



# **Working Paper**

Social class differentials at the transition from lower to upper secondary education in France

Testing rational action models within an institutionalized dialogue between family and school

Katherin Barg



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#### **Editorial Note:**

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#### Abstract

This paper analyzes the generation of social class differentials at the transition from lower to upper secondary education in France. While in other countries the crucial school track decision is either taken by the students and their parents or by the teachers, the families of French secondary students take part in an institutionalized dialogue with the school that mainly consists of three steps: First, the family formulates a school track request; second, considering this request, the staff meeting elaborates a school track proposition; third, the family can reject the staff's proposition and if it does, it has to attend an obligatory talk with the headmaster. Based on this talk, the headmaster takes a binding school track decision. Legally, the dialogue can stretch even further, but due to small observation numbers, this paper concentrates on the first three steps of the dialogue and its final outcome.

In order to theoretically address social class differentials in families' and the school staff's choices along the dialogue I adapt well-known educational decision-making models based on rational action theory. Using a longitudinal data set on a large cohort of French secondary students who entered lower secondary school in 1995, I empirically test these decision-making models. My results primarily reveal: First, social background of students has an important impact on the three main steps of the dialogue and, hence, on its final outcome. Second, rational action theory explains a large part of the social background effect on families' choices. Third, the school staff's decision is strongly determined by family's request and even produces social class differentials that go beyond those generated by families' decisions. Fourth, parental involvement such as membership in a parent association has a remarkable effect on the families' and the staff's decision-making. It makes families more confident in demanding the higher school track even though the child concerned has rather low marks. At the same time, when a student has marks in the lower and middle range, the staff meeting is significantly more willing to accept the family's request if the parents are involved.

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#### 1 Introduction

At the end of the 1980s, the governing French Socialist Party considerably changed the process of school track choice at the transition from lower secondary to upper secondary school. Before, this crucial educational decision had been taken solely by the teachers. Since the establishment of the 1989 Orientation Law though, students and their families are involved in an institutionalized "dialogue" (Masson 1997) with the school. In the first step of this dialogue, the families pronounce a school track request; in the second step, the (school) staff meeting formulates a school track proposition. As a third step, the families have the option to reject the staff's decision and if they do so, they are invited to discuss their request with the headmaster. Based on this obligatory talk, a virtually binding decision is taken by the headmaster. Although this happens in few cases, the families are then allowed to reject the headmaster's decision once again. If they adequately warrant their second rejection, they initiate another consideration of the child's case by the general staff meeting at the end of the school year. Yet, the final decision remains in the hands of the headmaster. In line with the arguments of cultural reproduction theory which claims that teachers act according to the interests of the dominant social classes (Bourdieu & Passeron 1970), one objective of the 1989 Orientation Law was to reduce social inequality in educational chances by transferring power of decision from the teachers to the families. By contrast, findings of recent studies, notably for Germany, indicate that teacher decisions are less "biased" by student's social background than choices made by the families themselves (Ditton & Krüsken 2006, Neugebauer 2010). Broad empirical studies for France show that during the last decades the association between social background and education has decreased (Brauns 1998, Thélot & Vallet 2000, Vallet & Selz 2007). Nevertheless, the same studies reveal that nowadays the impact of social background on educational attainment is still important and beyond that, strong effects of social background on the upper secondary school track choice, even when students' school performance is controlled, were found (Duru-Bellat & Mingat 1989, Duru-Bellat et al. 1993, Duru-Bellat & Kieffer 2001, Brinbaum & Kieffer 2009). This result seems to reveal that the 1989 Orientation Law has modified the process of the secondary school track choice in a way that still allows non-meritocratic decisionmaking. In fact, analyses of the school track demand by the families and the subsequent decisions by the staff meeting indicate that, in the majority of the cases, the teachers simply accept the families' requests and, hence, strengthen the social class effects net of school performance (Duru-Bellat & Mingat 1993, Roux & Davaillon 2001). In light of this partial explanation and the clear and longish procedure of the dialogue between family and school, one may wonder via which exact mechanisms the effect of students' social background on each step of the dialogue - the families' request, the staff meeting's proposition, the families' decision to reject and attend the talk with the headmaster, etc. - operates. Therefore, the general research question addressed by this paper is, how do social class differentials emerge within the French institutionalized dialogue between family and school?

As for other European countries, there is a debate on whether the association between social background and education has persisted (Goux & Maurin 1997) or decreased. For France, in sum, the overall association declined, though social class differentials regarding the access to different types of higher education – which is exceptionally important in France – has remained (for more detail see e.g. Brauns 1998).

Following the well-known differentiation between primary and secondary effects of social stratification (Boudon 1974, Girard & Bastide 1973), sociologists of education have extensively analyzed the processes that generate the secondary effects, namely those of social background on educational decisions net of school performance.<sup>2</sup> Rational action theory was applied to model the educational decision-making of students and their parents (Erikson & Jonsson 1996, Breen & Goldthorpe 1997, Esser 1999 and others) and these theoretical models were empirically tested for different countries (Jonsson 1999, Breen & Jonsson 2000, Becker 2003, Breen & Yaish 2006, Stocké 2007, Van der Werfhorst & Hofstede 2007, Becker & Hecken 2009a, 2009b).<sup>3</sup> German studies in which teacher decision-making and the impact of teacher recommendations on families' school track choices were addressed (e.g. Becker 2000, Jürgens 1989, Ditton 1989, Ditton et al. 2005, Ditton & Krüsken 2006, Neugebauer 2010, Wiese 1982) and previous studies examining the French dialogue between family and school (Duru-Bellat & Mingat 1993, Masson 1997, Roux & Davaillon 2001), have investigated the role of teachers within the process of educational decision-making. However, when and to which degree do teachers and other school staff consider families' official requests, especially regarding school track choices, and does, then, their decision-making affect the generation of social class differentials in education, are questions that remain not fully answered. With regard to the manner in which families make educational decisions, previous studies have neglected the mechanisms through which families' social background affects their anticipation of teacher decisions and their willingness to reject and discuss the teachers' decisions. Therefore, investigating the French institutionalized dialogue between family and school is an interesting opportunity to gain new insights in the decision-making of both actors, families and the school staff, in particular regarding the degree to which they take into account each other's propositions and evaluations. Moreover, the extra parental effort demanding structure of the dialogue enables examining the importance of parental participation in their children's schooling and their knowledge about the functioning of the educational system.

In order to investigate how social background affects the decision-making of families and the school staff, I formalize a theoretical model for each of the two actors based on rational action theory and empirically test this model using a longitudinal data set on French secondary students. Since the data provide detailed information about the dialogue, student's family background, school performance, parents' subjective evaluations of different important factors related to their child's education and their school relevant knowledge and involvement, I am able to examine whether the families' school track request and their willingness to reject are based upon a rational consideration of costs and benefits. Moreover, the data enables me to analyze which characteristics of the students and their parents the school staff considers when making their school track decisions and, finally, whether and to which degree parental participation in the schooling of their children contributes to the emergence of social class differentials within the dialogue. The next chapter will present the French educational system and the formalization of a theoretical model explaining the decision-making of the family and the school staff and the emergence of social class differentials within the dialogue. Chapter three will deal with the empirical analysis and the final section will conclude and discuss the results.

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<sup>&</sup>lt;sup>2</sup> The primary effects refer to the relationship between social background and school performance.

#### 2 Background

## 2.1 The French educational system and its institutionalized dialogue between family and school

In France, students enter primary education at the age of 5 or 6 and attend the "école primaire" during 5 school years (see Figure 1). Lower secondary education usually starts with the age of 10 or 11. All students jointly attend the "collège". At the transition to upper secondary school, families and teachers can choose between four options: the general upper secondary school track ("lycée général et technologique" – LGT), the vocational upper secondary school track ("lycée professional" – LP), the lower vocational track which corresponds to an apprenticeship (A), and letting the student repeat the last school year. The general track is split into an academic track which leads to the diploma "baccalauréat général" and a more professional track which ends with the diploma called "baccalauréat technologique". Attending the vocational upper secondary school track means going to the "lycée professionel" (LP). The students who successfully complete grade 10, 11 and 12 within this track usually end up with the diploma "baccalauréat professionnel", and those who successfully attain the end of grade 11 get the "BEP" ("brevet d'études professionelles"). Formally, all "baccalauréats"-diplomas allow for entry into higher education, though the former rather leads to university studies and studies at grandes écoles" (the French elite universities), while the latter directs to more vocational higher education (Brauns 1998, Duru-Bella et al. 1993, Kerckhoff 2001). Students who attend the lower vocational track typically do an apprenticeship (A) which finals with the diploma "CAP" ("certificat d'aptitude professionelle").

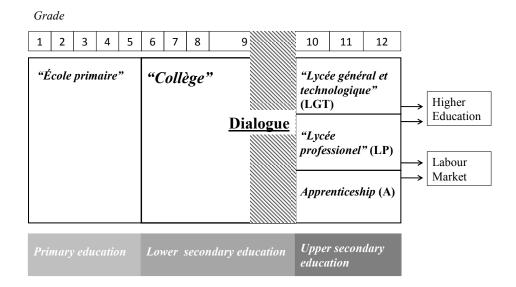
The transition from lower secondary to upper secondary school is particularly different in France as compared to other Western countries. While in most countries the school track choice at the first important transition – in some countries after primary education, in others during secondary education – is taken by the students and their families or, like in some *Länder* in Germany for instance, by the teachers, French families and teachers participate in an institutionalized dialogue. The dialogue starts right after the first semester of grade 9. *All* students and parents are supposed to know how the dialogue functions and to be able to take advantage of it. Brochures about the dialogue and the available educational options are handed to the students, parent-teacher meetings are organized, internet links to informatory pages of the ONISEP (national office of information on schooling and vocations) and the ministry of education are told to the families and they are invited to open hours at the different upper secondary schools and firms who offer training vacancies (Masson 1997). Moreover, the orientation advisor ("conseiller d'orientation") is charged to inform the students and their parents about the different secondary education tracks and to help them elaborate their "academic or professional projects".

<sup>&</sup>lt;sup>3</sup> Rational action theory is also known as *rational choice theory*.

E.g. www.onisep.fr, www.orientation.fr.

The orientation advisor usually is an external professional employed by the ministry of education who has a degree in psychology and who has attended two additional years of special schooling.

Figure 1: The French educational system



Since World War II the French educational system has gone through numerous reforms referred to as "démocratisation". All of these reforms aimed at raising the overall educational level and at reducing the intergenerational reproduction of social inequality (Mellizo-Soto 2000). In 1989 the so-called *Orientation Law* ("loi d'orientation sur l'éducation") has been enacted. Up to then, the school track decision at the transition from lower to upper secondary education had been taken solely by the teacher conference. But with Article 8 of the law the "orientation procedure" was significantly altered. Article 8 says:<sup>6</sup>

"[...] The student works out his/her educational orientation plans with the help of the school and the educational community, in particular the teachers and the orientation advisors, who will support the student in realizing his/her educational plans during schooling and at its ending. The orientation decision is based upon a continuous observation of the student. The family is responsible for the student's choice; the student is responsible when he/she is of full age. Every disagreement with the proposition of the teacher conference becomes part of a talk prior to a decision by the headmaster. If this decision does not correspond to the request of the student or the family, it is [still] valid. The orientation decision can be part of the recall procedure" (Loi n°89-486 du 10 juillet 1989, §8).

Figure 2 presents a restricted decision-tree that shall illustrate the dialogue in a simplified way in order to make its theoretical modelling and empirical testing as clear as possible. Even though the families and teachers can choose between four options, the decision-tree shows only two main branches, focusing on the two alternatives that are chosen most frequently: the general upper secondary school

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The term orientation corresponds to the identical French word "orientation" which is used to describe the school track decision procedure at the transition from lower to upper secondary school. It implies that the procedure does not only consist of one decision but of talks of the teachers with the students and their parents as well. I use the term "dialogue" (Masson 1997) instead as it vividly describes its contrast to the decision-making procedure in other countries.

track (LGT) and the vocational upper secondary track (LP).8 The first school track choice of the family is called the family's request (F1). During January the students have to bring home an "orientation dossier" in which their parents have to report this first school track decision. After the family has filled in the dossier the student has to bring it back to school. There, during the next 2 to 3 months, the student's teachers meet to consider the family's request and to take a (first) decision, the staff meeting's proposition (S1). The staff meeting takes place once and is attended by all of the student's teachers, the class teacher, an orientation advisor and parents' representatives. Once the staff meeting has met and taken a decision, the students have to bring back home the dossier in order to communicate the school staff's proposition to their parents. Those families, who do not agree with the staff's decision, can reject it. To do so, they have to tell their rejection via the orientation dossier and they have to come to the school to meet the headmaster. The family's rejection (F2) can only lead to a reconsideration of the student's case, if the family attends this obligatory talk with the headmaster (F3). If they do not, the proposition of the staff meeting remains binding. Based upon the obligatory talk with the family, the headmaster has to decide whether he sticks to the initial choice of the staff meeting (S1), whether he agrees with the family's request or whether he makes a completely different choice, i.e. the lower vocational track or letting the student repeat a school year (not illustrated in Figure 2). In the subsequent step of the dialogue, the family can, once again, reject the decision of the headmaster (F4). Given this second rejection, "...the orientation decision can be part of the recall procedure" (Loi n°89-486 du 10 juillet 1989: §8). The "recall procedure" ("procédure d'appel") takes place in every secondary school at the end of the school year. It is a general meeting of the teachers, the headmaster and the parents' representatives during which different student cases are discussed. 10 The student and the family are allowed to attend this meeting and to state their points of view. The school track decision that is brought out by the "recall procedure" (S3) is expressed by the headmaster. It is the binding final outcome of the dialogue.

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Own translation.

As pointed out by Figure A1 in the appendix, around 69% of the families in the analysis sample opt for LGT and around 25% for LP. (For a more detailed description of the analysis sample see Chapter 3).

This dossier is "the main instrument within the dialogue between the families and the different categories of secondary school agents". At the end of the school year, it will be transferred to the regional educational authorities and administration ("rectorat" and "inspection académique") in order to be used for the official statistics on family requests (Masson 1997: 135).

During the "recall procedure" e.g. school exclusions are discussed as well.

