

Examining the educational gap between Flemish and French-speaking schools

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The contribution of Professor Vandenberghe is very much welcome. Belgium is a special microcosm for education policies. Indeed there is wide variation in education achievement between the French-speaking and Flemish communities (and much wider variations across schools and across students). Flemish schools have been consistently at the top of the PISA tests in math, reading and science (for years 2000, 2003, 2006 and 2009); whereas the French-speaking schools were below the average. The gap is large around 50% in terms of standard deviation (which is equivalent to one year of learning). Moreover this achievement gap is not recent and it seems to keep on growing.

The natural question to raise is why is there a gap if we want to close this gap. Prof. Vandenberghe is giving elements to answer the question and we will complement this analysis with further important considerations arising from our recent work on the issue.

Why is there a gap?

Socio-economic difference: First the Flemish community is richer and parents are more educated. It is widely known that more educated parents get more educated children. For example, in a literature review published in the *Journal of Economic Literature*, Bob Haveman and Barbara Wolfe (1995) conclude that the education of parents is the most fundamental factor in explaining the child's success in school. Is it nature or is it nurture? Is it because more able parents have more able children? Or is it because more educated parents have more resources - caused by their higher education - to provide a better environment for their children to do well in school?

The intergenerational transmission of cognitive ability is now well documented, but it is hard to conceive that Flemish parents are more able on average and so transmit better cognitive ability to their children. The fact is that we do not need to delve in this nurture/nature debate because the analysis of Vandenberghe shows clearly that we cannot resort to difference in the family socio-economic status to explain the achievement gap across communities. It is much more than that. Similar results have been obtained by Hindriks et al (2009), Hirtt (2008), and Perelman et al (2009).

Migrants difference: The PISA 2006 sample reveals that there are three times more pupils with migrant status in the French-speaking schools than in the Flemish school (20% against 7%). It is also well known that non-native pupils perform less at school. This is well documented in Jacobs et al (2009) and Hindriks et al (2009). Recently the Minister of Flemish education reported that pupils with migrant status are three times more likely to lag behind. In 2008-2009, 41% non-native pupils are lagging behind in primary schools against 14% native pupils. For secondary education, these proportions are 69% for non-native against 27% for native pupils (Belga 17/08/2010). The fact that French-speaking schools have much more non-native pupils can explain lower achievements. However the key fact is that migration difference cannot explain the achievement gap, in the sense that pupils with the same migration background will on average perform better in the Flemish schools than in the French-speaking schools. Again there is more than that as already suggested in Hindriks et al (2009), Hirtt (2008), and Perelman et al (2009).

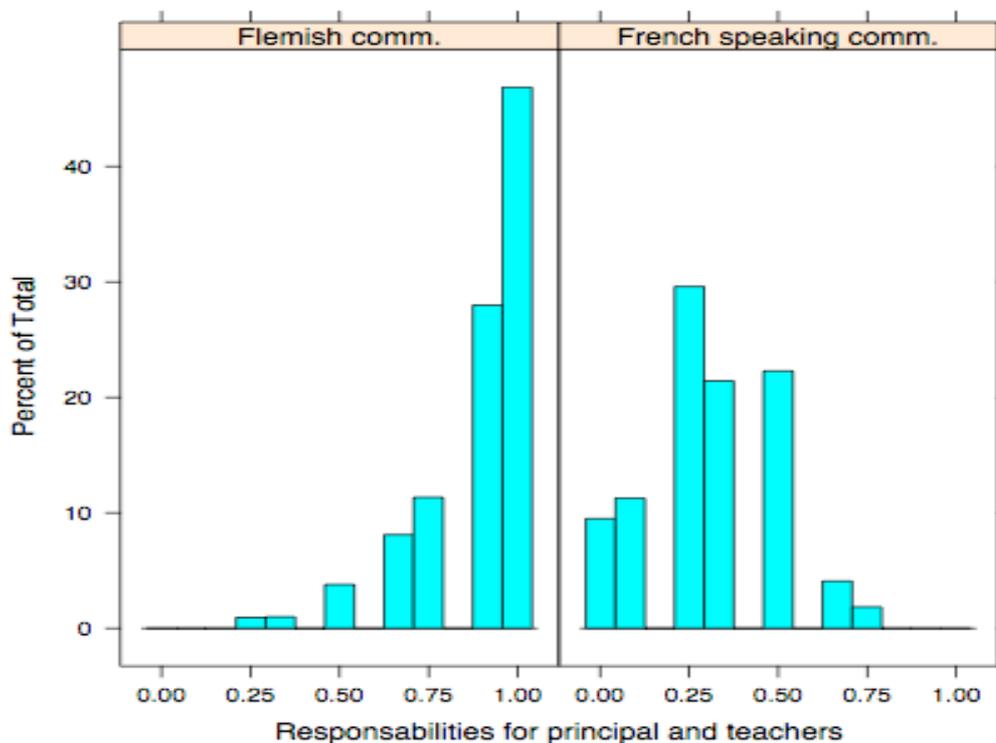
School Autonomy difference:

