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Some aspects of success performing in departments preparing candidates for language teacher recruitment in the French secondary education system

ABSTRACT

In France, secondary teachers are public sector employees. Becoming a language teacher in secondary education is subject to passing public competitive entry examinations. Preparation for these examinations is provided in College Departments, which are essentially assessed on the basis of their success performance in the exams. This paper analyses the determinants of Departments' success performance. We first present the broad lines of the French system of language teacher recruitment in secondary education. Next, by means of statistical analysis of data from a survey on Departments, we isolate significant determinants of success performance. Finally, from this analysis, we derive some strategic implications for the management of Departments' success performance.

Keywords: Assessment, Educational administration, Language teacher induction, Language teacher preparation, Performance analysis

Introduction

In France, secondary teachers are public sector employees. Each year, about 30 public competitive examinations are organised to recruit secondary school language teachers. Some 20,000 candidates take these examinations. Preparation for examinations is provided by Exam Preparation Departments, within the framework of Colleges of Education. Exam Preparation Departments receive funding for their *mission*. To a large extent, the assessment of these Departments is based on the number of successful candidates in the exams. Therefore, it is important for Department Heads to know which factors determine success performance, in order to improve their Department's performance through adapting its pedagogical and material organisation accordingly.

In this paper, we aim, first, to isolate significant determinants of success performance in Departments preparing candidates for language teacher recruitment, and secondly, to emphasise the strategic implications of these determinants for the management of Departments' success performance.

French Colleges of Education were created in 1990. Probably owing to the youth of these

institutions, very few papers have been written so far on this topic in international academic literature. This adds to the reasons for which we think that this study might be of interest.

First of all, in Part I, we intend to sketch the French system of language teacher recruitment in secondary education. Secondly, in part II, we will present the method of analysis. Then, in Part III, we will present and comment the results obtained.

I. Some broad lines of the French system of language teacher recruitment in secondary education

Teacher recruitment examinations and examining boards are organised by the Ministry of Education. A predetermined number of posts to fill is set for each examination. The examinations cover four groups of languages:

- French;
- a group of 15 foreign languages, which are Arabic, Chinese, Dutch, English, German, Greek, Hebrew, Italian, Japanese, Portuguese, Russian, Swedish, Spanish, Turkish and Vietnamese;
- regional languages, which are Basque, Breton, Catalan, Corsican, Creole, Occitan, Tahitian;
- and dead languages as Ancient Greek and Latin.

About 4,000 candidates pass these exams each year. Successful candidates go on teaching practice during one year. Save for exceptional circumstances, all trainees become qualified secondary language teachers.

Since 1990, preparation for the examinations, as well as training the successful candidates to teaching, have been structured in the framework of Colleges of Education (named *Instituts Universitaires de Formation des Maîtres*, "IUFM": Asher & Malet, 1996; Caldwell & Mailhos, 2002; Cornu, 2002; Zay, 1997). There are 31 such Colleges, spread across the whole national territory, including overseas. In each College, several Exam Preparation Departments are organised, each Department preparing specifically for one examination. Not all specialities are covered in each College, coverage depending on social demand and on available means. In 2001, 160 Preparation Departments for language teacher recruitment exams were in activity (CNE, 2001:75). Colleges of Education and Preparation Departments take part neither in the organisation of the examinations nor in the examining boards. Graph 1 illustrates the general organisation of the system.

Graph 1.The process to become a language teacher in secondary education in France
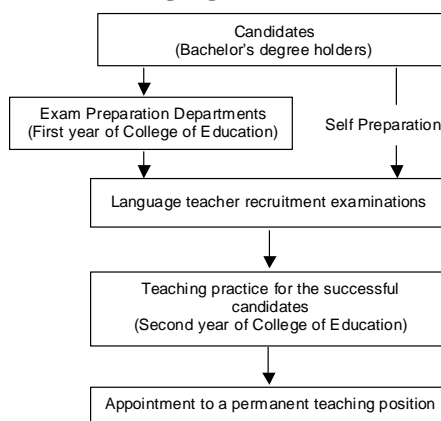
Each Exam Preparation Department is managed by a Department Head, chosen among the College Professors by the Dean of the College. The Department Head is in charge of the administrative and pedagogical organisation of the Department. He/she chooses the Professors, designs the programme contents and schedules, the student recruitment policy, and the bibliographical policy, and deals with problems. A secretary's office provides administrative support.

II. Method and data

The method consists in isolating significant performance determinants by means of statistical analysis of data from a survey on Exam Preparation Departments.

The objective of the survey was to gather as many data as possible on success performance determinants. Generally speaking, a large number of factors may influence success performance. Table 1 gives some examples of such potential factors.

