A new form of educational inequality? What we know and what we still do not know about the immigrant-native gap in Italian schools

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Abstract: Investigating the educational gap between students with migration background (SMB) and natives is becoming more and more important in Italy, as the immigrant student population has been constantly growing and becoming increasingly diverse in the last decade. School administrative data show that SMB face a systematic educational disadvantage compared to their native classmates. However, empirical research on educational inequalities has only recently begun to cover this topic. Going through the most relevant empirical studies thus far realized, this paper is aimed at answering two major questions. The first one asks whether research does provide corroborative evidence on the existence of an immigrant-native gap and which educational outcomes have been examined. The second question is aimed at understanding to what extent 'traditional explanations' of educational inequalities (i.e., socioeconomic background) account for the observed immigrant-native gap and which other new explanations have been advanced. Finally, the paper attempts to enlighten possible future directions for research, considering uncovered topics, underexploited data sources, and methodological improvements.

Keywords: Education; immigrant-native gap; Italy.

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1. Introduction: defining the area²

Despite its past as an 'emigration country', since the late Seventies Italy has progressively become a destination of significant immigration flows³. Over the past decades – as it happened in other "new immigration countries" of Europe like Ireland and Spain – the presence of immigrant population has been continuously and rapidly growing. Between 2003 and 2008 the number of foreigners in the country has doubled, shifting from about two millions up to roughly 4 millions, thus representing 6.5% of the total population⁴. Moreover, the immigrant population shows a huge diversity with regard to country of origin, with the nationalities most represented being Romanian, Albanian, Moroccan and Chinese (OECD 2010).

Over the past three decades the presence of immigrants in the country has changed not only in quantitative terms, but also qualitatively (Colombo & Sciortino, 2004). The immigrant population is not composed exclusively by 'young and male workers', as it used to be until some years ago (Ambrosini, 2001). On the contrary, today a significant portion of the immigration flows to Italy is motivated by family reunifications (Ambrosini 2001, Ambrosini & Molina, 2004). These changes led to a rapid growth in the presence of immigrants' children born in Italy and children migrated at very young ages (Gabrielli, *et al.* 2009). The amount of young immigrants aged 18 or less grew from 59,000 in 1999 to around 862,400 in 2008; thus shifting from 0.6% to 5.9% of the total population under the age of 18. In the same period the number of births from both foreign parents increased from 7,000 in 1993 to more than 72,000 in 2008, representing 12.5% of the total births in the country⁵.

The impressive growth in the presence of immigrants in the Italian society has been reflected in schools as well. Indeed, foreign students in Italian schools increased by almost six times between academic year 1998/99 and 2007/08, switching from 85,522 to 574,133. In academic year

 ² I am thankful to Carlo Barone and to the anonymous referee of the journal for helpful comments on an earlier version of this paper.
³ In 2008 the number of foreigners living in Italy has reached for the first time the number of

³ In 2008 the number of foreigners living in Italy has reached for the first time the number of Italians living abroad, see Migrantes (2009).

⁴ These figures do not take into account the irregular component, which represents a relevant part of the migratory flows to Italy, see Caritas (2009).

⁵ Data from Italian National Institute of Statistics, 2009.

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2007/08 foreign students accounted for 6.4% of the whole student population.

Education is widely recognized as the main way for social advancement and better life chances. In a perspective of equality of opportunity, education should be equally distributed in the population regardless of ascriptive status. On the contrary, a large body of empirical research points to the persistence of inequality in educational opportunity across most Western countries (Breen & Jonsson 2005; Arum, et al. 2006; Breen, et al. 2009). In Italy, social origins along with geographical collocation represent the major ascriptive factors affecting in educational outcomes (Pisati, 2002; Ballarino & Checchi 2006; Schizzerotto & Barone, 2006; Bratti, et al. 2007; Barone, et al. 2010). The increased presence of immigrant students represents a further and particularly striking threat to the challenge of equalizing educational opportunity in Italy. However, given the novelty of the phenomenon, research on the educational gap between immigrants and natives is still an underdeveloped area of research in Italy. The main reason for this "research gap" is that Italy had until some years ago a negligible foreign population in schools and, consequently, the availability of microdata on foreign students has been scarce. This situation has rapidly changed in the past few years. Data have slowly become a minor problem, thanks to the diffusion of international surveys on student achievement (e.g. PISA, PIRLS, TIMSS); to the introduction of new variables (on nationality or migratory status of the respondents) and to the growth in numbers of foreigners in Italian surveys. A proof of the increasing interest raised by this topic is the special issue of the 'Italian Journal of Sociology of Education' entirely dedicated to the educational outcomes of children of immigrants in the country (Giovannini & Queirolo Palmas, 2010).