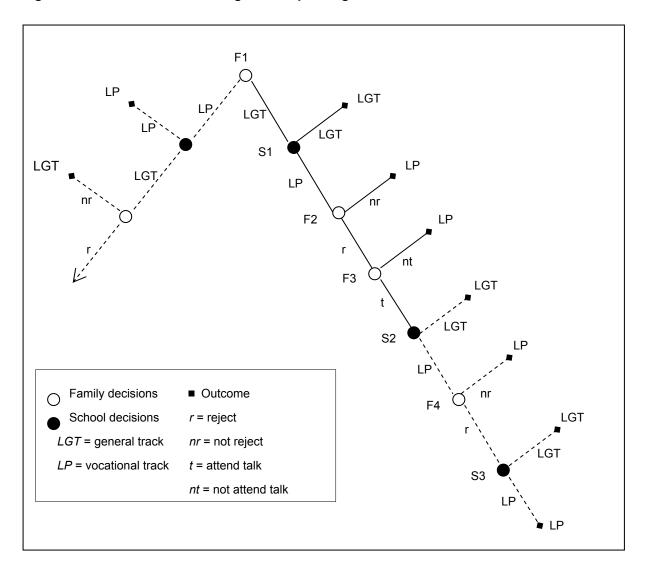


Figure 2: Decision-tree focusing on the options general and vocational school track\*

Figure A1 in the appendix presents the different pathways through the dialogue with observed frequencies. It is based on the sample used for the analyses (for a detailed description of the sampling procedure see Chapter 3). The basic points to note are: First, in most cases the staff meeting proposes the same school track the family has requested, though, the percentage of acceptance varies over 88 percent for LGT, 97 percent for LP, 78 percent for A and 92 percent for RSY. Second, the staff meeting proposes higher tracks than those requested by the families to 2 percent of those who have demanded LP, to 21 percent of those who have requested A, and to 8 percent of those who have chosen school year repetition. Third, only around 40 percent (not directly outlined in Figure A1) of the families who received a staff meeting's proposition that is lower than their request decide to reject the proposition and to attend the talk with the headmaster. Fourth, when the families have requested LGT,

<sup>\*</sup> In order to describe the dialogue between family and school in a most clear and simplified manner, the decision-tree is restricted to two initial options. As explained in the text, usually the decisions F1, S1, S2 and S3 consist of four alternatives, the general and the vocational upper secondary school track as well as the lower vocational track and letting the students repeat the school year. Dashed lines indicate branches and decisions that are not focused on in the theoretical modelling and the empirical analyses, because of too little observation numbers.

i.e. the highest school track, the decision of the headmaster mostly corresponds to the proposition of the staff meeting (61 respectively 71 percent), while when the families have demanded A or RSY (the lower options), the headmasters are more likely to accept the request. Fifth, most of the families who have rejected, but did not achieve a decision of the headmaster that corresponds to their request, decide to reject a second time. However, overall less than 2 percent of the families in the sample actually do that. Because of these small observation numbers at the end of the dialogue the empirical analyses will focus on the decisions *F1* to *F3*. Finally, repeating a school year appears to play a special role: The staff meeting proposes it even more than LP to families who have requested LGT, and the headmasters choose this option very often, too. Similarly, the recall meeting decides RSY for many of the families who have rejected a second time. These frequencies provide a preliminary support of the argument that – within the dialogue – the school staff and the families handle repeating a school year as an *intermediate* choice. They make use of this option in order to *postpone* the ultimate school track decision by one year (Roux & Davaillon 2001: 44).<sup>11</sup>

#### 2.2 Theoretical modelling

#### 2.2.1 The interdependent decision-making of the families and the school staff

Henceforth, I develop a theoretical model based on Subjective Expected Utility (SEU) Theory (Esser 1999) that explains how social class differentials emerge along the dialogue between family and school. More specifically, I formulate separate SEU-functions for the decision-making of families and teachers at every step of the dialogue. For the sake of simplicity, like in Figure 2, I concentrate on the most popular school track, namely the general upper secondary school track (LGT). Therefore, the decision I focus on has the option LGT or not LGT, the latter corresponding to LP, A or RSY. I have settled for mathematical formalization in order to provide a clear overview over the parameters I add to the existing rational decision-making model and to highlight how they interact. Besides, in order to make empirical testing of the theoretical model as simple as possible, concrete formalizing of the decision-making can be very helpful (Becker 2003, Stocké 2007).

#### Family's decision-making

As a basic model for the family's decision-making I use the SEU-model advanced by Esser in 1999. It is a general variation of a group of specific educational decision-making models provided among others by Breen and Goldthorpe (1997) and Erikson and Jonsson (1996). I have chosen Esser's model since it is more parsimonious and less complex than the model by Breen and Goldthorpe even so it is more detailed than the model by Erikson and Jonsson (1996). In a nutshell, it is detailed enough to adapt it to the institutionalized dialogue.

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Looking closer at the option RSY would be another interesting way to understand the interdependent decision-making of families and the school staff. However, this assumption is only sparsely addressed in this working paper since properly analyzing it would fill another separate work.

According to Esser (1999: 266 ff.), the family considers the direct and indirect costs of further general education C (books and other learning material, longer duration of the education, foregone earnings etc.), the benefit B of it (satisfaction of general learning, attending a diploma that leads to a higher class position, a certain level of income etc.), p the likelihood of successfully completing the chosen school track (here the general track), the costs of status decline SD and c, the probability of that status decline. Whether the family will benefit from sending their child to the upper secondary school depends on p, the child's chances of successfully passing the final exam and attaining the general diploma ("baccalauréat general"). Correspondingly, the costs of status decline depend on the probability that the child fails to successfully complete the general track (1-p). Furthermore, whether the family will experience the costs of downward mobility if the child does not attain the general diploma depends on c, the likelihood of status decline. As the theoretical models by Erikson and Jonsson (1996) and Breen and Goldthorpe (1997) are based upon rational action theory, too, they include the same parameters. The costs of status decline and the probability of it are represented by the notion of "relative risk aversion" which is an assumption regarding the aspiration of the family to avoid downward social mobility (Breen & Goldthorpe 1997: 283). In line with this assumption, SD and c indicate to which degree the parents want their child to attain at least the same social class position as they have. Students and their parents evaluate their educational options and the benefits of these with the family's social class position as a yardstick, and, hence, higher class families have more to loose from having children not following the general school track and attending university than lower class families (Boudon 1974, Erikson & Jonsson 1996: 27 f.). To summarize, given the same desire to maintain the family's social status, completing the vocational track would satisfy a working class family, but not one from the service class.

I make use of Esser's (1999: 267) model in order to formalize a basic function for the family's option of choosing LGT:

$$SEU_{F}(LGT) = pB + (1-p)c(-SD) - C \tag{1}$$

Equation 1 shows an *independent* decision-making of the family, i.e. how they would make their school track choice if they were the only one to decide, hence, not dependent on the decision of the school. The subscript F generally stands for family's decision-making and LGT indicates that the evaluated option is the general school track. To adapt this preliminary model to the institutionalized dialogue between family and school, another parameter has to be added: I, the family's subjective expected likelihood that the school will opt for the general track as well. I assume that the family additionally anticipates what decision the school staff will make, since the utility they associate with having their child attend the general track ( $SEU_F(LGT)$ ) depends on whether the staff meeting agrees with their request. In other words, since the school has the final say at the end of the dialogue, whether the family will benefit from having their child attend the general track, whether it will have to account for the costs of education and for those of status decline depends on whether the school staff opts for the general track. The following SEU-function for the family's request F1 illustrates this line of thoughts:

$$SEU_{F1}(LGT) = l_{t1}p_{t1}B + l(1 - p_{t1})c(-SD) - l_{t1}C + (1 - l_{t1})c(-SD)$$
(2)

or

$$SEU_{F1}(LGT) = l_{t1}[p_{t1}B + (1 - p_{t1})c(-SD) - C] + (1 - l_{t1})[c(-SD)]$$
(3)

Like the other small letters, the parameter I represents a probability that determines the emergence of positive or negative benefits (usually signified by capital letters). It can range from 0 to 1. The subscript t indicates the time point at which the decision of the family is made. Generally, the model will concentrate on 3 time points; t1 denotes the family's school track request at the beginning of the second semester (F1), t2 the staff meeting's proposition 2 to 3 months later (S2) and t3 the family's decision to reject and attend the talk with the headmaster a few weeks after (F2, F3). Equation 2 and 3 explicate that the benefits of education do not only depend on the chances that the student will successfully complete the general track, but on the likelihood that the teachers let the student attend the general track as well. For instance, if  $l_{t1}$  equals 0, a student that would successfully complete the general track will never benefit from that success, since the teachers will not have let him attend that track. The costs of status decline (SD) vary with the risk of status decline (c) and they emerge in case the student does fail in the general track, i.e. if  $p_{t1}$  equals 0. The second part of the equation implies that even if the staff meeting agrees with sending the student to LGT, if the student fails, the family will experience the costs of status decline (depending on c, their risk of that decline). C, the direct and indirect costs of attending the general track only emerge if the staff meeting admits the student to the general track. The last part of the equation implies that, if the staff meeting does not opt for the general track (1-I), the family will experience downward social mobility (again, depending on c, the risk of status decline), even if the student would have been able to succeed in the general track (p equals 1). Moreover, if the staff meeting does not propose LGT, the family might experience the "psychological costs" of being rejected. If the staff does not agree with the family's request, this would demonstrate to the family a mismatch of the teachers' and their own perceptions of the student's abilities, and this could irritate some families severely. 12

According to studies dealing with educational decision-making, p is generally a function of typical school performance indicators such as student's marks (e.g. Jonsson 1999, Breen & Yaish 2006), number of repeated school years (Roux & Davaillon 2001), scores on standardized tests (e.g. Jonsson 1999, Breen & Yaish 2006, Van der Werfhorst & Hofstede 2007) or – like in the case of Germany – the teacher recommendations (Becker 2003, Stocké 2007). Regarding the estimation of  $l_{t1}$ , Masson's (1997) qualitative interviews with lower secondary students and their parents reveal that most of the families feel unaware about the precise factors on which the staff meeting bases their school track decisions. Therefore, I assume that parents can only make use of school performance indicators that are

These costs are the reason why not every family initially demands LGT, regardless of their chances of actually getting access to LGT. I suggest that especially lower class families are unsure about their ability to assess their child's performance and, thus, they are more sensitive to a refusal by the school. (These additional costs are not outlined in the equations.)

visible to both actors the families and the school staff. Hence, they make use of indicators such as marks and repeated school years not only to assess  $p_{t1}$ , but to estimate  $l_{t1}$ , too. Moreover, as shown by studies dealing with cultural capital, parents are conscious that additional contact with the teachers can provide their children with more favourable treatment (Lareau 1987, Lareau & McNamara Horvat 1999, Reay 1999). Therefore, I suggest that  $l_{t1}$  is also determined by additional effort parents have put into telling the teachers what school track they want their child to attend, and extra participation in their child's schooling (e.g. being member of a parent association or initiating meetings with the teacher).

To keep the theoretical background of this study simple and clear, I formulate one SEU-function that embraces both decisions of the family, F2 and F3, their decision to reject and their decision to attend the talk with the headmaster. This seems appropriate since only if the family attends the talk, the headmaster will reconsider their initial request. To model the SEU-function for the family's decision to reject and attend the talk, one additional parameter has to be taken into account: R, the family's subjective expected costs of rejection. These costs consist of filling in the dossier and, most importantly, of going to the school and talking with the headmaster. For the parents, this may be time and money consuming as well as psychologically stressful. 13 Furthermore, although the costs and benefits of having their child attend LGT are exogenous and remain the same, the parents might evaluate  $p_{t1}$  in another way than  $p_{t1}$ , since now they know the staff meeting's school track proposition. For this reason I suggest that  $p_{t2}$  is a function of marks, repeated school years and the staff meeting's proposition. Finally. I assume that the family has to reconsider I, the likelihood that in the subsequent decision the school will agree with their request, since this decision is taken by the headmaster instead of the staff meeting. Again,  $l_{i}$  is a function of parent's subjective evaluation of their child's school performance, their participation in their child's schooling and their subjective assessment of their verbal abilities and arguments to persuade the headmaster. But this time, parents might take less account of the meetings they have initiated with teachers, since the headmaster did not attend these meetings and might even not know about them, while their membership in a parent association might be of greater importance, since the headmaster usually knows which parents are engaged in that way. Marks and repeated school years might play a minor role or even no role at all, since these already have been considered by the staff meeting and are captured by their proposition (S1). Modelling this reasoning leads to:

$$SEU_{F2}(LGT) = l_{f2}[p_{f2}B + (1 - p_{f2})c(-SD) - C] + (1 - l_{f2})[c(-SD)] + R$$
(4)

Equation 4 points out that whether the family can benefit from sending the child to the general track and whether they will have to account for the costs of that general education depends on  $l_{i2}$ , their subjectively expected likelihood that the headmaster will agree with their demand. Yet, the costs of rejection will emerge regardless of the headmaster's subsequent decision. Since the empirical analysis

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Qualitative interviews with mothers of students in primary school revealed that especially for mothers from the working class "making contact with teachers constituted a lot of psychological effort" (Reay 1999: 161). This association between social background and meeting the teachers will be addressed in more detail in the next section.

presented in this working paper is restricted to the decisions F1, S1 and F2/F3, I skip the formalization of a SEU-function for the family's decision to reject a second time (*F4*).

#### Staff meeting's decision-making

In face of the French educational reform's aim to reduce social inequality, the shifting of power of decision from the school to the families implies that letting the school decide on their own permitted greater inequalities to emerge than involving the parents in the decision-making process. This reasoning agrees with cultural reproduction theory which claims that teachers act according to the interests of the dominant social groups recruiting students of higher social background for the school tracks that lead to higher social classes and excluding students of less favourable background from these tracks (Bourdieu & Passeron 1970). Providing evidence for this argument, the studies that examine closer the dialogue between family and school argue that most often the school staff follow the families' requests without attempting to "correct" too ambitious or too modest choices of the families (Duru-Bellat & Mingat 1993, Duru-Bellat 2002, Masson 1997, Roux & Davaillon 2001). When higher and middle class parents demand the general track even though their child has rather bad marks, the staff accepts their request; when working class families demand LP although their child has good marks, the teachers do not insist on sending the child to the general track. By contrast, German studies investigating secondary effects emerging through families' as compared to teachers' decision-making have shown that school track choices made by teachers are considerably less "biased" by student's social background than families' decisions (Ditton et al. 2005, Ditton & Krüsken 2006, Neugebauer 2010). Nevertheless, in Germany the teachers make their decision prior to the families and do not have to follow a law that requires them to take into account students' aspirations. In France though, the first Article of the 1989 Orientation Law states: "The students [in school and in higher education] work out their orientation plans regarding school, university and vocation based on their aspirations and their abilities, with the help of their parents, their teachers, the orientation advisors and expert professionals" (Loi n°89-486 du 10 juillet 1989: §1). 14 Accordingly, one must assume that when French teachers consider what school track would be most appropriate for a student, they take into account the student's abilities and aspirations, i.e. students' marks and families' initial school track request (Duru-Bellat 2002).