Table 1. Some potential factors of success performance in Exam Preparation Departments

Potential factor	Expected effect on the success performance of Departments
1. The national number of examinees	The higher the national number of candidates taking an examination, the lower the success performance of each Department preparing for this examination
2. The size of the Department	The bigger a Department (for instance, the number of candidates registered in the Department), the higher the probability of having good candidates and, therefore, good success performance
3. The number of posts to fill set for the examination	The higher the number of posts to fill set for an examination, the higher the success performance of each Department preparing for this examination
4. The speciality	Examinations may be more or less easy according to the speciality. Therefore, speciality may influence the success performance of Departments
5. The location of the Department	Since context differs from one Department to another, success performance may be influenced by the location of the Department
6. The quality of the Department's pedagogical staff	Insofar as quality of the pedagogical staff can be measured, the higher the pedagogical quality, the higher the Department's success performance
7. The size of the Department's pedagogical staff	The number of professors teaching in the Department may influence success performance positively (a large staff gives access to more knowledge) or negatively (pedagogical and material coordination becomes more and more difficult when the size of the staff increases)
8. The number of training hours by student in the Department	To some extent, the higher the number of training hours received by each candidate in the Department, the higher the Department's success performance
9. The competition between Departments	The number of Departments preparing for the same examination can influence the Departments' success performance positively (pedagogical and administrative staff increase their efforts under the pressure of competition) or negatively (the higher the number of Departments, the lower the mean number of successful candidates by Department)

Potential factor	Expected effect on the success performance of Departments
10. The pedagogical methods used in the Department	It seems possible that the success performance of Departments differ according to the pedagogical methods used
11. The quality of the candidates	The higher the quality of the candidates (for instance, their knowledge and learning ability), the higher the Department's success performance
12. The recruitment policy applied by the examining board	In agreement with the Ministry, or on its own initiative, each examining board may design a recruitment policy, and apply extra-academic criteria (for instance geographical or social equity), which influence the Departments' success performance

The survey was conducted from July 2002 to February 2003. All 31 existing Colleges of Education were surveyed. 11 Colleges communicated their data. These data were completed with national data published by the Ministry of Education. Thus we have a representative sample, in which 72 Departments preparing for language teacher recruitment (45% of the total) and 15 language teacher recruitment examinations (50% of the total) are represented. These data cover the period 1992–2002. However, only data relating to the first five factors and to performance could be obtained. The technical note provides further details.

Technical note

Performance indicator: the number of successful candidates.

Variables

As regards the first three determinants, we take into account alternative indicators.

The national number of candidates going in for an examination can be represented by:

- either the national number of candidates registered for this examination (that we name X1A),
- or the national number of *actual* candidates, which are the candidates registered for *and* present at the exam (X1B),
- or the number of registered external competitors, which are the registered candidates outside the Department (X1C = X1A – X2A),
- or the number of external actual competitors, which are the registered and present candidates outside the Department (X1D = X1B – X2A).

The size of a Department can be represented by:

- either the number of departmental candidates, which are the candidates registered in this Department (X2A),
- or the weight of this Department in the national number of registered candidates (X2B = X2A/X1A),
- or the weight of this Department in the national number of actual candidates (X2C=X2A/X1B).

The number of posts to fill at an examination can be defined as:

- the initial number officially announced before the beginning of the examination (X3A),
- or the final number of positions effectively filled at the end of the examination (X3B),
- or the initial number of positions per departmental candidate (X3C = X3A/X2A),
- or the final number of positions per departmental candidate (X3D = X3B/X2A).

Statistical model

We investigate the links between factors and performance by means of a linear regression model. We use panel data regression models (Baltagi, 1995). The use of panel data statistics is justified by the fact that our data constitute a panel of several individuals (the Departments) observed during several periods (11 years from 1992 to 2002). Mainly two different models of panel data statistical analysis exist: the model with fixed effects and the model with random effects. The results of both models are presented below. For comparison purposes, we also report the classical ordinary least squares (OLS) estimates.

III. Results and comments

As can be seen from Table 2, in a Department preparing candidates for language teacher recruitment, the number of successful candidates depends significantly on the number of external actual candidates, on the number of departmental candidates, and on the final number of positions effectively filled. The number of departmental candidates and the final number of positions filled have a positive influence, while the number of external actual candidates has a negative one. According to the R-square statistic of the OLS estimates, this model accounts for 85.7% of the variation of the number of successful candidates.

