provided as a skills-course. But here we see that the contents are also frequently used (with a small range of 0.32). It is even the most frequently used course in the training. These results may to some extent surprise since Flanders/Belgium is overall not very active in policy evaluation, especially in comparison with other European countries as the UK, Scandinavia, the Netherlands, etc. The wide interest of students for this course, and their appreciation of its usefulness, nevertheless reflects a maturing evaluation culture, or at least an interest for it<sup>4</sup>.

<sup>4</sup> De Peuter, B. (2008), “Toward a mature evaluation culture in Belgium and Flanders? A search for drivers, recent developments and challenges”, paper presented at the Symposium Policy and Programme Evaluation in Europe: Cultures and Prospects. France: Strasbourg.

Pattyn, V. (2011). “Why organisations (do not) evaluate. A search for necessary and sufficient conditions”, paper presented at the American Evaluation Association Conference. California: Anaheim.

Cluster "Administration"

Government and Citizen	Interesting (average)	Useful (average)
Conceptual framework and approach: civil, administrative, policy, administration	3.83	2.67
The requirement of legitimacy of the governance and administrative action	3.83	2.83
The relationship between citizen and government as a communication event: the communication model	3.89	2.94
Transparency of public action: transparency, formal reasoning requirement, open government	4.00	3.17
Quality standards for government action: principles of good governance, ombuds norms, good governance	4.00	3.00
Handling complaints and ombuds function	3.94	2.44
Participation and interactive policy	3.89	2.78
Facilitate interactive policy processes	3.78	2.67
Consultation of citizens and civil society groups	3.72	2.61
Interaction with strategic advisory bodies	3.61	2.44
<b>TOTAL AVERAGE</b>	<b>3.85</b>	<b>2.76</b>

The focus in 'Government and Citizen' is more on knowledge than on skills. Thus the lower score for use is not so surprising. It is surprising however, that the skills components 'Handling complaints and ombuds function' and 'Consultation of citizens and civil society groups' are not necessarily the most used components. Moreover, it must be realized that there is a relatively large range between the components (0.73). In general, the course was found interesting.

Administrative law	Interesting (average)	Useful (average)
The public service	3.74	2.63
Centralization and decentralization	3.95	2.84
The different forms of service decentralization	3.68	2.63
The administrative contract	3.63	2.32
The concessions of public services	3.53	2.58
Procurement and contracts for works, supplies and services	3.84	3.26
The public service and the constitution	3.58	2.16
The disciplinary system for public employees	3.58	2.32
The status of the staff of the federal government	3.47	1.78
The status of the staff of the Flemish government	3.42	2.16
Public and private domain	3.42	2.05
Planning & Environment	3.37	1.95
The province and the municipality	3.58	3.05
The creation of agencies in the municipal and provincial decree	3.53	2.74

The organization of the police	3.37	1.89
The inter-municipal cooperation	3.47	2.26
The social welfare	3.26	2.32
Legal protection against action of government	3.68	2.26
The Constitutional Court	3.53	2.21
<b>TOTAL AVERAGE</b>	<b>3.56</b>	<b>2.39</b>

Given the fact that public administration is ruled by (administrative) law, we were surprised by the low score for use for the course of Administrative Law. Although, the very large range of 1.48 between the components indicates differences. In that respect, it is noted that the 'Procurement and contracts for works, supplies and services' is the most used component. We assume that most parties are in some way or another confronted in their daily practice with procurement and purchases. Again, in general the course was found interesting.

<b>Institutions and policies of the European union (academic year 2007-2008)</b>	<b>Interesting (average)</b>	<b>Useful (average)</b>
The analysis of the EU: concepts and methods: nature of the & perception of EU	4.25	2.13
Institutions and policy: the European Commission	4.13	2.25
Institutions and policy: the Council of Ministers and European Council	4.25	2.38
Institutions and policy: the European Parliament	4.13	2.29
Institutions and policy: other institutions	4.00	2.13
Institutions and policy making: interaction between these institutions (inter-institutional and inter-state dynamics)	4.50	2.50
Institutions and policy making: formal decision making processes and influence of stakeholders	4.50	2.50
European policy: analysis of the basic principles, powers and policy of the EU	4.38	2.38
European policy: diversity and complexity of EU policy (e.g. internal market and competition policy, economic and monetary policy, agricultural policy and cohesion policy, foreign policy)	4.25	2.38
European policy: European budget and the financial perspectives	3.88	2.38
<b>TOTAL AVERAGE</b>	<b>4.23</b>	<b>2.33</b>

Since the focus is more on knowledge in the course of 'Institutions and policies of the European union', the low score for use is in line with expectations. On the other hand, this course was found the most interesting course.