I assume that the school staff acts rationally. They subjectively evaluate costs and benefits of choosing LGT for a student and the probabilities that these costs and benefits will emerge. I propose that choosing LGT can have one of two sets of consequences for the teachers in the staff meeting, one set of positive consequence (benefits) or one of negative consequences (costs). The benefit *G*, the staff meeting can gain include a good reputation vis-à-vis colleagues and the headmaster and professional self-esteem for having taken an appropriate decision and having helped a student to reach the general track and, hence, to have the chance of higher education. Besides, since a famous declaration by the Education Secretary Jean-Pierre Chevènement in 1985 has compelled the secondary schools to augment the rate of students who attain the "baccalauréat" to 80 percent within 15 years (Prost 1997:

207), the teachers might also feel satisfied with having followed this widely acknowledged social claim by the government. The staff meeting can experience costs as well. These costs (*D*) consist of a bad reputation, lowered professional self-esteem and, in particular, disapproval by the headmaster. Literature dealing with the dialogue and French secondary headmasters argues that the school staff, and in particular the headmaster, try to accomplish low numbers of rejections, because the educational authorities of the government request them to do so (Masson 1997, Huber 2004). Furthermore, a rejection is only valid if the parents attend the obligatory talk with the headmaster, hence, it implies that the parents bother the headmaster and may initiate other time and energy demanding meetings with the teachers to persuade them of sending their child to the general track. Moreover, the whole school's image could be harmed, if the information is spread that inappropriate school track propositions are made by its staff. This is probable in France, where schools' reputations are usually widely known and play an important role, because parents strategically choose schools that promise more favourable learning environments and higher chances of attaining higher education.

The emergence of these benefits and costs depends on probabilities. First, whether the staff meeting and the school can benefit from G depends on the "appropriateness" of sending the student to LGT. If the student obviously has low chances of succeeding in the general track, proposing the general track would not provide the staff meeting with a good reputation and appreciation by the other teachers and the headmaster. The staff meeting's subjective evaluation that the student will succeed in the general track is denoted with a and a is a function of the student's school performance. More specifically, the school staff considers visible performance indicators such as students' marks and number of repeated school years to evaluate their abilities and, by this way, their chances of success (Duru-Bellat & Mingat 1993, Roux & Davaillon 2001, Ditton & Krüsken 2006). Moreover, the staff may directly consider ascriptive student traits such as social background or parental involvement, e.g. attendance at parentteacher meetings, to estimate parent's competencies and willingness to support their child's education (Lareau 1987) and to herby evaluate a. Finally, the costs D emerge only if the parents reject the staff meeting's proposition. This subjectively evaluated probability that the family will reject (and attend the talk with the headmaster) is assigned with r. I propose that r is a function of the family's school track request (F1), the student's school performance and the parent's involvement in their child's schooling: Only if the family's request was LGT, not choosing LGT would invite the family to reject; furthermore, if the student's school performance is neither very high nor very low, the parents will be more likely to reject, since the school performance does not clearly tell which school track would be perfectly appropriate regarding the student's abilities; lastly, parental involvement in their child's schooling is a visible and distinct indicator for parent's willingness to invest in their child's schooling. In terms of parental involvement, I assume that the school staff considers two types of factors: first, the content of talks with parents during personal teacher-parent meetings, conferences and school events and, second, indicators of parental involvement in their child's education such as membership in parent associations. Both types of factors are strongly correlated, since every kind of meeting with the teachers is a possibility

<sup>&</sup>lt;sup>14</sup> Own translation.

for the parents to discuss their child's educational situation and to demonstrate their willingness to put additional effort in promoting their child's schooling. 15

Formalizing the staff meeting's decision-making leads to:

$$SEU_{S1}(LGT) = aG + (1-a)r(-D) + (1-a)(1-r)G$$
 (5)

or

$$SEU_{S1}(LGT) = aG + (1-a)[r(-D) + (1-r)G]$$
 (6)

Equation 5 and 6 illustrate that the staff meeting chooses LGT if the student is likely to succeed there (a=1), but opts for another (lower) track if the student will probably fail in the general track (a=0). Therefore, in case the staff thinks the student will succeed, it will receive the benefit G, i.e. good reputation for the teachers and the school as a whole, professional self-esteem and the satisfying feeling of having accomplished the social requests of the government. Indeed, the benefit G does also depend on the probability that the student will actually successfully complete the general track. However, for the sake of simplicity, I assume that the staff meeting is very good in predicting a student's chances of succeeding in the general track and, thus, if the teachers think a=1, the student is very likely to truly succeed. The other basic assumption I make is that the family will not reject if the staff proposes LGT. since this is the most demanded and prestigious school track. 16 On the other hand, if the staff meeting thinks that the student would fail in the general track (a=0), it will opt against LGT. Then, either the family rejects this proposition or it agrees. In case the family agrees, the staff meeting will experience no costs, but the benefits G. The staff meeting will receive good reputation and feel satisfied with their professional behaviour, since the student will succeed in a lower school track and this will show that the teachers and the whole school have made an appropriate decision. However, if the family rejects, the staff meeting will have to account for the costs D. Again, these include a bad reputation for the teachers and the school and disapproval by the headmaster, since the family will bother him when attending the talk and since the low rate of rejections required by the educational authorities will not be accomplished.

With regard to the decision of the headmaster (S2) and final recall meeting (S3), I suppose the same parameters to work. However, to keep this theoretical modelling as short and clear as possible, I skip a specific formalization of these two other school decisions. Another reason is that this part of the dialogue will not be empirically examined because of too low numbers of observations for these decisions.

Besides, it is argued that the school track decisions of the teachers and of the headmaster also depend on the possibilities of the surrounding upper secondary schools and companies to accept students from the lower secondary schools (Briand & Chapoulie 1993). Unfortunately, like Roux and Davaillon (2001) who use the same data set, I cannot directly test the effect of these factors, since I have no information on the supply of the nearby upper secondary schools and firms.

Nevertheless, there are a very small number of families who reject "higher" propositions (31 families). However, I ignore these within my theoretical modelling and I have excluded these from the analysis sample, since they can be seen as an exceptional group of observations for which distinct hypotheses would have to be made.

#### 2.2.2 The generation of social class differentials

As advanced by Erikson and Jonsson (1996), Breen and Goldthorpe (1997) as well as Esser (1999), social class differentials in students' and parents' educational decision-making emerge through three mechanisms. The first mechanism follows from the assumption that social classes differ with regard to the economic resources they control and as the marginal direct and indirect costs of education will be smaller the better their financial circumstances, for families of more favourable social background the burden of financially supporting their child's education will be less (e.g. Erikson & Jonsson 1996: 17). The second mechanism refers to the primary effects of social stratification, i.e. the effects of social background on ability (Boudon 1974). Since p the mean level of subjective ability increases with the family's social status, the proportion of service-class children who, according to the students and the parents, fulfil the certain level of ability and, thus, of probability of success that is required for attaining the general track exceeds the proportion of middle-class children. In the same way, the corresponding proportion of middle-class children exceeds the proportion of working-class children (Breen & Goldthorpe 1997: 285). 17 The third mechanism is based upon the idea that social classes differ in terms of status decline they can experience if their children do not reach at least the same social class position as they have. A service-class family will suffer steeper downward mobility than a middle class family if their child does not successfully attain the general secondary school diploma; in that same case a working-class family may suffer no decline at all. All families, regardless of their social status, feel the same "relative risk aversion" and want to avoid downward social mobility (Breen & Goldthorpe 1997: 283), but as they differ regarding the educational level their child has to reach to maintain the family's social status, they differ regarding the costs of social decline they risk if not sending their child to the general track.

Table 1 summarizes the social differentials in the parameters required by the model: The benefits *B* of attaining higher levels of education (higher income, prestige, joy of general learning, etc.) are the same for every class, so are *C* the direct and indirect costs. Nevertheless, as described above, the *marginal* costs differ by social class since their economic resources to account for *C* vary. Similar to *C*, I expect *R*, the costs of rejection, to be the same for every family. Regardless of their social background, parents (and eventually the student herself) have to meet the headmaster or to attend the recall meeting at the end of the school year and to discuss the student's educational future. However, families differ with regard to the resources they control to account for these costs of rejection; and, the social class position of a family considerably influences whether they control these resources. I assume these resources to include time and money, and most importantly cultural capital in terms of abilities and signals that help persuade the teachers (see further below). Therefore, differences in accounting for the time and monetary part of *R* can be explained via the first mechanism: social class differentials regarding economic resources lower the marginal financial (and time) costs of rejection for families from higher classes while they increase these costs, in relative terms, for families from lower social classes. The costs *SD* of status decline (loss of economic, social and psychological well-being,

Within their detailed mathematical modelling of educational decision-making, Breen and Goldthorpe moreover mention that the variance of ability (and economic resources) is the same in each class.

Esser 1999: 268) vary as well since the higher the social status of a family is, the longer they can slip socially downward. For the same reason, c, the probability that these costs emerge is 1 for serviceclass and middle-class families, while it is 0 for working-class families who could experience upward social mobility if their child attains only the "baccalauréat professionel" (Esser 1999). Corresponding to the primary effects of social stratification (Boudon 1974) the likelihood of success (p) increases with student's social background. Accordingly, I the family's subjective expectation that the teachers will accept their school track request increases with their social class position, since I partly depends on the student's school performance which - as for p - is widely known to depend on social background. Regarding the school staff's decision-making, I assume that their benefits (G) and costs (D) do not vary by student's social class. Following the idea of the primary effects, a the staff meeting's evaluation of the student's chances to succeed in LGT increases with student' social background. To sum up, one could easily say p equals l equals a. Though, since different actors (families, school staff and families who anticipate the staff meeting's evaluations) use different indicators of school performance to different degrees, all three parameters are, indeed, supposed to be positively related to social class position, but the relationship is assumed to vary by strength and by the mechanisms that generate it. For the same reason I have assigned different letters to each of the parameters. For instance, the effect of social background on I may be different, since it does not only include the student's school performance but her parent's extra participation in her schooling as well. Likewise, the variation of p by social background may be stronger than for a, since parents from higher social classes might overestimate and parents from lower social classes might underestimate the performance of their children (Erikson & Jonsson 1996). Moreover, I and p vary with the time points they are evaluated at. As explained above,  $l_{t1}$  is more based on school performance than  $l_{t2}$  and both parameters differ with regard to the types of parental involvement that affect them. The likelihood of success p varies over the time point since at t1 the family simply considers obvious school performance indicators and at t2 they additionally take into account the proposition of the staff meeting. Nevertheless, I assume that their association with social class does not considerably vary over the two time points.

Table 1: Variation of the required parameters by social class

Parameter required by the model	Social class of the family							
, ,	Working class	Middle class	Service class					
Family decision-making								
B (benefit of attending LGT)	*	*	*					
C (costs of attending LGT)	*	*	*					
R (costs of rejection)	*	*	*					
SD (costs of status decline)	0	-						
c (probability of status decline)	0	1	1					
p (likelihood of success in LGT)	-	+	++					
I (likelihood of acceptance by staff)	-	+	++					
Knowledge about the dialogue†	-	+	+					
School staff decision-making								
G (benefit of student succeeding in LGT)	*	*	*					
D (costs of rejection by parents)	*	*	*					
a (probability that student succeeds in LGT)	-	+	++					
r (probability that parents reject)	-	+	++					

Note: \* = similar value for every class; - = relatively low; -- = lower; + = relatively high; ++ = higher. † Although 'knowledge about the dialogue' is not a parameter directly integrated in the theoretical decision-making models, it contributes the generation of social class differentials within the dialogue and, hence, it is listed in this table.

Besides the three mechanisms described in the rational action models by Erikson and Jonsson (1996), Breen and Goldthorpe (1997) and Esser (1999), the institutionalized dialogue between family and school claims other mechanisms that contribute to the generation of social class differentials. A fourth mechanism operates through social class differentials in families' resources to account for R, the costs of rejection. These costs consist of going to the school and, most importantly, of attending the talk with the headmaster. To bear them a family needs time and money (see the first mechanism) and, in particular, cultural capital. 18 According to a considerable part of the literature dealing with cultural capital, parents (and students) from higher social classes make use of certain cultural resources in communicating with teachers to obtain preferable treatment (Farkas et al. 1990, Lareau 1987, Lareau & McNamara Horvat 1999, Reay 1999). These studies draw on Bourdieu's argument that schools' culture resembles the culture of the social elites enabling middle and upper class children to achieve higher levels of academic achievement than their school mates from less favourable classes (Bourdieu & Passeron 1970). Parents that have the linguistic abilities and habits valued in school feel more comfortable in the school context and in interacting with the teacher and the headmaster (Lareau 1987, Reay 1999) and, hence, are more likely to reject the school's decision and to meet the school staff in order to persuade it from sending their child to the general track. This kind of cultural capital gives the parents the confidence to attend school events, initiate and attend meetings with the teachers or to be member in parents associations – parental involvement the staff meeting considers when making their school track proposition.

Resulting from the fourth mechanism, a fifth mechanism generates social class differentials within the dialogue. It operates through the effect of social class on *visible* parental involvement in their child's schooling. The above mentioned literature on cultural capital argues that, due to the specific "middle-class culture" of the educational system, parents from higher social classes feel more comfortable in the school context, have the disposition to successfully deal with the school staff and, therefore, are more likely to take part in school events such as parent-teacher conferences, open house and volunteering in class rooms (Lareau 1987, Lee & Bowen 2006) and to initiate meetings with the teachers (Reay 1999). I propose that this kind of parental involvement plays a major role at three points along the families' dialogue with the school staff. First, when the families subjectively evaluate *I*, the likelihood that the staff meeting (or later the headmaster) will accept their request. The families basically assume that the more they are involved, the more the school staff will positively consider their request. Second, additional parental participation is supposed to be taken into account by the school staff when they evaluate *r*, the probability that the family will reject their decisions. The staff supposes that the

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The literature dealing with the term "cultural capital" is vast and varies a lot regarding the way in which it defines and operationalizes it (Jacob 2010). I rely on the circumscription of cultural capital as 'abilities and competences and the familiarity with the dominant culture' (see e.g. De Graaf et al. 2000, Dumais 2002, Becker 2010), since this best describes the facet of cultural capital that creates social class differentials in families' possibility to account for the costs of rejection.