Table 2. Regression of the number of successful candidates of a Department (N=463)

Variable	Random effects model	Fixed effects model	OLS
Number of external actual candidates	-0.004*** (-9.65)	-0.001*** (-2.77)	-0.005*** (-11.58)
Number of departmental candidates (Department size)	0.278*** (15.32)	0.152*** (7.48)	0.275*** (20.51)
Marginal effect of the Department size ($X2A^2$)	-0,0001*** (-4.70)	-0.0001*** (-7.51)	-1.86e-5 [NS] (-0.92)
Final number of positions effectively filled	0.025*** (12.05)	0.026*** (9.82)	0.024*** (11.67)
Location of the Department	-0.134[NS] (-0.50)		-0.31** (-2.49)
Speciality of the examination	0.066[NS] (1.26)		0.072*** (2.86)
Constant	-3.791** (-2.20)	-4.278 * (-1.75)	-0.117 [NS] (-0.10)
R^2			0.859
Adjusted R^2			0.857
R^2 overall	0.83	0.486	

Note: t-statistics are in brackets.
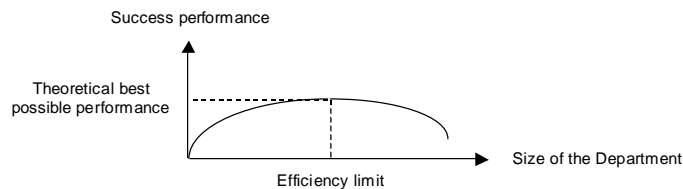[NS]: Non significant.
* Significant at the 10% level.
** Significant at the 5% level.
*** Significant at the 1% level.

We also investigate whether there is a limit in the positive influence of the Department size on success performance. We wonder if a point exists beyond which the growth of the Department has decreasing positive influence – or even negative influence – on success performance. Theoretically, such an *efficiency limit* is possible and would be explained by the fact that growth generates increasing difficulties in material organisation and coordination. We insert the squared size in the regressions, in order to capture the effect of increasing the size ("marginal effect"). If an efficiency limit exists, the coefficient of the quadratic variable must be negative.

We effectively observe a significant efficiency limit. This means that increasing the size of a Department raises success performance, but less than proportionately, and only up to a certain threshold beyond which growth lowers success performance. Graph 2 illustrates this phenomenon.

**Graph 2. The efficiency limit of the size factor**

Another observation is that neither the location of the Department nor the examination speciality have significant influence on success performance.

In terms of success performance management, these results suggest what an efficient strategy might be.

The only variable that a Department Head can control is the number of applicants that he/she authorises to register at the Department. Thus, the Department Head can favour enrolment. Up to the efficiency limit, raising enrolment has a positive influence on success performance. Moreover, *ceteris paribus*, raising departmental enrolment lowers the number of external competitors, which in turn generates an additional positive effect on the department's success performance. However, the Department Head must take into account the institutional and social context too.

Graph 3. A strategy for raising success performance
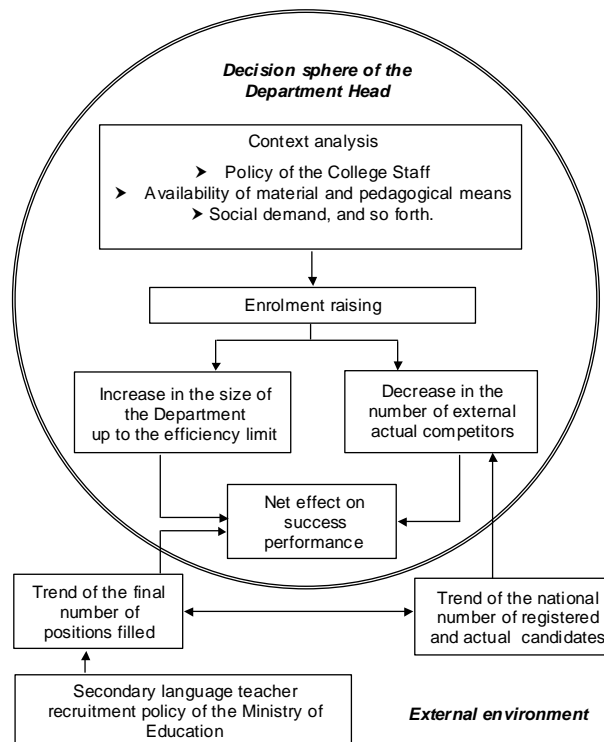
Conclusion

In the French system of secondary language teacher recruitment, candidates are provided preparation in Exam Preparation Departments. Departments are assessed on the basis of their success performance in the exams. In this study, we have isolated some significant determinants of success performance, and emphasised their strategic implications for the management of Departments' success performance.

The data analysed in this study do not cover the totality of the potential determinants of success performance. Therefore, a full understanding of the determinants at work, and of the precise strategies to apply, requires availability of more data.

Furthermore, it would be interesting to compare this French problematic with other ones from other national contexts.

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