The aim of this article is to review empirical research on the educational differentials between immigrants and natives in Italy. More precisely, I ask: a) on which educational outcomes research reports the existence of migration-related differences; b) whether substantial immigrant-native differences exist even after controlling for family socioeconomic background; c) which additional factors account for the immigrant-native gap. Before doing this, I will shortly clarify some terms and highlight some major research findings across European countries.

Educational success is observable on two macro-dimensions of the schooling processes: on one side, *educational achievements*, which include learning outcomes (measurable through marks and standardized tests); and

on the other side, *educational attainment*, which refers to the progression up the educational system (i.e., qualifications, continuation and dropout rates, school choice, etc.).

Italian official statistics and empirical studies adopt different criteria for identifying foreign students. While official figures are usually based on a citizenship criterion, social research is more inclined to rely on information on place of birth (Mantovani, 2010). In addition to this problems of identification, foreign students display huge heterogeneity with regard to at least three major aspects: country of origin, generational status⁶ and age of arrival (or, time spent in the destination country). In this review, I will use the concept of *migration background* as a comprehensive term covering all these possible definitions, and, for the same reasons, I will talk of *students with migration background* (SMB), referring to the ample variety in migration conditions of individuals and families.

The educational gap between SMB and natives is a 'lively' field of research, which has been attracting increasing interest in Europe in recent years (Heath, et al. 2008) and which has a long tradition in North America (Portes & MacLeod 1996, 1999; Cameron & Heckman 2001; Kao & Thompson, 2003; Morgan 2005). Cross-national comparative studies have also experienced a significant growth thanks to the availability of standardized tests (Schnepf, 2004: Marks, 2005; Oecd 2006). All in all this large body of research points to a conspicuous disadvantage of SMB compared to native-born students in both the above mentioned macrodimensions of educational success. Nevertheless, among SMB substantial variation in the educational performances has been detected with respect to country of origin (Heath & Rothon, et al., 2008). Moreover, a large convergence exists on the allegation that difficulties in the integration process are a function of time spent in the host country and of age at migration: the longer an immigrant student has lived in the country (the younger he/she was when he entered the country for the first time), the higher are his/her chances to perform good in school. Also immigrant generational status is found to be strongly associated with their educational performances. However a wide theoretical debate still exists on whether second-generation immigrants adapt to the host society following a straight-line assimilation pattern or whether segmented paths of assimilation exists (Alba & Nee, 2003; Portes, et al., 2009).

⁶ Empirical research in Italy uses different definitions of 'generations' of immigrants (Casacchia, *et al.*, 2008; Mantovani 2010).

According to empirical research a large part of the immigrant-native educational gap is accounted by 'traditional' factors linked to family characteristics. Socioeconomic background, in the first place, appears to be the most powerful factor in explaining the gap between SMB and native students, although its relevance differs significantly among specific receiving countries (Marks, 2005) and between national-origin groups (Fekjær, 2007; Heath & Brinbaum, 2007; Kristen & Granato, 2007; Rothon, 2007; Levels, et al., 2008). Apart from socioeconomic deprivation, SMB encounter additional hurdles in their integration process into the host society. Language acquisition is one of them, and it is commonly indicated as a crucial determinant of educational achievement (Schnepf, 2004; Esser, 2006). Parental knowledge of the host education system in the destination country is also considered to play a relevant role for children educational attainment. Moreover, educational aspirations are commonly understood as the conditio sine qua non for future academic success. However, the question whether there exist ethnic differences in relation to aspirations remains controversial (Kao & Tienda, 1995; Brinbaum & Cebolla-Boado, 2007; Heath, Rothon, et al., 2008) and a discrepancy between aspirations and expectations along migration and ethnic lines exists (Kao & Tienda, 1998; Portes, et al., 2010). Moving to explanations related to social and school context, the concepts of 'human capital externalities' and the theory of 'ethnic capital' come into play (Borjas, 1992). Within this theoretical framework, school performances of children depend not only on parental skills, but also on the average skills of the ethnic group in the parents' generation and in the neighbourhood. Finally, some authors suggest that societal and political contexts of reception are crucial domains for immigrants children educational success (Portes & Zhou, 1993; Portes, Fernandez-Kelly, et al., 2009).