The concept of parental involvement is mostly used in research on school achievement and, thus, also includes parental involvement in schooling *at home* such as help with homework or parent-student discussions about school (see for an example McNeal 1999). However, for the investigation of the role of parental involvement within the decision-making of families and school staff, only *visible* parental commitment and the bringing about of situations in which the parents can "activate" their cultural capital is relevant (Lareau & Horvat 1999).

more the family is involved the more likely it is to reject, to attend the talk with the headmaster and to bother the teachers with additional meetings. Third, the staff might consider parental involvement when assessing *a*, the student's s chances of success, too. As shown by qualitative studies, attending school events, initiating meetings with the teachers or being member of a parent association gives the parents the opportunity to "activate" their cultural capital in order to get a better hearing from the teachers (Lareau & McNamara Horvat 1999) and teachers "interpret[ed] parental involvement as a reflection of the value parents placed on their child's educational success" (Lareau 1987: 81). Whenever the parents meet the teachers, they have the occasion to tell them how much effort they put in their child's learning. Some types of parental involvement may even have a greater effect than others; e.g. extra time and energy consuming activities like volunteering at school events or being parent representative. In sum, since the parental involvement the families take into account to evaluate *l* and the school staff considers to assess *r* and *a* strongly depends on family's social class position (e.g. Lareau 1987, Lareau & McNamara Horvat 1999, Lee & Bowen 2006, Reay 1999), social class differentials emerge within the decision-making of the families and of the school staff as well.

Parental involvement in their child's schooling can have another positive consequence; it provides the parents with knowledge about the educational system (Coleman 1988, Masson 1994). In face of the rather complex procedure of the dialogue, I suggest this knowledge might promote the emergence of social class differentials within the dialogue, too. For instance, in Germany – where in some Länder the families are allowed to object the binding teacher recommendation - Jürgens (1989) finds that lower educated parents ignore this objection possibility. In the case of France, whether a family can consider rejecting the decisions of the school staff (S1, S2) depends on whether the family is generally aware that they have the option to reject. Moreover, even their initial decision to request LGT can depend on that knowledge: Say a family knows that the staff will propose LP (e.g. because the student has bad marks), but still the family wants the child to attend LGT. Then the family will request LGT, because they know that only if their request contradicts the staff's proposition they can reject it and if they reject they have another chance to finally get LGT. In contrast, families who have not that knowledge will be less likely to initially demand LGT. Therefore, the association between social background and the knowledge about the rejection option could function as another mechanism generating social class differentials within the dialogue. Now, one may object that - as pointed out previously - the French secondary students and their parents are supposed to perfectly know how the dialogue functions since the schools offer many possibilities to get information (e.g. meetings with the orientation advisors). However, in his qualitative study on French secondary schools Masson (1994) finds that few families take advantage of these possibilities. Besides, parents who have attended one-to-one conversations with the orientation advisor claim to be unsatisfied with their help. All parents, except those who are parents' representatives, feel uninformed about the functioning of the dialogue and the upper secondary pathways their child could opt for (Masson 1994).

#### 2.3 Hypotheses

Against this theoretical background, I advance a set of rather fundamental and more specific hypotheses on how social class differentials are generated at each step of the dialogue. Hypotheses H1 to H4 address the family's decision-making, while hypotheses H5 and H6 deal with the decision-making of the school staff.

H1: The effect of  $p_{r1}$ , C, B,  $l_{r1}$  and knowledge about the dialogue on family's request. The higher the social class position of a family the more likely they are to request the general upper secondary school track (LGT). This positive effect of social background on requesting LGT operates through the family's subjective evaluation of the benefits of that education, their financial resources to account for its costs, their child's school performance and their involvement in their child's schooling and social class differentials in family's knowledge about the dialogue.

H2: Interaction of  $p_{t1}$  and  $l_{t1}$  on family's request. Given lower and middle performance levels, parents who are involved in their child's schooling will be more likely to request LGT than parents who are not involved, since they expect the staff meeting to consider their additional effort and to, therefore, more easily accept their request.

H3: The effect of  $p_{t2}$ , C, B,  $l_{t2}$  and R on family's decision to reject. The higher the social class position of a family the more likely they are to reject the staff meeting's proposition (if this contradicts their request). This positive effect of family's social background on their decision to reject is generated by their subjective re-evaluation of the benefits of that education, their financial resources to account for its costs, their child's school performance, their involvement in their child's schooling and their financial and "cultural" resources to account for the costs of rejection.

H4: The mediating effect of knowledge about the dialogue on family's decision to reject. Families from lower social classes are less likely to reject the staff meeting's proposition (if this contradicts their request), because they are more likely to not know that they have the option to reject.

H5: *The effect of a, G, r and D on staff meeting's proposition.* The higher the social class position of a family the more likely the staff meeting is to propose LGT. This positive effect of student's social background on the staff meeting's decision is mediated by student's school performance, family's school track request and parental involvement.

H6: Interaction between a and r on staff meeting's proposition. Given low and middle performance levels, the staff meeting considers more the request of families with involved parents than of parents that are not involved in their child's schooling. This interaction is based upon two possible assumptions of the school staff: First, more involved parents are more likely to reject the staff meeting's decision and to bother the headmaster and, second, more involved parents are more likely to support and help their child in successfully completing the general track (LGT) although it finished lower secondary school with rather bad marks.

### 3 Empirical analysis

#### 3.1 Data and sampling

The analysis presented in this working paper consists of two main parts. In the first, I test the predictions outlined in Table1, i.e. the "bridge hypotheses" on the antecedent mechanisms creating social class differentials within the parameters required by the theoretical models. Briefly, they embrace the positive effect of social background on i) student's *actual* school performance in terms of marks and repeated school years and the parent's subjective evaluation of the student's school performance, ii) parent's *subjective* assessment of their financial resources to account for the costs of their child's education, iii) parent's involvement in their child's schooling and iv) parent's knowledge about the functioning of the dialogue. Unfortunately, the data I use do not provide adequate information on parent's subjective evaluation of the benefits and on their relative risk aversion. In the second part of the analyses, I test the central hypotheses (H1 to H6) on the decision-making of the families and the school staff that generate social class differentials within the dialogue.

The data employed stems from a representative longitudinal study commissioned by the French ministry of education. The "panel d'élèves du second degré" followed students who entered lower secondary school (the "collège") in 1995 up to their transition to upper secondary education in 1999 (2000 or 2001, depending on the number of school years they repeated). In the first survey year (1995) the headmasters of 5,686 lower secondary schools reported the socio-demographic characteristics (e.g. age, gender, social and immigration background) of 17,830 students. In 1998, the parents of 17,684 students received a questionnaire that collected information on their socio-demographic characteristics, their evaluation of their child's school performance and their assessment of other school relevant issues. 15,290 families returned the questionnaire. At the end of lower secondary school, i.e. in 1999 for those students who did not repeat school years and in 2000 respectively 2001 for those who did, the headmasters documented every step of the dialogue. They reported a) families' school track request, b) the propositions of the staff meetings, c) whether a family has rejected a proposition, d) whether a family has attended the talk with the headmaster, e) headmasters' subsequent school track decisions, f) whether a family has rejected the headmaster's decision and g) the final binding school track decisions of the recall meetings. As described above, Figure A1 in the appendix presents the observed frequency (based on the sample for the analyses) for each path through the dialogue. Excluding students who do not live with at least one of their parents (132 students), for whom the report on the dialogue is missing (2,545 students) and those who have missing values on the relevant variables (1,709) reduced the initial sample to 10,904 students. Furthermore, the data provides information on the type of school the student was enrolled at when the dialogue took place (private school, school belonging to a ZEP<sup>20</sup>) and the number of inhabitants of the village, town or city the school is located in.

ZEP stands for "zone d'éducation prioritaire"; these are urban areas with a high percentage of families with lower social background. Schools located in these areas receive additional support from the government to reduce social inequality in education by means of special teaching strategies and extra resources.

#### 3.2 Operationalization of the theoretical constructs

In the following, I present the measures I use to operationalize most of the parameters that are required by the theoretical models and factors that are assumed to determine these parameters. Since the number of observations decreases dramatically the closer we get to the end of the dialogue (see Figure A1), the main analysis focuses on the decisions *F1*, *S1*, *F2*, *F3*. Accordingly, only variables affecting this decision-making are generated.

Choices at each step of the dialogue. These are the central dependent variables in the analysis. The family's school track request (*F1*) can be either the general upper secondary school track (LGT) or the vocational upper secondary school track (LP) or the lower vocational track, i.e. an apprenticeship (A), or repeating a school year (RSY). In this working paper, I concentrate on family's choice between LGT and LP, since these are the most popular options (see Figure A1). The family's choices of rejection (*F2*) and of attending the talk with the headmaster (*F3*) are represented by one common binary variable which indicates whether the family has rejected and attended the talk or not rejected and not attended the talk. Those families who have rejected but not attended the talk are not considered, since they are very few (43) and since, nevertheless, only families who have attended the talk with the headmaster can obtain a revision of the school's school track decision.<sup>21</sup>

Family's social class. Information on mother's and father's occupation is provided by the family guestionnaire in 1998. In the survey occupations were categorized according to the French official socioprofessional categories. I defined these categories according to the eight EGP-classes (Erikson, Goldthorpe & Portocarero 1979, Brauns et al. 1997), since this scheme is widely acknowledged for the operationalization of social class within European comparable research on social stratification (Breen et al. 2009). In order to take account of both parents' social class position I assigned the one parent with the "higher" social class position using a dominance order proposed by Erikson and Goldthorpe (1992: 266). I then generated a social background variable that consists of 5 categories: (1) 'EGP I' includes higher-grade professionals, administrators, and officials, managers in large industrial establishments and large proprietors; (2) 'EGP II' consists of lower grade professionals, administrators, and officials, higher grade technicians, managers in small industrial establishments and supervisors of non-manual employees; (3) 'EGP III' assembles routine non-manual employees of higher grade (in administration and commerce) and routine non-manual employees of lower grade in sales and services; (4) 'EGP IV' includes small proprietors and artisans with or without employees, farmers, smallholders and other self-employed in primary production; (5) 'EGP V, VI, VII' includes technicians of lower grade, supervisors of manual workers, skilled manual workers, semi- and unskilled manual workers in industrial as well as agricultural production and students whose both parents or one single-parent have never worked, are 'housewives' or who have no precise profession. Table 2 shows that all categories are of about the same size (20 to 23 percent), except for EGP IV - the group of famers and other selfemployed - that is only about half the size of the other categories (10 percent). Although, this EGP-

These are mostly parents who assess their child's performance as low (58%) and who have attended official parent-teacher meetings (86%).

class is relatively small, I do not collapse it with another class, since the agricultural sector is important in France and its employers and employees are known to differ regarding their attitudes towards education (Roux & Davaillon 2001).

Subjective probability of success (parents). To operationalize parent's subjective evaluation of their child's chances to succeed in the general track (p), I use parent's assessment of their child's school performance. In 1998, the parent's had to rate their child's performance by answering whether they think that their child is (1) "a student that has a lot of difficulties", (2) "a student that has some difficulties", (3) "a relatively good student" (4) "an excellent student". Based on this question I generated a variable with a 4-point scale. Its mean is of 2.68 (cf. Table 2).

Subjective probability of success (school staff). I use marks and repeated school years as some of the measures the school staff uses to evaluate student's likelihood of success (a) and the probability that the family will reject their proposition (r). French marks usually range from 0 to 20. For the analyses I have calculated the average of every student's mark in French and in Math, hence, the variable ranges from 1.75 to 19.5 (cf. Table 2). The marks have been reported by the headmasters together with the information on the dialogue. They are the average of the marks the student has received in grade 8 and grade 9. Unfortunately, the marks cannot be disentangled for every grade. Furthermore, I employ a variable that indicates whether a student has repeated 1 or 2 years up to grade 9. By this means and as the sample consists only of students that reach the dialogue for the first time, this variable does not take into account school year repetitions that have been produced by the dialogue. Marks and repeated school years are applied as determinants of parent's subjective probability of success. Certainly, the chronological order of the marks and the parent's performance assessment is not perfect, since one part of the marks has been measured in grade 9, while the parent's assessed their child's performance in 1998 (grade 8). Still, one can assume the biases to be minor, since changes in marks from one school year to the other are usually very small and the parent's assessment is measured very broadly with only 4 categories, whereas the marks range on a 20-point scale.

Family's financial resources. In order to operationalize family's subjectively estimated financial resources to bear *C* the costs of sending their child to the general track, I use a question addressed to the parents in the 1998 family questionnaire. The parents were asked whether they think that the family's financial resources are (1) "not sufficient at all [...]", (2) "a bit insufficient [...]", (3) "only just sufficient [...]" or (4) "absolutely sufficient [...] for the child's educational plans". <sup>22</sup> By means of this question I created a variable with a 4-point scale. In combination with it I include the number of siblings of the student, since the more children a family has the higher the marginal costs of education will be for it (Blake 1985, Jaeger 2009). Table 2 indicates that the students included in the sample have between 0 and 16 brothers and sisters, 1.82 on average. The mean of the financial resources variable is 2.54.

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Unfortunately this variable is a relative measure, i.e. it already captures the family's educational plans and, hence, it seems an imperfect indicator. An item asking whether the family thinks their "financial resources are sufficient for letting their child attend the general track" would have been an independent and, thus, a proper indicator.