In Flanders, considerable school policy autonomy was entrusted with non-profit school groups ('de inrichtende macht') that can group several schools of the same type within the same city or region. (see also contribution of Frank Vandembroucke in this volume). The studies of Eurydice (2007, 2008), a EU network that provides

information on and offer analysis of European education systems and policies, provide insight in the structure of school autonomy in Belgian regions in an internationally comparable way. A key feature is the great difference in the degree of school autonomy between the French-speaking and the Flemish Communities. Neither schools, nor intermediate government institutions have the autonomy to set the salaries of teaching or non-teaching staff. Schools have no autonomy in setting the end goals, though full autonomy in the curricular content of optional subjects. Schools also have full autonomy over teaching methods, textbook choice, grouping of pupils, pupil assessment and the decision whether a pupil should resit a year or not.

In line with Eurydice, the PISA 2006 data, summarized in Table 2, show that Flanders is characterized by considerable autonomy in staffing, budget issues, assessment and discipline of pupils and that most of this autonomy is entrusted with the principal and the teachers. To obtain insight in the overall school staff empowerment, we created the composite index “school staff empowerment” as the proportion of the following issues where the principal or teachers have responsibility on: (1) hiring teachers, (2) firing teachers, (3) course content, (4) courses offered, (5) student assessment, (6) student discipline, (7) budget formation, (8) budget allocation. We found that Flemish schools report much larger operational autonomy than French-speaking schools.

Figure: Histogram of school staff empowerment in Flemish and French-speaking Communities



Source: Hindriks and Verschelde (2010).

Hindriks et al (2010) shows that school autonomy boosts educational performance when school autonomy is defined as the operational empowerment of the principals and teachers. The analysis is carried out within the Flemish secondary school system in Belgium as it has a long history of educational school autonomy, but considerable variation between schools in school staff empowerment. Combining detailed school level and pupil level data from the PISA 2006 study with a semiparametric hierarchical model, there are strong indications that operational school autonomy is associated with high educational performance if an appropriate accountability system is in place. Sensitivity tests show that both low and high-performing pupils benefit from this kind of school autonomy.

The larger operational autonomy of the Flemish schools is also associated with a finely and densely defined set of learning targets (see also Frank Vandenbroucke in the same Volume). This is nicely illustrated in the following statistical survey of educational objectives in the Flemish and the French-speaking communities.

The table suggests clearly a better and finer definition of the learning's objectives in the Flemish educational system both in primary and secondary schools.

| Tableau 14 Comparaison statistique entre les "socles de compétences" et les "eindtermen" en mathématique (textes réduits à l'énoncé articulé des matières, des connaissances, des savoir-faire) | | |
|---|------------------------|-------------------------|
| | Vlaamse Gemeenschap | Communauté française |
| Enseignement primaire | | |
| Longueur du texte (signes) | 8 867 | 3 853 |
| Nombre d'items | 54 | 39 |
| Nombre de concepts et de "savoir-faire" relevés | 183 | 84 |
| Premier degré secondaire (enseign. général) | | |
| Longueur du texte (signes) | 5 377 | 2 850 |
| Nombre d'items | 44 | 27 |
| Nombre de concepts et de "savoir-faire" relevés | 151 | 56 |
| TOTAL | | |
| Longueur du texte (signes) | 14 244 | 6 703 |
| Nombre d'items | 98 | 66 |
| Nombre de concepts et de "savoir-faire" relevés | 334 | 140 |

Source: N. Hirtt (2008)

The missing link: school identity

Vandenberghe shows that difference in educational returns cannot explain difference in schooling. His analysis reveals the striking result that returns to education are higher in the French-speaking community than in the Flemish community, which is exactly the opposite of what standard economic analysis would suggest. To get a better grasp of this outcome, just ask why do girls perform better than boys at school? This cannot be due to better salary prospects since they are paid less and are more likely to work part time. Pursuing this analogy with gender difference is in fact intriguing because we cannot attribute such difference to family background or migration status. We cannot attribute such gender difference to school difference neither (because they attend same schools) and lastly we cannot claim gender difference in cognitive ability. So there is something else as for the community difference. Something less visible and obvious but still very important. What could it be?