The remainder of the article is organized as follows. In the next section I will report official figures on foreigners-natives differences in educational attainment. In the third and fourth sections I will review the most relevant empirical studies carried out in Italy. More precisely, in the third section I will assess whether research provides convincing evidence on the existence of SMB-natives differences net of social origins. In the fourth section I will give an overview on other explanations provided by research in order to account for the part of the educational gap between SMB and natives not accounted for by socioeconomic factors. The final section discusses the

most relevant findings of research in Italy and concludes suggesting some areas of further development of the literature.

2. School administrative data show the existence of large differences between foreign and native students

The Italian education system is divided into four levels: primary education (from 6 to 11 years), lower secondary education (from 11 to 14), upper secondary education (from 15 up to 19 years), and tertiary education. Upper secondary education includes academically oriented and generalist schools (*licei* and *istituti d'arte*), vocational schools (*istituti professionali*) and an intermediate and technical type of school (*istituti tecnici*). Beside these three tracks, a further branch is represented by regional training courses (*formazione professionale di base*), which contrary to the previous ones do not allow students to access tertiary education. Compulsory school ends at the age of 16 whereas a looser obligation to take part to some forms of vocational training lasts until the age of 18⁷.

School administrative data provided by the Italian Ministry of Education (MIUR) are an important starting point for the purposes of this review, since they rely on censorial information on the presence of foreigners in schools (defined as those students whit Non-Italian citizenship). Data are yearly collected at each school level since academic year 1997/98. These data indicate that the presence of foreign students is unbalanced across different school levels: being higher in primary and lower secondary education (7.7% and 7.3% respectively) and lower in upper secondary education (Miur 2009)⁸. Moreover, the presence of foreign students displays relevant geographical heterogeneity, which reflects the demographical distribution of immigrants in the country, who mostly settled in Northern regions⁹. With regard to countries of origin, Italian schools display a wide heterogeneity: Europeans (Non-EU nationals) are

⁷For a detailed description of the Italian education system, see: http://eacea.ec.europa.eu/education/eurydice/

⁸ Data from academic year 2007/08. In upper secondary schools the growth rate has been higher than the average, since in the same ten years it has increased by 12 times.

⁹ It is important that data are disaggregated at province level, since – even though differences with regard to educational attainment have been progressively reducing in the last decades - literacy outcomes are still highly heterogeneous across geographical areas (Bratti & Checchi, *et al.*, 2007).

the largest group (28.3%), followed by Africans (23.8%), EU-citizens (21.6%), Asians (14.7%) and Americans (10.9%). The most represented nationalities are Romanians, Albanians, Moroccans and Chinese. Finally, data show that foreign students born in Italy ('second-generation') are unevenly distributed among the different school levels: the incidence of second-generation students on the whole foreign student population varies from 71.2% in pre-schools and 41.1% in primary schools, to 17.8% in lower secondary schools and only 6.8% in upper secondary schools (Miur, 2009).

Besides offering a detailed picture of the presence of foreigners in schools, MIUR data report the existence of large differences between Italian and Non-Italian students with regard to four relevant aspects of school attainment: school delay, grade retentions, dropout, and school choice in upper secondary education.

Foreign students have higher risk of experiencing scholastic delay: the overall difference between Italians and Non-Italians is larger than 30 percentage points. Indeed, four out of ten Non-Italian students experience school delay, against only one out of ten Italians. Although the risk of school delay increases with age and school level for both groups, differences between foreigners and Italians tend to increase as well, shifting from roughly 18 percentage points in primary education, up to 43 and 47 points in lower and upper secondary schools respectively¹⁰. In sum, MIUR data clearly report large differences with respect to regularity of educational careers between Italian and Non-Italian students. In the next section we will see that scholastic delay has several causes, among these: grade retentions.