Parental involvement in their child's schooling. As explained in the previous chapter, parental involvement is supposed to affect *I*, parent's subjective evaluation of the probability that the staff meeting and the headmaster will agree with their request, *r*, the school staff's subjective assessment that the family will reject their decisions (if these are different from their request) and that the student will successfully complete LGT (a). I use three measures from the 1998 family questionnaire to operationalize parental involvement: first, parent's membership in a parent association, second, whether the parents have initiated meetings with the teachers, third, whether the parents have attended official meetings with the teachers. More specifically, the first binary variable is based upon a question on whether one of the parents is member in a parents association. The second and the third variable have been generated by means of a question on where the parents have had the chance to meet their child's teachers a) at meetings initiated by the parents or b) at official parent-teacher meetings. 17 percent of the parents in the sample are member of a parent association, 33 percent initiated meetings with the teachers and 86 percent attended the official parent-teacher meetings (cf. Table 2).

Parent's knowledge about the dialogue. In 1998, the parents had to answer the following question: "Do you think that, at the end of grade 9, the parents have the right to recall a school track decision that is not all right with them?" The answering options were "yes", "no" and "don't know". I coded a binary variable indicating whether the parents have understood the functioning of the dialogue (measured by the answer "yes"), respectively whether they have not (measured by the answers "no" and "don't know"). 82 percent of the parents who are in the analysis sample know that they have the option to reject.

Controls. Finally, I generated four variables I have to add as controls since they are related to social background and to the different outcome variables of my analyses. First, I created a binary variable for immigration background that denotes whether a child's parents were both born outside France or in the French oversees territories. The information I used was provided by the family questionnaire. Second, I built a measure indicating whether the school the student attends is located in a ZEP, i.e. an "education priority zone". Although the effectiveness of this program to reduce social inequality could not be proven (Bénabou et al. 2009), the school staff is known to be different there as compared to other public and private schools. The teachers tend to be younger, have a different teaching style and closer relations to the parents of their students (Chaveau 2001). Third, I generated a variable that denotes whether the student is enrolled at a private school. Public and private schools differ with regard to their social distribution and the average performance level of their children; at private schools more students with higher social background are enrolled (Nauze-Fichet 2004) and students who attended private lower and upper secondary schools receive better marks (Tavan 2004). Finally, as the population in French urban areas is very different from the people living in rural parts of France, I have to take into account the size of the city (or village) where the student goes to school. The more inhabitants a district has the higher the proportion of families with more favourable social background and the more "ambitious" attitudes they have (Brauns 1998). Accordingly, Roux and Davaillon (2001) show that families from Paris and larger cities are more likely to request the general track than families that live in the country side. To control for the urban-rural discrepancies I employ a variable with 4 categories: (1) 'rural to 5,000 inhabitants', (2) '5,000 to 20,000 inhabitants', (3) '20,000 to 200,000 inhabitants' and (4) '200,000 to 2,000,000 inhabitants and Paris'. The variables for the school types and the size of the town or city are based upon information provided by the headmasters in 1999. Table 2 indicates that 12 percent of the students in the analysis sample have an immigration background, 10 percent attend a school in a ZEP and 21 percent are enrolled at a public school. Most students live in larger cities or in Paris (35 percent); the smallest group are the students attending schools in smaller towns with a population between 5,000 and 20,000.

Table 2: Descriptive statistics for the two analysis samples\*

	I		lysis sample 10,904)	Sample for rejection analysis† (N = 905)				
_	Min	Max	Mean (Std. dev.)	Min	Max	Mean (Std. dev.)		
Social background								
EGP I	0	1	0.23	0	1	0.26		
EGP II	0	1	0.21	0	1	0.20		
EGP III	0	1	0.23	0	1	0.21		
EGP IV	0	1	0.10	0	1	0.12		
EGP V, VI, VII	0	1	0.24	0	1	0.21		
Performance assessed by the parents	1	4	2.63 (0.80)	1	4	2.21 (0.62)		
Marks	1.75	19.5	11.09 (2.77)	13.5	16.75	9.04 (1.51)		
Repeated school years up to grade 9	0	1	0.21	0	1	0.27		
Financial resources	1	4	2.54 (0.98)	1	4	2.56 (0.97)		
Number of siblings	0	16	1.82 (1.34)	0	16	1.86 (1.47)		
Parent's membership in parent association	0	1	0.17	0	1	0.15		
Meetings initiated by the parents	0	1	0.33	0	1	0.48		
Attendance to official parent-teacher meetings	0	1	0.86	0	1	0.85		
Knowledge about dialogue	0	1	0.82	0	1	0.83		
Immigration background	0	1	0.12	0	1	0.17		
ZEP-school	0	1	0.10	0	1	0.08		
Private school	0	1	0.21	0	1	0.30		
Town size								
rural to 5,000 inhabitants	0	1	0.20	0	1	0.13		
5,000 to 20,000 inhabitants	0	1	0.18	0	1	0.16		
20,000 to 200,000 inhabitants	0	1	0.27	0	1	0.25		
200,000 to 2,000,000 inhabitants and Paris	0	1	0.35	0	1	0.46		

Note: Standard deviations for dummy-variables are omitted.

Source: Panel national 1995 d'élèves du second degré, ministère de l'Éducation nationale, DPD; own calculations.

### 4 Empirical results

The findings of my empirical analysis are presented in three parts. Part one describes the general relationship between social class and the two main school track decisions – family's school track request (F1) and the staff meeting's proposition (S1) – and the final school track outcome of the dialogue. In the second part I briefly test the "bridge hypotheses" on social class differentials in the parameters (or determinants of these factors) of the decision-making models developed in Chapter 2. Finally, in the third part, I empirically test hypotheses H1 to H6 which aim at explaining social class differentials family's school track request (F1), the staff meeting's school track proposition (S1) and family's decision to reject the proposition and to attend the obligatory talk with the headmaster (F2/F3).

<sup>\*</sup> The choices at each step of the dialogue are not listed (cf. Figure A1); † the sample for the rejection analysis includes only students whose family has requested LGT and for whom the staff meeting proposed either LP (48 percent) or A (1 percent) or RSY (51 percent).

#### 4.1 Social class differentials within the dialogue

I begin with some descriptive results. Figure 3 presents absolute chances of opting for one of the three school tracks or repeating a school year by social class of the family. As expected, the chances of requesting, getting proposed and finally getting access to the highest track (LGT) augment with the social class position of the family. For instance, 91 percent of the families belonging to EGP I, 79 percent of those belonging to EGP II, 61 percent from EGP III, 65 percent from EGP IV and 49 percent of the families belonging to EGP V, VI and VII request the highest track. The relationship between the staff meeting's school track proposition and the family's social class highly resembles the corresponding association with family's request, though generally the chances that the staff meeting proposed LGT are lower. Regarding the final outcome of the dialogue, the respective general chances of getting access to LGT lie in-between, at least for EGP I and EGP II. More specifically, while 91 percent of the families from EGP I request LGT, the staff meeting proposes LGT to only 82 percent of them and 84 percent of these families finally attain access to LGT. For families in EGP II and EGP V, VI, VII (the "lowest" social classes) the percentages act by the same pattern. In contrast, for EGP III and IV the final outcome of the dialogue perfectly corresponds to the staff meeting's proposition, at least regarding LGT. These descriptive numbers indicate that in most of the cases the staff meeting agrees with the families demand. E.g. only 9 percent of the families that belong to EGP I and that have requested LGT, do get a proposition from the staff meeting that does not correspond to their reguest. Respectively 7 percent from EGP II, 7 percent from EGP III, 8 percent from EGP IV and 7 percent from EGP V to VII wanted LGT, but got another proposition. Now it is interesting to note that 2 percent of those families from EGP I and 1 percent of those from EGP II and EGP V to VII, finally get what they have demanded, that is access to LGT.

The average marginal effects (AME) shown in Figure 4 correspond to Boudon's "secondary effects of social stratification", i.e. the effects of student's social background on school track choices given the same performance level.<sup>23</sup> They have been gained by logistic regression models containing social class of the family, student's marks, repetition of school years and the control variables (immigration background, school type and town size). Figure 4 reveals that the two main decisions *F1* and *S1* as well as the final outcome of the dialogue are significantly affected by family's social class: Compared to the reference group EGP V to VII, EGP I, II, III and IV are all significantly more likely to demand LGT, to get an LGT-proposition from the staff meeting and to finally attain access to LGT. Moreover, regarding all three school track outcomes, the highest class is even significantly more likely than EGP II and both are significantly more likely than EGP III and IV to request LGT, receive the proposition and get access to LGT. Comparing the left graph and the one in the centre, one can see that the staff's proposition is somewhat less affected by social background than the family's own request: For instance, while the AME of the highest social class is around 0.22 for the family's request, it is 0.18 for

As pointed out by Mood (2010) the comparison of estimates obtained by non-linear models (log-odds and odds-ratios) is associated with important problems such as unobserved heterogeneity. Following the statistical solution proposed in the literature, I compare average marginal effects.

Family's request (F1) EGP I EGP II EGP III .61 EGP IV .65 02 02 EGP V-VII .49 2 0 8 Staff meeting's proposition (S1) EGP I 82 EGP II EGP III 06 .54 06 EGP IV 57 EGP V-VII .42 04 0 .2 .6 .8 Final outcome of the dialogue EGP I 84 07 01 EGP II .73 .08 EGP III EGP IV .07 .57 EGP V-VII .43 .06 School track 0 LP LGT RSY

Figure 3: Social class differentials in family's school track request (F1), staff meeting's school track proposition (S1) and the final school track outcome of the dialogue (absolute chances, N = 10904)

Source: Panel national 1995 d'élèves du second degré, ministère de l'Éducation nationale, DPD; own calculations.

the staff meeting's proposition. By tendency, this result is in line with previous studies that found weaker secondary effects on teacher decisions as compared to family decisions. However, the difference between the AMEs is very small and their confidence intervals overlap. Hence, one should note that there is no striking difference regarding social class differentials in families' school track decisions and in staff's school track choices, at least within the French institutionalized dialogue. The reader might question now, why is there no difference between social class differentials in F1 and S1? This question will be answered below by empirically testing the theoretical model on the staff meeting's decision-making.

Moving further from the graph in the centre to the graph on the right, nothing considerable changes. The impact of student's social background on the school track he or she can finally attend is exactly the same as for the probability that the student receives an LGT-proposition. This indicates that – at least on average – there is no step between *S1* and the end of the dialogue that further enhances or reduces the social class differentials that have been produced by the staff meeting. Thus, up to now it seems that family's option to reject plays only a minor role or no role at all regarding the overall generation of social class differentials within the dialogue.

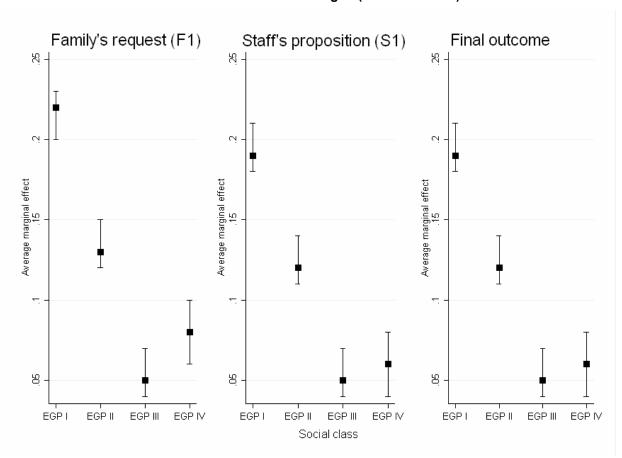


Figure 4: Average marginal effect of social class on family's request, staff meeting's proposition and the final outcome of the dialogue (LGT versus LP)

Note: Reference category for calculation of social class effect is EGP V-VII; estimates obtained from Model 2 in Table 3 (for family's request), Model 2 in Table 5 (for staff meeting's proposition) and one corresponding regression model with the final outcome of the dialogue as dependent variable (not presented in this working paper)

Source: Panel national 1995 d'élèves du second degré, ministère de l'Éducation nationale, DPD; own calculations.

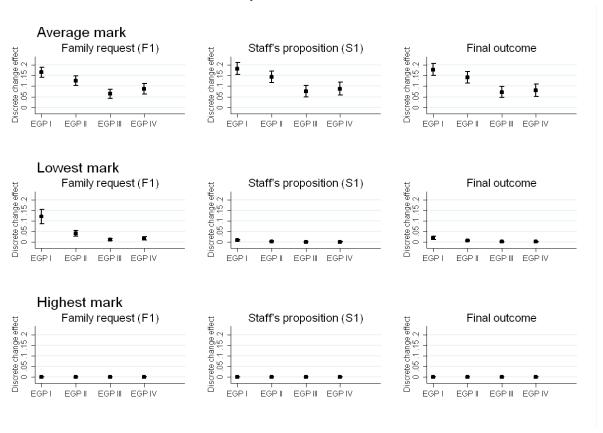
Figure 5 presents estimated changes in the probability of choosing LGT (as opposed to LP) for discrete changes in the social class variable. Again, the estimates have been obtained by logistic regression models that analyze family's request, staff meeting's proposition and the final outcome of the dialogue. In order to show how the changes in the probability vary by students' performance level, they have been calculated holding constant the marks-variable a) at its mean, b) at its lowest value and c) at its highest value (11.09 / 1.75 / 19.5, see Table 2).<sup>24</sup> The discrete change effects clearly show that the social background effect on family's request, the teachers' proposition and the outcome of the dialogue depends on the level of students' marks. Holding constant the marks at their mean, families from EGP I, II, III and IV are all significantly more likely to opt for LGT than families from EGP V-VII. The same is for the staff's proposition and the final outcome: Families from the four higher social

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Since these analyses are based on different samples, their results might be biased by unobserved heterogeneity and have to be compared with caution (Mood 2010). As pointed out above, to report effects that are not affected by unobserved heterogeneity, average marginal effects have been calculated (see Figure 4). For these cannot show the variance of the secondary effects by performance level, here discrete change effects have been produced as well.

classes are significantly more likely to receive the permission to access LGT than families from the lowest classes. Interestingly, the discrete change effects on the staff's proposition are as strong as those on the family's request. This result contradicts studies that found that teachers' decisions are less affected by secondary effects. Looking really close, one can notice that for students from EGP I the probability that the staff meeting opts for LGT is even slightly higher than the likelihood that the student's family demands LGT. This implies that secondary effects on teachers' decisions might be even stronger than on families' choices. Holding constant the marks at their lowest value, secondary effects occur only for the family's request. In particular, families belonging to EGP I demand LGT although their child performs very poorly at school. By contrast, the staff meeting's decision is not affected by student's social background at all; the teachers uniformly suggest the vocational school track (LP). Regarding the final outcome of the dialogue, a tiny increase of the discrete change effect for EGP I weakly indicates that some of the upper class families who demanded LGT even though their child has very low marks manage to finally get access to the general track - possibly by use of their right to reject. For students who perform excellently no secondary effects emerge, too. Families and school staff jointly agree that students with very high marks should attend the "lycée général et technologique".