Tastes vary with social context. This vision of tastes is important because norms are powerful sources of motivation. Norms affect fine-grain decisions of the moment. Norms drive life-changing decisions as well: on matters as important as whether to quit school, whether to go to the university or go to work.

When we examine people's decisions from the perspective of their identities and social norms, we get new answers to many different economic questions. Who people are and how they think of themselves is key to the decisions that they make. Their identities and norms are basic motivations. This approach was coined "identity economics" by Akerlof and Kranton (2010).

To grasp the relevance of identity economics, and how it differs from standard economics, consider the following puzzling fact. Men and women in the United States smoked cigarettes at vastly different rates at the beginning of the twentieth century, but these rates largely converged by the 1980's. Women now smoke just as much as men. We cannot explain this convergence in terms of standard economic arguments, such as changes in relative prices and incomes, because no such changes were sufficiently large. But we can explain it if we ask how people think about themselves – that is, if we examine changes in gender norms. Women early in the twentieth century were not supposed to smoke; it was inappropriate behavior. By the 1970's, however, advertising campaigns targeted "liberated" women, telling them that smoking was not only acceptable, but desirable.

This example is just the tip of the iceberg. Taking social norms seriously has consequences that pervade the economic system, and also our lives more generally.

But with identity economics it all makes sense, and we gain an entirely new perspective on work and learning incentives. The most important determinant of whether an organization functions well is not the monetary incentive system, as standard economic models would imply, but whether its members identify with the organization and with their activities within it. If they do not, they will seek to game the incentive system, rather than to meet the organization's goals.

Likewise, good schooling occurs not as a result of monetary rewards and costs, but because students, parents, and teachers identify with their schools, and because that identification is associated with learning. Moreover, whether students identify with being in school becomes the major determinant of whether they stay or drop out.

To illustrate the effect of parental implication, Rege et al (2007) have investigated the implications of parental job loss for children's educational attainments. Using Norwegian register data they have estimated how children's school performance is affected by their parents' job loss. Fathers' job loss leads to a substantial decline in children's graduation-year grade point average. The negative effect does not appear to be driven by a reduction in father's income or an increase in parental divorce, or the trauma of relocating. In contrast, the mothers' job loss leads to improved school performance! Such findings are consistent with sociological "role theories," with mothers responding to job loss by allocating greater attention towards child rearing.

Given this, education policy should look at what some successful programs have done to establish a school identity that motivates students and teachers to work according to a common purpose. If we focus on training teachers in how to inspire their students to identify with their school – rather than teaching students to take standardized tests – we just might be able to reproduce these schools' great results.

As economists and policymakers, we could be content to continue looking only at prices and income and related statistics to explain people's decisions. In some circumstances, that might be enough to understand what is happening. But in many other situations, we would miss major sources of motivation – and thus would adopt useless, if not counter-productive, measures aimed at producing the outcomes we seek. Identity Economics provides the broader vision that we need.

References

Akerlof, A. and Kranton R. (2010), *"Identity Economics: How Our Identities Shape Our Work, Wages, and Well-Being"*, Princeton University Press.

Haveman, R. and Wolfe, B. 1995, *"The determinants of children's attainments: a review of methods and findings"*, Journal of Economic Literature, pp. 1829-1878.

Hindriks, J., Verschelde, M., Rayp, G., and Schoors, K. (2009) *"Que peut enseigner l'école flamande à l'école francophone?"*, Itinera memo, October 2009. (also available in Dutch)

Hindriks, J. and Verschelde, M. (2010), *"L'école de la chance"*, Regards économiques, n°77, February.

Hindriks, J., Verschelde, M., Rayp, G., and Schoors, K. (2010), *"School autonomy and educational performance: within-country evidence"*, CORE discussion paper n° 2010-80.

Hirtt, N. (2008), *"Pourquoi les performances PISA des élèves francophones et flamands sont-elles si différentes?"*, Bruxelles: Appel pour une école démocratique (Aped).

Jacobs, D., Rea, A., Teney, C., Callier, L., and Lothaire, S. (2009), "*L'ascenseur social reste en panne: performances des élèves issus de l'immigration en Communauté française et en Communauté flamande*", Rapport pour la Fondation Roi Baudoin Mai 2009.

Perelman S, Pestieau P., and Santin D. (2009), "*Pourquoi les performances des élèves flamands et francophones sont-elles si différentes?*", 18ème Congrès des Economistes belges de Langue française, CIFOP.

Rege, M, Telle, K. and Votruba, M., (2007), "*Parental job loss and children's school performance*", Discussion Paper n° 517, October, Statistics Norway, Research Department.