Designing school-level indicators in French Speaking Belgium

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Extended abstract
Objectives and Theoretical framework

The particularities of the educational system in the French Community of Belgium, organised as a quasi-market (Maroy, 2006), foster segregation of schools and create several "types" of schools on a continuum from "ghetto" schools to "sanctuary" schools. Different examples of segregation have been observed in numerous studies (Crahay, 2000; Demeuse & Baye, 2007; 2008). Not only are there great socio-economic disparities between schools, related to the type of programmes they offer, but also, when we look at the institutions on the extreme ends of this continuum, we see that the situation is worsening: the most privileged institutions dispose of their most underprivileged pupils, whereas the most underprivileged schools cannot keep their most privileged pupils (Friant et al., 2008).

In this context, the public authority has very little leverage to encourage a certain social mixing or an equalisation of results. One of them is the way it allocates public funds to all educational operators, public and private (Demeuse et al., in press). However, another one consists in promoting schools' autonomy, by making them able to know their situation, notably in terms of segregation and relegation. In this case, the schools are regarded as real units, and not simply operators undergoing a certain number of educational policies (Ross & Levacic, 1999). The authors join this perspective in this communication, which is part of a research project funded by the public schools organised by the French Community of Belgium (Réseau d'enseignement organisé par la Communauté française de Belgique).

One of the objectives of this research is to give the schools the means to monitor educational outcomes (Pelgrum & Stoel, 1996, cited by Demeuse & Baye, 2001). Going by the "pilotage" model by Demeuse & Baye (2001), we postulate that, in pursuit of quality, it is of first importance that school directors get information on their school's status, regarding the pupils' characteristics as well as their outcomes and the school's functioning. As a consequence, it is advisable to equip school directors with relevant information concerning their school, i.e., with indicators. This model (Demeuse & Baye, 2001) postulates that there is a definition, at least temporary, of an "ideal state", i.e. a target to reach. Pursuing this target, the "pilotage" (1) consists in four steps: collecting information, diagnosing, determining the actions, and implementing solutions. In this paper, we will discuss the first step: collecting and grouping a set of information as indicators in order to define the system's current state.

Method

The indicators at the school level we will present in this paper, have been designed using data from a previous research (Demeuse et al., 2007) which focused on the school financing (Demeuse, Friant, & Derobertmasure, in press) : data from the school population census used in the allocation of school funds, provided by the educational administration. Three data tables were used, each one corresponding to one census year of students in the French Community of Belgium. Each of these data tables contains as many records as students counted in the French Community of Belgium, as well as the variables used in constituting the general statistics for education (such as the school attended, the study level and track, the birthdate, the home country and municipality, the certificates earned and a socio-economic index score). The socio-economic status of the students is represented by a socio-economic index (SES) initially built to implement the policy of positive discrimination (Demeuse and Monseur, 1999). Each student is assigned the socio-economic index score of the district where he lives and somehow brings this index score to the level of the institution. From a statistical point of view, this is a normal distribution metric variable that varies between -3.5 and 3.5.

We designed indicators at the school level by aggregating the data tables on the "student" level, so that one record corresponds to one school, and we merged them in order to establish an evolution over three consecutive years, including annual student flow (Demeuse and Delvaux, 2004). Different indicators were created related to the schools. On the one hand, they reflect the structure of the population attending the school, and, on the other hand, the population flow to and from each school (Friant et al., 2008).

Results

These indicators allow us to gauge the situation of a school regarding segregation and relegation mechanisms. On the basis of each pupil's grade, track, and SES, a snapshot of the school population structure can be drawn, using such indicators as the average SES of the school, the average SES of each track or the proportion of grade repetition. Other indicators give an insight of recruitment, selection and creaming-off mechanisms (conscious or not). These are, for instance:

- Gain or loss of pupils across grades
- SES comparison at two stages of study years
- Students flows leaving or enrolling in the school between two academic years
- Socioeconomic characteristics of these students
- Grade repetition and its treatment (or not) by the school
- Socioeconomic characteristics of these students

Such indicators allow us to study school-level mechanisms that lead to segregation at the macro level. By linking these indicators with one another, we have a more accurate understanding of the mechanisms fostering segregation at the educational system level. For instance, schools, whether privileged or not, differ notably by their gain or loss of pupils across grades: some pyramid-shaped structures show a "creaming pupils off" situation, while other funnel-shaped structures reveal bottom ranked schools in the hierarchy (Maroy, 2006), that can encounter some difficulties.

Educational or scientific importance of the study

Above all, these indicators have an educational importance as they allow us to portray each school by designing "school IDs" revealing their situation regarding segregation and relegation. Each school can

therefore be characterized by a set of indicators that could be used by the school directors in their pursuit of quality. In our context, where the ideal is stated as “no more ghetto schools” (Government of the French Community of Belgium, 2005), indicators such as grade repetition treatment can inform the school directors about the school level mechanisms that have a systemic impact and create segregations. Therefore, they could help them to determine and to implement actions. However, it is not advisable that this autonomy of the schools prevent the public authority’s right to oversee them, especially by the means of external evaluations of the pupil’s outcomes, which give full meaning to indicators such as grade repetition rates.

Notes

(1) There is no word for word English translation of the French word “pilotage”. However, « monitoring of educational outcomes » (Pelgrum & Stoel, 1996, cited by Demeuse & Baye, 2001) can be an approximation.

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