Figure 5: Discrete change effect of family's social class on the probability of choosing LGT (vs. LP) at two main steps of the dialogue (F1 and S1) and the final school track outcome for different school performance levels



Note: Reference category for discrete change effect is EGP V-VII; estimates obtained from Model 2 in Table 3 (for family's request), Model 2 in Table 5 (for staff meeting's proposition) and one corresponding regression model with the final outcome of the dialogue as dependent variable (not presented in this working paper).

Source: Panel national 1995 d'élèves du second degré, ministère de l'Éducation nationale, DPD; own calculations.

#### 4.2 Testing the "bridge-hypotheses"

Table A1 in the appendix addresses the question whether families from different social background systematically vary regarding their subjective evaluation of their child's school performance and, thus, of their child's chances of success (parameter p). The basic assumption is that the higher the social background of a student, the higher is the parent's performance assessment, because higher social classes generally show higher actual average levels of school performance as compared to lower social classes (Boudon's "primary effects of social stratification"). Another assumption I intend to test is whether given the same actual performance level, families from different social background tend to "over-" or "underestimate" their children's performance and chances of success (Erikson & Jonsson 1996). First, coefficients gained from OLS-regressions shown in Table A1 reveal the expected positive relationship between social class and parent's assessment of their child's performance (Model 1). All models contain the control variables immigration background, town size and school type. Including the marks of the student (Model 2) and whether he has repeated at least one school year up to grade 9 (Model 3) strongly reduces the y-standardized coefficients of the EGP-classes and partly eliminates their significance. Model 3 reveals that, at a very low significance level, parents from EGP I tend to "overestimate" their child's chances of success. At the highest significance level, parents who are farmers and other smallholders (EGP III) "underestimate" the performance level of their child as compared to parents from the lowest social classes.

In Table A2 in the appendix social class differentials in parent's subjective assessment of the adequacy of their financial resources to bear their child's education are examined. This variable will be used to measure parent's subjective expectation to be able to account for *C*, the direct and indirect costs of further education. The results listed in Model 1 support the hypothesis that social classes significantly differ by their monetary capital (measured in terms of their subjective evaluation of that capital). For instance, parents from EGP I rate the adequacy of their financial resources 1.13 points higher on a 4-point-scale than parents from EGP V to VII. Taking into account the number of siblings of the student (Model 2) reduces the coefficients of all EGP-classes, supporting the assumption that with the number of children in a family its capacity to account for the education of each of them declines.

Social class differentials in parental involvement in their child's schooling and parent's knowledge about the dialogue are addressed by Table A3 in the appendix. The indicators of parent's extra commitment will be employed to approximate *I*, the family's subjective evaluation that the staff meeting will agree with their request, and *r*, the school staff's assessment that the parents will reject the proposition and attend the talk with the headmaster. Regarding parental membership in parent associations and their attendance to official parent-teacher meetings, highly significant effects of all social classes are found. They point in the expected direction: The higher the social class position of the parents the more likely they are to be member in a parent association and to attend official parent-teacher meetings. However, the effect for meetings with the teachers initiated by the parents is not significant for EGP IV and only weakly significant for EGP III. The findings presented in the three models on the left-hand side of Table A3 generally support the hypothesis that parents from higher social classes are more involved in their child's schooling. Finally, Model 1 and 2 list the results from binary logistic re-

gressions that examine social class differentials in parent's knowledge about the functioning of the dialogue. In find strong social class effects even when immigration background, town size and school type are held constant (Model 1). Taking into account the three different types of parental involvement in their child's schooling does not importantly reduce the social class effect. Nevertheless each type has a significant positive impact on parent's knowledge about the dialogue. Parents who are member in a parent association (y std. b=0.09; p>0.05), who initiate meetings with the teachers (y std. b=0.15; p>0.001) and who attend official parent-teacher meetings (y std. b=0.13; p>0.001) are more likely to know that they have the option to reject the staff meeting's proposition. However, the causality of this relationship is not clear. Either, parents know about the rejection option because they are involved in their child's schooling, e.g. because they have been informed about the dialogue in parent-teacher meetings; or, since parents know how the educational system functions, they are more involved, e.g. they are more likely to attend school events and to know how important it is to talk regularly with the teachers. Yet, it is important to note that parental involvement and their knowledge about the dialogue are strongly positively related and depend on social class.

#### 4.3 Educational decision-making of the family and the school staff

This section addresses the decision-making models that have been theoretically elaborated in Chapter 2. As extensively outlined there, these models aim at explaining the emergence of social class differentials within the dialogue. The empirical existence of such social class differentials has been shown in section 4.1; now, their emergence will be examined by empirically testing the theoretical models on family's and school staff's decision-making.

#### 4.3.1 Family's decision marking

First, I test hypothesis H1 which assumes that the family's decision to request LGT is based upon an evaluation of  $p_{r1}$ , C, B,  $l_{r1}$  and is affected by their knowledge about the dialogue. Table 3 shows the results of logistic regressions of families' decision to request LGT rather than LP. All models include the control variables immigration background, town size and school type. Model 1 reveals strong effects of social background on the likelihood that the family will demand LGT. The inclusion of marks and repetition of school years considerably reduces the social background effect, revealing that social class differentials in school performance (the "primary effects") explain a large part of social class differences in families' educational decision-making (Model 2). Taking into account parent's subjective performance assessment and their subjective evaluation of their financial resources further lowers the coefficients of all EGP-variables (Model 3). The y-standardized coefficient of EGP I decreases from 1.24 to 7.0, the one of EGP II from 0.72 to 0.39, the one of EGP III from 0.26 to 0.16 and the corresponding coefficient of EGP IV from 0.4 to 0.22. All effects remain highly significant. This remaining effect can be attributed to those parameters that could not operationalized (e.g. B and family's relative risk aversion). Nevertheless, this result provides strong empirical support for the educational decision-making theory of Erikson and Jonsson (1996), Breen and Goldthorpe (1997) as well as Esser (1999).

It is interesting to note that both school performance indicators – the more subjective assessment of the parents and the more objective measures marks and repeated school years - are highly significant. On the one hand, this may indicate that when actually making the request, the family uses different "subjective" and "objective" indicators to evaluate the student's chances of success. On the other hand, if the parent's performance assessment is a sufficient proxy for their evaluation of their child's chances of success, the remaining significant effect of marks and repeated school years may indicate that the parents use these visible generally acknowledged performance measures to anticipate whether the teachers will propose LGT, in other words, to evaluate  $l_{1}$ . Taking into account membership in a parent-association, initiation of meetings with the teachers and attendance at official parentteacher meetings, slightly reduces the effect of all social classes (Model 4). The y-standardized coefficients of membership in a parent-association and attendance at official parent-teacher-meetings are highly significant and are both of size 0.12, while the variable measuring the initiation of meetings with the teachers is less significant and smaller (b std. y=0.07). The positive significant impact of parental involvement might be driven by parents who for long have wanted their child to receive preferable treatment and access to LGT and, therefore, have been engaged a lot in their child's education. At the same time, it could indicate that parents consider the additional effort they have put in showing the teachers how involved they are in their child's education and in discussing their child's school career with them to assess  $l_1$ , the probability that the staff accept their request. Finally, Model 5 includes parent's knowledge about the functioning of the dialogue. This variable has a small positive effect that is marginally significant (b std. y=0.05) and its introduction into the sample has practically no impact on the effects of the EGP-classes. The weak but significant effect of the knowledge about the dialogue implies that, given the assessment of p (student's chances of success) and I (probability that the teachers will choose LGT), parents who know that they have the option to reject, are more likely to demand the general track. In other words, although they know that the staff will probably not accept their request, they demand LGT, because they know that if they do so, they will have the chance to reject.25

However, a graphical analysis of the probability that the family will request LGT by knowledge about the dialogue and student's marks did not reveal significant additional effects of knowledge about the dialogue.

Table 3: Determinants of family's school track request: option LGT compared to LP (logit coefficients estimated with binary logistic regressions; y-standardized)

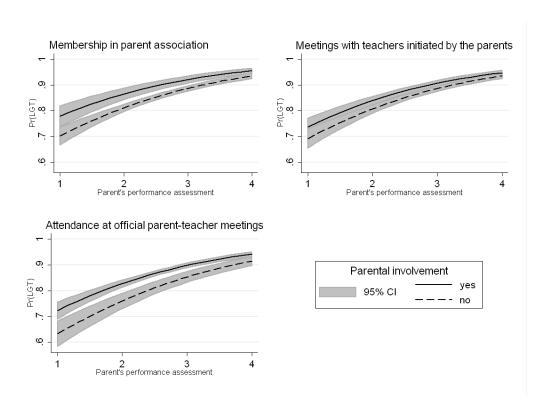
		Model 1			Model 2			Model 3			Model 4			Model 5	5
	b	(SE)	b std. y	b	(SE)	b std. y	b	(SE)	b std. y	b	(SE)	b std. y	b	(SE)	b std. y
Social background															
(Ref. EGP V, VI,VII)															
EGP I	2.54***	(0.10)	1.24	2.16***	(0.11)	0.75	2.07***	(0.12)	0.69	1.98***	(0.12)	0.66	1.97***	(0.12)	0.66
EGP II	1.49***	(0.07)	0.72	1.22***	(0.09)	0.42	1.16***	(0.09)	0.39	1.09***	(0.09)	0.36	1.07***	(0.10)	0.36
EGP III	0.54***	(0.06)	0.26	0.49***	(0.08)	0.17	0.48***	(80.0)	0.16	0.45***	(80.0)	0.15	0.44***	(0.08)	0.15
EGP IV	0.82***	(0.08)	0.40	0.71***	(0.10)	0.25	0.64***	(0.10)	0.22	0.62***	(0.10)	0.21	0.61***	(0.10)	0.20
Immigration background	0.10	(0.07)	0.05	0.59***	(0.09)	0.20	0.59***	(0.10)	0.20	0.64***	(0.10)	0.21	0.65***	(0.10)	0.22
Town size															
(Ref. < 5,000 inhabitants)															
5,000–20,000	0.07	(0.07)	0.03	0.27**	(0.09)	0.09	0.30**	(0.09)	0.10	0.29**	(0.09)	0.10	0.29**	(0.09)	0.10
20,000–200,000	0.29***	(0.07)	0.14	0.55***	(0.09)	0.19	0.57***	(0.09)	0.19	0.59***	(0.09)	0.20	0.59***	(0.09)	0.20
200,000- Paris	0.36***	(0.07)	0.18	0.88***	(0.09)	0.30	0.88***	(0.09)	0.29	0.88***	(0.09)	0.29	0.88***	(0.09)	0.29
Private school	-0.06	(0.06)	-0.03	-0.22**	(80.0)	-0.08	-0.21**	(0.08)	-0.07	-0.25**	(80.0)	-0.08	-0.25**	(80.0)	-0.08
ZEP-school	-0.24**	(0.08)	-0.12	-0.19	(0.10)	-0.06	-0.18	(0.10)	-0.06	-0.19	(0.10)	-0.06	-0.19	(0.10)	-0.07
Marks				0.58***	(0.02)	0.20	0.51***	(0.02)	0.17	0.50***	(0.02)	0.17	0.50***	(0.02)	0.17
Repeated year(s)				-1.46***	(0.07)	-0.51	-1.25***	(0.07)	-0.42	-1.25***	(0.07)	-0.42	-1.25***	(0.07)	-0.42
Parent's perform. assessment							0.60***	(0.05)	0.20	0.61***	(0.05)	0.20	0.61***	(0.05)	0.20
Financial resources							0.12***	(0.03)	0.04	0.11**	(0.03)	0.04	0.11***	(0.03)	0.04
Number of siblings							-0.07**	(0.02)	-0.02	-0.06*	(0.02)	-0.02	-0.06*	(0.02)	-0.02
Parent association										0.34***	(0.10)	0.12	0.34***	(0.10)	0.11
Meetings initiated by the parents										0.20**	(0.07)	0.07	0.19**	(0.07)	0.07
Official teacher-parent-meetings										0.36***	(80.0)	0.12	0.36***	(80.0)	0.12
Knowledge about dialogue													0.15*	(80.0)	0.05
Const.	-0.06	(0.06)		-5.87***	(0.19)		-6.73***	(0.22)		-7.12***	(0.24)		-7.24***	(0.24)	
Pseudo R <sup>2</sup>	0.114	(0.00)		0.388	(0.10)		0.403	(0.22)		0.407	\0.2.)		0.408	(0.2.)	
N	10224			10224			10224			10224			10224		

Note: SE = standard error; \* p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001; full analysis sample (N = 10,904).

Source: Panel national 1995 d'élèves du second degré, ministère de l'Éducation nationale, DPD; own calculations.

Figure 6 intends to test hypothesis H2 which predicts an interaction of parent's assessment of their child's probability of success ( $p_{t1}$ ) and the likelihood that the staff meeting will propose LGT ( $l_{t1}$ ). More specifically, I examine whether parental involvement significantly augments the probability that the family requests LGT when the parents rate their child's performance as middle or low. Figure 6 reveals that for membership in parent association and attendance at official parent-teacher meetings and for students with a performance assessment between 1 and 3 (on a 4-point scale) parental involvement significantly enhances the probability that the family demands LGT (as compared to LP). This can be interpreted as evidence for the assumption that parents take into account the extra effort they have put in meeting the teachers and in demonstrating their support of their child, especially when the probability that the staff will accept their demand is uncertain – that is when their child is neither well performing nor too poorly performing.

Figure 6: Probability that family requests LGT (compared to LP) by the three types of parental involvement



Note: estimates are obtained from binary logistic regression which contain social background, marks, repetition of school years, control variables, parent's performance assessment and either membership in parent association, meetings initiates by the parents or attendance at official parent-teacher meetings; CI = confidence interval.

Source: Panel national 1995 d'élèves du second degré, ministère de l'Éducation nationale, DPD; own calculations.

This can be seen from the white area between the two curves indicating that there the confidence intervals do not intersect.