<b>Governance in the EU (from the academic year 2008-2009 onwards)</b>	<b>Interesting (average)</b>	<b>Useful (average)</b>
Governance in the EU & EU governance theories	4.11	2.40
Policy makers and decision-making: the formal and informal framework	4.11	2.80

Origin and growth of European policy	4.11	2.50
The treaties as the primary basis of institutions and policies: evolution	3.89	2.40
The EU institutions: composition, powers, functioning and interaction, role in decision making and policy	4.11	3.10
EU institutions and decision-making: executive politics	4.33	2.50
EU institutions and decision-making: legislative politics	4.44	2.50
EU institutions and decision-making: judicial politics	4.33	2.30
EU actors I: networks, experts, lobby groups, etc	4.33	2.40
EU actors II: citizens, NGOs, parties, etc.	4.44	2.50
“Governance” in EU-policy domains	4.00	2.50
<b>TOTAL AVERAGE</b>	<b>4.20</b>	<b>2.54</b>

Similar conclusions can be drawn for the course ‘Governance in the EU’. With a focus on knowledge, the low score for use is in line with expectations. On the other hand, this course was found almost equally interesting. We might hypothesize from the low scores on use of the both EU courses, that Europe is not very much present, in the daily routines and practices of Belgian public administration, despite the strong discourse on Europeanisation. This is definitely an issue that shall be taken up in the focus group interviews.

*Cluster “Methods and Techniques”*

Management Skills	Interesting (average)	Useful (average)
Theories on leadership	4.05	3.33
Management skills: mentor role	4.10	3.30
Management skills: broker role	3.95	3.33
Management skills: director role	4.00	2.90
Management skills: producer role	3.90	2.86
Management skills: innovator role	4.10	3.14
Management skills: facilitator role	4.00	3.24
Management skills: monitor role	3.95	2.90
Management skills: coordinator role	4.14	3.29
<b>TOTAL AVERAGE</b>	<b>4.02</b>	<b>3.14</b>

‘Management skills’ is – as the title indicates – a mainly skills-oriented course. In that respect, it is not too surprising that this course contains the second most used contents (with a medium range of 0.47 between components). Moreover, it was one of the most interesting courses, according to the alumni (with a very small range of 0.24 between the components).

Management and Information Technology	Interesting (average)	Useful (average)
Information systems: components, types, role in organizations	3.23	2.54
Hardware, software, data resource management and telecommunications networks	3.38	2.38
E-business systems, e-commerce and citizen/customer relationship management	3.23	2.31
IT strategy tools and solutions	3.31	2.54
Ethical issues and security	3.31	2.31
<b>TOTAL AVERAGE</b>	<b>3.29</b>	<b>2.42</b>

Because of the focus on concepts and theory in the course of 'Management and Information Technology', it again confirms the pattern that skills-courses are transferred more easily. The contents here are hardly used (also with a very small range of 0.23), although in general the topics were found to be interesting (with the smallest range of 0.15). Given the omnipresence of IT in administrative processes, it seems a challenge for the course to take up a stronger skills' components, if indeed we are right to think this may improve the use by graduates. The focus group discussions might reveal more insights on this matter.

Qualitative research methods	Interesting (average)	Useful (average)
Design of qualitative research	3.77	3.31
Techniques: snowball sampling	3.54	2.31
Techniques: interviews and focus groups	3.92	3.46
Techniques: case study	3.92	3.08
Techniques: content analysis and discourse analysis	3.69	2.85
Techniques: observation and participative observation	3.77	2.85
Methods for analysis in qualitative research: grounded theory & QCA	3.54	2.62
Ethics, logistics and reporting of data	3.54	2.77
<b>TOTAL AVERAGE</b>	<b>3.71</b>	<b>2.90</b>

More surprising is the course of 'Qualitative research methods', which has equal attention for skills and knowledge. With an average score of 2.90 for use, we see that the components are only sometimes used, although there is a variation of 0.84 between the separate components. In that respect, it seems that the technique of interviews is most often used compared to more sophisticated techniques for analysis, which are less required in daily work. In further analysis, we might explore the link between job content and use of these course components. It may well be that only few graduates end up in positions where the application of research methods is required. Yet, when we consider that many graduates indicate the usefulness of the course components of 'policy evaluation', and given the reliance of evaluation on scientific methods, the results are a bit paradoxical and demand further investigation.

### *Preliminary conclusion on course components*

A general trend that can be derived, is the lower (average) scores for usefulness/usability compared to the scores for interest. Systematically, courses are found to be interesting and enriching, however, the specific topics are not easily used on or transferred to the work floor.

All courses are found enriching, and four could even be evaluated as 'very enriching' (Policy evaluation, Management skills and Institutions & policies of the EU and its successor, Governance in the EU).

Amongst those very enriching courses, the two most used courses can be found: Policy evaluation and Management skills. Then there are five courses that could be labeled as 'sometimes used': Personnel management, Organization of public tasks, Design and strategy of policy, Government and citizen and Governance in the EU. The other five courses are 'hardly used': Financial management, Policy implementation, Institutions & policies of the EU, Administrative law and Management and information technology.

The pattern emerges that skills-courses – with a large focus on skills and application – are more easily transferred than courses with a focus on knowledge-transfer. However, on the level of course components, it is rarely so that skills components are used more frequently than the knowledge components. Here, we need to take into account that there is often a large distance between the components with respect to 'use', while the distance between components is smaller when evaluating the interest.

Also, when looking at the top 20 course components, we see a similar pattern occurring. The same courses keep appearing, indicating also the short distance of scoring within one course and a large distance between the courses<sup>5</sup>.

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<sup>5</sup> The short distance between scores within a course may well mean that students evaluate courses at a more aggregate course level and do not differentiate their evaluations on the basis of course components. They may do so for reasons of ease or even the demise of knowledge over time.

<b>MOST INTERESTING TOP 20</b>	
Institutions and policy making: interaction between these institutions (inter-institutional and inter-state dynamics) - <b>Institutions and policies of the European union</b>	4,50
Institutions and policy making: formal decision making processes and influence of stakeholders - <b>Institutions and policies of the European union</b>	4,50
EU institutions and decision-making: legislative politics - <b>Governance in the EU</b>	4,44
EU actors II: citizens, NGOs, parties, etc. - <b>Governance in the EU</b>	4,44
European policy: analysis of the basic principles, powers and policy of the EU - <b>Institutions and policies of the European union</b>	4,38
EU institutions and decision-making: executive politics - <b>Governance in the EU</b>	4,33
EU institutions and decision-making: judicial politics - <b>Governance in the EU</b>	4,33
EU actors I: networks, experts, lobby groups, etc. - <b>Governance in the EU</b>	4,33
The analysis of the EU: concepts and methods: nature of the & perception of EU - <b>Institutions and policies of the European union</b>	4,25
Institutions and policy: the Council of Ministers and European Council - <b>Institutions and policies of the European union</b>	4,25
European policy: diversity and complexity of EU policy (e.g. internal market and competition policy, economic and monetary policy, agricultural policy and cohesion policy, foreign policy) - <b>Institutions and policies of the European union</b>	4,25
People and organization: motivation - <b>Personnel management</b>	4,23
The evaluation process: analysis and assessment: measurement problems, standards setting, valuing and ranking - <b>Policy evaluation</b>	4,18
The evaluation process: policy theory: change model, implementation model, logical modeling - <b>Policy evaluation</b>	4,16
Management skills: coordinator role - <b>Management Skills</b>	4,14
Institutions and policy: the European Commission - <b>Institutions and policies of the European union</b>	4,13
Institutions and policy: the European Parliament - <b>Institutions and policies of the European union</b>	4,13
The evaluation process: defining a policy evaluation - <b>Policy evaluation</b>	4,11
Policy makers and decision-making: the formal and informal framework - <b>Governance in the EU</b>	4,11
Governance in the EU & EU governance theories - <b>Governance in the EU</b>	4,11



<b>MOST USED TOP 20</b>	
Problem analysis: analysis of policy problems (scope, division and timing of policy problems) - <b>Design and strategy of policy</b>	3,57
The evaluation process: data collection and analysis: policy indicators and monitoring - <b>Policy evaluation</b>	3,50
The evaluation process: data collection and analysis: policy indicators and monitoring - <b>Policy evaluation</b>	3,50
Techniques: interviews and focus groups - <b>Qualitative research methods</b>	3,46
[Het evaluatieproces: het afbakenen van een beleidsevaluatie ]	3,39
The evaluation process: analysis and assessment: measurement problems, standards setting, valuing and ranking - <b>Policy evaluation</b>	3,39
People and organization: motivation - <b>Personnel management</b>	3,36
Evaluation types: ex post evaluation - <b>Policy evaluation</b>	3,33
Theories on leadership - <b>Management Skills</b>	3,33
Management skills: broker role - <b>Management Skills</b>	3,33
Management tools: function descriptions & competence profiles - <b>Personnel management</b>	3,32
Design of qualitative research - <b>Qualitative research methods</b>	3,31
Management skills: mentor role - <b>Management Skills</b>	3,30
Management skills: coordinator role - <b>Management Skills</b>	3,29
Procurement and contracts for works, supplies and services - <b>Administrative law</b>	3,26
Management skills: facilitator role - <b>Management Skills</b>	3,24
Management tools: personnel evaluation & development - <b>Personnel management</b>	3,23
The evaluation process: policy theory: change model, implementation model, logical modeling - <b>Policy evaluation</b>	3,22
Evaluation management, -capacity and –quality: scope, responsibility and budget, monitoring, reporting & feedback - <b>Policy evaluation</b>	3,22
Policy instruments: types, advantages & disadvantages - <b>Design and strategy of policy</b>	3,20

## V. Directions for further analysis

This paper should be seen as work in progress. Further statistical analysis of the data is needed. We may then look at correlations between the use of knowledge and the type of function the alumni have in the public sector, at the relation with the type of agency the alumni are working at or investigate the links between transfer climate in the organization (as measured with the LTSI) with the data on use of contents.

Furthermore, focus groups will be held at a later stage for in-depth discussions on the use of course contents. In this way, we gain insight in the reasons for (not) using specific course components. Through these discussions we shall also hope to get a better understanding of possible distinctions between direct instrumental use, or more conceptual indirect use, and the possible correlation of such different uses with the nature of course components. The interviews are also expected to be revealing about the scores that surprised us the most, that is for the course on policy evaluation, research skills and IT, as well as for EU Governance.

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