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Important problems emerge when interaction terms of log-odds or odds-ratios are interpreted (Ai & Norton 2003). Hence, following statistical literature, I look at absolute probabilities and their confidence intervals to examine whether the expected interactions are significant.

Table 4 presents results of logistic regression models that analyze families' decision to reject the staff meeting's proposition (F2) and to attend the obligatory talk with headmaster (F3). All models include the control variables immigration background, size of the town the school is located in and school type. Since only families who did not receive the proposition that corresponds to their request have to decide whether they reject or not, the regressions are calculated using a sample that consists only of students whose families demanded LGT but to whom LP, A or RSY was proposed by the staff meeting.<sup>28</sup> Table 2 (Chapter 3) shows descriptive statistics of this restricted sample. The results presented in Table 4 aim at testing hypothesis H3 that expects social class differentials in family's decision to reject and attend the talk to be explainable by family's subjective evaluation of  $p_{12}$ , C, B,  $l_{12}$  and R. Model 1 reveals that families from EGP I and II are significantly more likely to reject and attend the talk than families that belong to the lowest social classes (EGP V to VII). Interestingly, the coefficient for EGP I is slightly smaller than the one for EGP II. Taking into account marks and repetition of school years (Model 2) reduces the significance of the social class effects, but enhances the y-standardized coefficients of both highest EGP-classes. Probably due to low observation numbers, none of the other variables show significant effects. Nevertheless, interpreting them can reveal interesting insights. When parent's assessment of their child's school performance is included (Model 3), the social class effects are further reduced and lose their significance. Although the coefficient of parent's performance assessment is not significant, I value these results as evidence for the assumption that social class differentials in  $p_{12}$  (student's re-evaluated chances of success) partly explain social class differentials in family's decision to reject and attend the talk. Adding family's subjective evaluation of their financial resources (Model 4), provides even more support for the decision-making model developed in Chapter 2. The social class effects go on decreasing and the coefficient of the variable measuring the financial resources shows a positive sign (b std. y=0.08, not significant). Furthermore, this finding provides support for the role of R, the costs of rejection, as these costs can be accounted for by financial capital, too. Finally, Model 5 additionally contains parental involvement and knowledge about the option to reject. Though still no variable shows any significance, one can see that the effects of EGP I and EGP II increase. Membership in parent association and meetings with the teachers initiated by the parents would have a positive effect on family's decision to reject and talk with the headmaster, while attendance at official parent-teacher meetings and knowledge about the dialogue would have a negative impact. These findings indicate that parent's additional effort and their knowledge about the dialogue do not explain the emergence of social class differences in F2 and F3, but still seem to influence the families when they elaborate their decision. I carefully suggest that parental involvement can affect the family's decision-making in two ways: First, parents take into account their extra effort to assess  $l_{i2}$ , the probability that the school (here the headmaster) will finally accept their request. Second, parental

<sup>-</sup>

Whether a student belongs to this restricted sample depends on factors that affect his or her family's decision to reject and talk with the headmaster. Since this dependence might bias the estimates of the regression, I follow statistical literature on sample selection and insert an "inverse mill's ratio" in the regression models (Heckman 1979). This inverse mill's ratio has been calculated by a logistic regression model that includes variables which have a significant effect on being selected into the restricted sample. These are student's social class, immigration background, private school, town size (200,000 inhabitants – Paris), performance assessed by the parents, marks and knowledge about the dialogue.

involvement measures parent's *cultural capital*, meaning the cultural competencies and, hence, the confidence the parent's have in being able to persuade the headmaster. Put another way, parental involvement seems to be a proper measure for parent's (cultural) resources to account for R, the costs of rejection. However, social class differentials in these resources seem not to be the cause of social class differentials in F2 and F3. Finally, one has to generally keep in mind that these results have to be interpreted with caution, since none of the effects is significant and the analysis is based on a small sample.

Table 4: Determinants of families' decision to reject and attend talk with headmaster (logit coefficients estimated with binary logistic regressions; y-standardized)

		Model 1	Model 2			Model 3				Model 4			Model 5		
	b	(SE)	b std. y	b	(SE)	b std. y	b	(SE)	b std. y	b	(SE)	b std. y	b	(SE)	b std. y
Social background															
(Ref. EGP V, VI,VII)															
EGP I	0.74**	(0.26)	0.40	0.85*	(0.42)	0.46	0.52	(0.47)	0.28	0.43	(0.48)	0.23	0.71	(1.98)	0.38
EGP II	0.78**	(0.25)	0.42	0.85*	(0.33)	0.46	0.63	(0.36)	0.34	0.60	(0.36)	0.33	0.80	(1.30)	0.43
EGP III	0.17	(0.23)	0.09	0.20	(0.25)	0.11	0.09	(0.26)	0.05	0.12	(0.27)	0.06	0.21	(0.60)	0.11
EGP IV	0.02	(0.29)	0.01	0.07	(0.34)	0.04	-0.14	(0.37)	-0.07	-0.15	(0.37)	-0.08	0.04	(1.28)	0.02
Immigration background	0.32	(0.22)	0.17	0.33	(0.23)	0.18	0.23	(0.24)	0.12	0.20	(0.25)	0.11	0.29	(0.68)	0.16
Town size															
(Ref. < 5,000 inhabitants)															
5,000–20,000	0.03	(0.27)	0.02	0.04	(0.27)	0.02	0.04	(0.27)	0.02	0.06	(0.27)	0.03	0.07	(0.28)	0.04
20,000–200,000	0.09	(0.25)	0.05	0.10	(0.25)	0.05	0.11	(0.25)	0.06	0.13	(0.26)	0.07	0.14	(0.26)	0.08
200,000- Paris	0.10	(0.25)	0.06	0.15	(0.28)	80.0	0.01	(0.29)	0.01	0.04	(0.29)	0.02	0.16	(0.88)	0.09
Private school	0.23	(0.18)	0.13	0.31	(0.30)	0.17	0.04	(0.35)	0.02	0.05	(0.35)	0.02	0.26	(1.51)	0.14
ZEP-school	0.24	(0.27)	0.13	0.23	(0.27)	0.13	0.23	(0.27)	0.13	0.23	(0.27)	0.12	0.23	(0.27)	0.12
Marks				-0.04	(0.14)	-0.02	0.07	(0.16)	0.04	0.06	(0.16)	0.03	-0.04	(0.72)	-0.02
Rep. year(s)				0.08	(0.16)	0.04	0.10	(0.17)	0.05	0.11	(0.17)	0.06	0.11	(0.17)	0.06
Parent's perform. assessment							0.21	(0.14)	0.11	0.18	(0.15)	0.10	0.13	(0.39)	0.07
Financial resources										0.15	(80.0)	0.08	0.15	(80.0)	0.08
Number of siblings										0.03	(0.05)	0.01	0.03	(0.05)	0.01
Parent association													0.08	(0.21)	0.05
Meetings initiated by the parents													0.11	(0.72)	0.06
Official teacher-parent-meetings													-0.05	(0.21)	-0.03
Knowledge about dialogue		(a (=)			(2.42)			(a = ()			.a =		-0.08	(0.23)	-0.04
Inverse Mill's Ratio†	0.23	(0.15)	0.12	0.35	(0.42)	0.19	-0.06	(0.51)	-0.03	-0.03	(0.51)	-0.02	0.33	(2.54)	0.18
Constant	-1.80***	(0.54)		-1.82***	(0.54)		-1.98***	(0.55)		-2.38***	(0.61)		-2.44*	(1.18)	
Pseudo R²	0.017			0.017	, ,		0.019			0.023	, /		0.023		
N	904			904			904			04			04		

Note: SE = standard error; \* p < 0.05; \*\* p < 0.01; \*\*\* p < 0.00; † Inverse Mill's Ratio was calculated with a logistic regression model including student's social background, immigration background, private school, town size (200,000 inhabitants – Paris), performance assessed by the parents, marks and knowledge about the dialogue.

## 4.3.2 School staff's decision marking

Finally, I test the decision-making model developed to explain social class differentials in S1, the staff meeting's school track proposition. To do so, I start with testing hypothesis H5 which assumes that the effects of student's social background on the staff's choice can be explained by a, G, r and D. Table 5 lists the results of logistic regressions of the staff proposition (LGT vs. LP). In all models I control for immigration background, town size and school type. Comparing the social class effects in Model 1 and Model 2, one notices that - as for the family's request - a large part of the highly significant social class differentials in the teachers' decision is driven by social class differentials in marks and repeated school years, i.e. the primary effects. Adding family's school track request (F1), dramatically reduces the effect of student's social background and even eliminates the significance of the coefficients of the lower and middle EGP-classes (see Model 3). Though, the coefficient of EGP I remains highly significant (b std. y=0.12) and the one of EGP II weakly significant (b std. y=0.07) indicating that net of student's school performance and his or her family's request, the staff meeting is more likely to propose LGT to students who belong to higher social classes than to students from the lowest social classes (reference category EGP V to VII). When parental involvement is held constant (Model 4), the ystandardized coefficient of EGP I is slightly reduced to 0.11 and loses some significance. If student's parents are member of a parent association this positively affects the probability that the staff meeting proposes LGT (as compared to LP), while if parents have initiated meetings with the teachers, the staff is less likely to opt for LGT. I suggest that - to some extent - the findings presented by Table 6 can be interpreted as evidence for hypothesis H5. Social class differentials in the staff meeting's proposition seem to be caused by the staff's evaluation of a, student's performance (via marks and repetition of school years) and r, the likelihood that the student's parents will reject their proposition (via the family's request and membership in parent association). At the same time, the most remarkable finding gained by this analysis is that given the same school performance and given the same request, the staff meeting is more likely to propose LGT to a family from EGP I and EGP II than to a family from the lowest classes. This result leads to different interpretations. Either, it indicates that the teachers use student's social background (and their parent's involvement) to assess the student's chances of success (a). Or, the staff employs student's social background to evaluate r, the probability that his or her parents will reject and bother the headmaster. Alternatively, the remaining significant effects of EGP I and EGP II may be interpreted as support for the ideas of Bourdieu's cultural reproduction theory: The school staff acts as "gatekeeper" by recruiting higher and middle class students for the general track and preventing lower class students from upward social mobility.

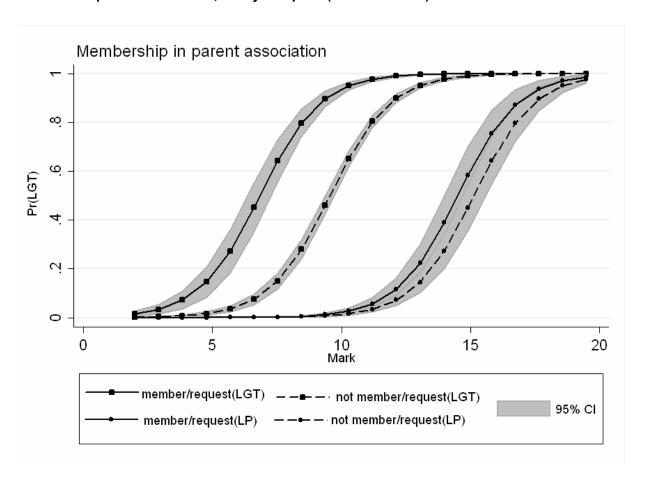
Table 5: Determinants of staff meeting's school track proposition: LGT compared to LP (logit coefficients estimated with binary logistic regressions; y-standardized)

	Model 1				Model 2			Model 3			Model 4	
	b	(SE)	b std. y	b	(SE)	b std. y	b	(SE)	b std. y	b	(SE)	b std. y
Social background												
(Ref. EGP V, VI,VII)												
EGP I	2.34***	0.09	1.16	1.90***	0.11	0.56	0.63***	0.18	0.12	0.58**	0.18	0.11
EGP II	1.44***	0.07	0.71	1.18***	0.10	0.35	0.38*	0.17	0.07	0.37*	0.18	0.07
EGP III	0.53***	0.06	0.26	0.51***	0.09	0.15	0.15	0.16	0.03	0.14	0.16	0.03
EGP IV	0.76***	0.08	0.38	0.60***	0.11	0.18	0.17	0.20	0.03	0.14	0.20	0.03
Immigration background	-0.08	0.07	-0.04	0.38***	0.10	0.11	-0.21	0.16	-0.04	-0.19	0.16	-0.04
Town size												
(Ref. < 5,000 inhabitants)												
5,000–20,000	0.05	0.07	0.02	0.26**	0.10	0.08	0.19	0.19	0.04	0.20	0.19	0.04
20,000-200,000	0.25***	0.07	0.13	0.59***	0.09	0.17	0.41*	0.18	0.08	0.43*	0.18	0.08
200,000- Paris	0.21**	0.07	0.11	0.78***	0.09	0.23	0.35*	0.17	0.07	0.36*	0.17	0.07
Private school	-0.22***	0.07	-0.11	-0.59***	0.08	-0.17	-0.82***	0.13	-0.15	-0.79***	0.13	-0.15
ZEP-school	-0.19*	0.08	-0.09	-0.07	0.11	-0.02	0.01	0.19	0.00	0.02	0.19	0.00
Marks				0.82***	0.02	0.24	0.85***	0.04	0.16	0.85***	0.04	0.16
Repeated school year(s)				-1.65***	0.07	-0.49	-1.48***	0.12	-0.28	-1.45***	0.12	-0.27
Family's request (LGT)							6.54***	0.19	1.23	6.55***	0.19	1.22
Parent association										0.56**	0.18	0.10
Meetings initiated by the parents										-0.24*	0.12	-0.05
Official teacher-parent-meetings										-0.02	0.16	-0.00
Constant	-0.21***	0.06		-8.65***	0.24		-12.88***	0.49		-12.80***	0.50	
Pseudo R <sup>2</sup>	0.106			0.487			0.802			0.803		
N	9710			9710			9710			9710		

Note: SE = standard error; \* p < 0.05; \*\* p < 0.01; \*\*\* p < 0.00.

In order to test hypothesis H6 I look at the interaction of membership in a parent association, family's request and student's school performance. This analysis is based on the assumption that a certain type of parental involvement may have a crucial impact on the staff meeting's decision-making, either because the staff uses it as an additional indicator of student's chances of success (a), or because it properly predicts whether the family will reject the staff's proposition (r). Figure 7 provides strong evidence for the special role of membership in parent association. It reveals that when families have requested LGT even though their child has marks in the low and middle range (~ 2 to 14), the school staff is significantly more likely to propose LGT to parents who are member of a parent association than to parents who show not such type of involvement. This advantage of involved parents increases with student's school performance. The reader now may wonder whether this relationship can be found for the other types of parental involvement and even for student's social background, too. Corresponding analyses not presented in this working paper, show that neither attendance at official parent-teacher meetings nor initiation of meetings or social class position itself provide such advantage for the families.

Figure 7: Probability that staff meeting proposes LGT (as compared to LP) by membership in parent association, family's request (LGT versus LP) and marks



Note: Estimates are obtained from a binary logistic regression including social background, repetition of school years, control variables, family's request, membership in parents association and marks; CI = confidence interval.

## 5. Summary and conclusion

The general aim of this working-paper is to analyze social class differentials at the transition from lower to upper secondary education in France. More specifically, it examines whether and how the social background of students affects the different steps of the French institutionalized dialogue between family and school that has been implemented to produce equitable decisions on students' upper secondary education. The first step of my empirical examination is to investigate whether there are significant social class differentials within the dialogue. Indeed, I find strong effects of students' social background on the school track decisions their parents and their teachers make and on the final outcome of the dialogue. The most interesting aspect of these social class differentials is that the staff meeting's school track proposition is as highly affected by student's social class as the family's request. Moreover, I find that no important social class differentials seem to be generated through the steps that come after the staff meeting's decision (family's rejection, headmaster's decision, etc.). The second part of the empirical analysis aims at detecting the mechanisms that generate these social class differentials. Regarding the family's request, I find that rational action theory explains most of the social class effect. As compared to previous research, this study has moreover shown the important role of parental involvement. Its results reveal that parents take into account their own effort when evaluating either their child's chances of success or the likelihood that the teachers will agree with their request. If the parents are member of a parent association or attending the official parent-teacher meetings, they are considerably more confident in requesting the general track than parents who are not involved in that way. As to the social class differentials in staff meeting's proposition, the findings gained by previous studies examining the dialogue can be confirmed. The staff meeting's decisionmaking is extremely driven by family's request and, therefore, it reproduces the large social class differentials that emerge through families' decision-making. In contrast to previous research, I find that given the same request and the same performance, the staff meeting is even more likely to propose LGT to students from the higher social classes than to students from the lower ones. Moreover, the remarkable role of parental involvement becomes apparent again. First, this additional commitment of the parents explains at least a small part of the social class differentials in the staff's school track choice. Second, membership in parent association appears to be a good way for a family to convince the staff meeting to propose the general track, even though the student concerned has rather low marks. This is either because the staff meeting wants to avoid family's rejection, or because it thinks that parental involvement is an indicator for student's future chances of success. Regarding the third step of the dialogue, my analysis shows that especially parents from the highest social classes reject the staff's proposition and attend the talk with the headmaster. Not significant but plausible estimates seem to indicate that family's decision to reject and meet the headmaster, is based on a rational consideration of their child's chances of success and their resources to account for the costs of education and - most importantly - for the costs of the rejection. Finally, knowledge about the option to reject has a minor impact on the generation of social class differentials within the dialogue.

In conclusion, this paper demonstrates that analyzing the institutionalized dialogue between family and school in France provides three main insights regarding the intergenerational reproduction of social inequality and the potential of rational action theory to explain it. First, although the dialogue has been

implemented to reduce social inequality, this examination points out that the dialogue stabilizes and even increases social inequality since staff meetings' decisions are strongly determined by families' requests and since, given the same request, the staff meeting is more likely to send a student from the higher social classes to the general track than a student from less favourable classes. This finding implies that shifting decision-making power from the families to the school can be counterproductive under some structural circumstances. Probably the family's request should not be made prior to the staff meeting's proposition and, hence, the German case in which the teachers pronounce a binding recommendation seems to be more successful in reducing social inequality. Second, the quantitative results of this analysis confirmed the findings of qualitative studies that claim the importance of social class differentials in parental involvement. I found that both families and the school staff take into account the family's additional commitment, but they differ on the value they associate with the different types of commitment. Parents seem to think that every kind of involvement is going to persuade the staff meeting, while the truth is that only membership in a parent association really animates the staff to accept the family's school track request. Third, although not every parameter could be operationalized, this study shows, again, that rational action theory can explain a large part of the secondary effects on family's educational choices. Moreover, it reveals that analyzing the decision-making of school staff should be based upon similar theoretical ideas. Unfortunately, due to missing appropriate variables, the empirical results could not detect the detailed mechanisms that drive teachers' evaluation of the costs and benefits of their choices. Yet, they provide first evidence and motivate further research, at best with special quantitative data on school staff's decision-making.

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## **Appendix**

Figure A1: Absolute number of families traversing the dialogue (full analysis sample; N = 10,904)

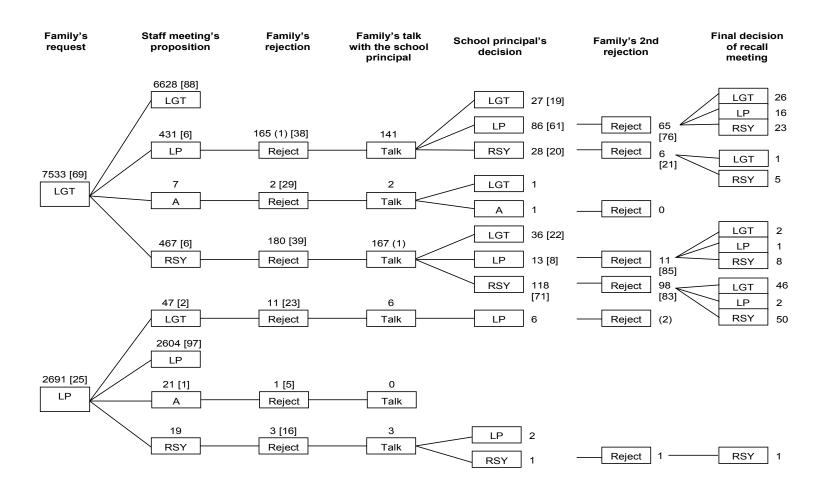
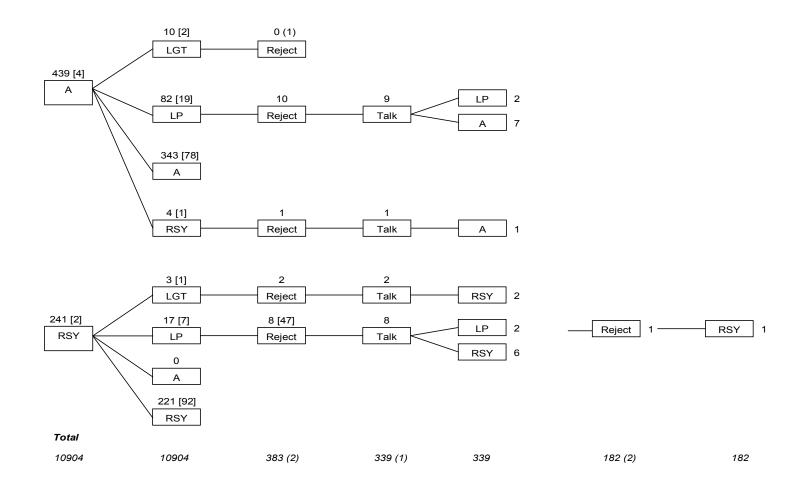


Figure A1: Absolute number of families traversing the dialogue (full analysis sample; N = 10,904), continued



Note: Numbers in parentheses indicate missing values.

Table A1: Social class differentials in school performance assessment of the parents (unstandardized and standardized coefficients from OLS-regression)

		Model 1			Model 2		Model 3			
	b	(SE)	β	b	(SE)	β	b	(SE)	β	
Social background										
(Ref. EGP V, VI,VII)										
EGP I	0.47***	(0.02)	0.24	0.07***	(0.02)	0.04	0.04*	(0.02)	0.02	
EGP II	0.26***	(0.02)	0.13	-0.01	(0.02)	-0.00	-0.03	(0.02)	-0.02	
EGP III	0.04	(0.02)	0.02	-0.06***	(0.02)	-0.03	-0.06***	(0.02)	-0.03	
EGP IV	0.12***	(0.03)	0.05	-0.01	(0.02)	-0.00	-0.02	(0.02)	-0.01	
Immigration background	0.02	(0.02)	0.01	0.11***	(0.02)	0.04	0.11***	(0.02)	0.04	
Town size										
(Ref. < 5,000 inhabitants)										
5,000–20,000	-0.04	(0.02)	-0.02	-0.01	(0.02)	-0.00	0.00	(0.02)	0.00	
20,000–200,000	-0.02	(0.02)	-0.01	0.02	(0.02)	0.01	0.01	(0.02)	0.01	
200,000– Paris	-0.04	(0.02)	-0.03	0.05**	(0.02)	0.03	0.04**	(0.02)	0.03	
ZEP-school	-0.01	(0.03)	-0.00	0.02	(0.02)	0.01	0.03	(0.02)	0.01	
Private school	-0.07***	(0.02)	-0.04	-0.09***	(0.02)	-0.05	-0.07***	(0.01)	-0.04	
Marks				0.19***	(0.00)	0.65	0.17***	(0.00)	0.59	
Repeated school years							-0.38***	(0.02)	-0.20	
Constant	2.48***	(0.02)		0.55***	(0.03)		0.84***	(0.03)		
R <sup>2</sup>	0.049			0.430			0.464		·	

Note: SE = standard error; \* p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001; full analysis sample (N = 10,904).

Source: Panel national 1995 d'élèves du second degré, ministère de l'Éducation nationale, DPD; own calculations.

Table A2: Social class differentials in adequacy of parent's financial resources (unstandardized and standardized coefficients from OLS-regression)

		Model 1		Model 2					
	b	(SE)	β	b	(SE)	β			
Social background									
(Ref. EGP V, VI,VII)									
EGP I	1.13***	(0.03)	0.48	1.09***	(0.03)	0.46			
EGP II	0.57***	(0.03)	0.23	0.53***	(0.03)	0.22			
EGP III	0.16***	(0.03)	0.07	0.12***	(0.03)	0.05			
EGP IV	0.48***	(0.03)	0.15	0.45***	(0.03)	0.14			
Immigration background	0.08**	(0.03)	0.03	0.15***	(0.03)	0.05			
Town size									
(Ref. < 5,000 inhabitants)									
5,000–20,000	0.02	(0.03)	0.06	0.02	(0.03)	0.01			
20,000–200,000	0.03	(0.03)	0.01	0.02	(0.03)	0.01			
200,000 Paris	0.08***	(0.03)	0.04	0.02	(0.03)	0.04			
ZEP-school	-0.08*	(0.03)	-0.02	-0.05	(0.03)	-0.02			
Private school	0.07**	(0.02)	0.03	0.07**	(0.02)	0.03			
Number of siblings	0.07	(0.02)	0.00	-0.06***	(0.01)	-0.08			
				0.00	(0.01)	0.00			
Constant	2.03***	(0.03)	·	2.16***	(0.03)				

Note: SE = standard error; \* p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001; full analysis sample (N = 10,904).

Table A3: Social class differentials in parental involvement in their child's schooling (logit coefficients from binary logistic regressions; y-standardized)

Dependent variable	M	embershi	o in	Me	etings init	iated	Offici	al parent-t	eacher	Knowledge about dialogue						
	parent association			b	y the pare	nts		meetings			Model 1			Model 2		
	b	(SE)	b std. y	b	(SE)	b std. y	b	(SE)	b std. y	b	(SE)	b std. y	b	(SE)	b std. y	
Social background																
(Ref. EGP V, VI,VII)																
EGP I	1.82***	(0.10)	0.93	0.23***	(0.06)	0.13	0.88***	(0.09)	0.47	0.80***	(80.0)	0.39	0.73***	(80.0)	0.39	
EGP II	1.30***	(0.10)	0.66	0.24***	(0.06)	0.13	0.90***	(0.09)	0.48	0.80***	(80.0)	0.39	0.74***	(80.0)	0.39	
EGP Illab	0.57***	(0.11)	0.29	0.12*	(0.06)	0.07	0.37***	(80.0)	0.20	0.35***	(0.07)	0.17	0.32***	(0.07)	0.17	
EGP IV	0.74***	(0.12)	0.38	-0.10	(80.0)	-0.05	0.38***	(0.10)	0.20	0.31***	(0.09)	0.15	0.29**	(0.09)	0.15	
Immigration background	-0.77***	(0.12)	-0.40	-0.11	(0.07)	-0.06	-0.47***	(80.0)	-0.25	-0.68***	(0.07)	-0.35	-0.65***	(0.07)	-0.35	
Town size																
(Ref. < 5,000 inhabitants)																
5,000–20,000	-0.01	(0.09)	-0.01	0.16*	(0.07)	0.09	-0.17	(0.09)	-0.09	-0.09	(80.0)	-0.05	-0.09	(0.08)	-0.05	
20,000–200,000	-0.03	(80.0)	-0.02	0.13*	(0.06)	0.07	-0.20*	(0.09)	-0.11	-0.11	(0.08)	-0.06	-0.11	(0.08)	-0.06	
200,000– Paris	0.11	(80.0)	0.06	0.33***	(0.06)	0.18	-0.12	(80.0)	-0.06	-0.12	(0.08)	-0.07	-0.14	(0.08)	-0.07	
ZEP-school	0.06	(0.11)	0.03	-0.11	(80.0)	-0.06	0.10	(0.09)	0.05	-0.02	(0.08)	-0.01	-0.02	(0.08)	-0.01	
Private school	-0.08	(0.07)	-0.04	0.47***	(0.05)	0.26	0.32***	(80.0)	0.17	0.05	(0.07)	0.01	0.01	(0.07)	0.01	
Parent association													0.16*	(0.08)	0.09	
Meetings initiated by the par-																
ents													0.28***	(0.06)	0.15	
Official teacher-parent-																
meetings													0.23***	(0.07)	0.13	
Const.	-2.61***	(0.10)		-1.09***	(0.06)		1.49***	(80.0)		1.26***	(0.07)		0.99***	(0.09)		
Pseudo R <sup>2</sup>	0.074			0.014			0.031			0.033		· · · · · · · · · · · · · · · · · · ·	0.037			

Note: SE = standard error; \* p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001; full analysis sample (N = 10,904).