Non-Italian students display systematic higher rates of grade retention compared to their Italian counterparts. Like in the case of school delay, differences in the risk of grade repetition tend to increase as well between the two groups, switching from 3.4 points in primary schools to 12.5 in upper secondary schools. At this educational level, foreigners-natives differences account for 8.5 points in *istituti professionali* to 12.0 points in *istituti d'arte*, 10.1 in *licei* and 11.1 points in *istituti tecnici*¹¹. In sum, these data clearly show that students with Non-Italian citizenship face a higher risk of grade retention compared to native students and that the risk

¹⁰ Data from academic year 2008/09.

¹¹ Data from academic year 2005/06.

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differential between immigrants and natives is not stable across educational levels and schools.

MIUR data also provide an overview on the phenomenon of dropout, which is expressed by the rate of students who leave school before completing it. School dropout has historically had noticeable proportions in Italy, especially in the lower grades of upper secondary education. Even though the phenomenon affects Italian students as well, among Non-Italian students the incidence of dropout appears to be systematically higher¹².

Non-Italian students appear to be disproportionately concentrated in shorter and more work-oriented tracks. Indeed, data show that the incidence of non-Italian students is higher in *istituti professionali* (12.0%) and *istituti tecnici* (7.0%) and lower in *licei* (2.9%) and *istituti d'arte* (4.8%). These data do not encompass *formazione professionale di base*, which is not part of the national educational system, and which attracts huge proportions of Non-Italians (Dalla Zuanna, et al. 2009).

There exists little evidence on the presence of foreign students in tertiary education. The available MIUR data do not differentiate between students who completed their secondary education in Italy and students arrived to Italy right for studying at the university. Consequently, this data source does not give insight on differentials in transitions rates. Nonetheless, MIUR data offer a general overview of the presence of third-country-nationals at the university. In academic year 2005/06 5,027 out of 300,735 students who completed university had a foreign citizenship. In the same year foreign students enrolled at the university amounted to 41,589, representing roughly 2% of the whole student population. Apart from students from European Union countries, the largest groups are represented by East-Europeans (44.2% of the whole student population), followed by Asians (11.4%), Africans (9.7%) and South-Americans (6.8%). Finally, foreigners appear to be mainly concentrated in applied fields like medicine, economics, and engineering, and in arts and humanities.

All in all, MIUR data indicate that Non-Italian students encounter higher risks of grade retention, delay, and dropout. Moreover, in upper secondary education they appear to be disproportionately concentrated in vocational schools. Nevertheless, in order to maintain that these observed differences represent a new form of educational inequality other factors are to be taken into account. I refer primarily to family socioeconomic

¹² Note that a small fraction of dropout students enroll in regional training courses.

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background, which according to educational research represent on of the most powerful predictors of educational success. The next section reviews the most relevant research findings with the objective of shedding more light on the underlying factors explaining the gap between SMB and natives.

3. The educational gap between immigrants and natives. Evidence on the role played by migration and socioeconomic background

In this section I review relevant empirical research on the educational gap between SMB and natives in Italy, trying to unfold two peculiar aspects. In the first place, I try to discover whether research confirms the observed differences reported by administrative data, and whether other dimensions of educational inequality are taken into consideration. Secondly, I seek to find out whether research provides sound evidence on the role played by socioeconomic background in accounting for SMBnative differentials. Put it differently, I ask whether the observed gap between natives and immigrants shrinks, or even vanishes, after controlling for socioeconomic background, as it happens in several European countries (Heath & Brinbaum, 2007). In other words, my aim is to understand whether a new form of inequality – a migration-related form of inequality – is in place or, on the contrary, whether the large observed differences between natives and SMB are fully accounted for by differences in family socioeconomic background. In this latter case, I would not talk of migration-related inequality. On the contrary, I would rather talk of traditional social inequality¹³. Once established whether academic research adequately answers this question, a last question is whether socioeconomic background and migration background interact. More precisely, I ask whether or not the gap between SMB and natives varies across social classes, or whether socioeconomic resources differently affect educational outcomes of natives and SMB. As already mentioned above, a growing body of research across Europe has been dealing with such questions (Heath & Brinbaum, 2007; Heath, Rothon, et al., 2008). In this chapter I am going to find out whether such an attempt has been brought out in Italy

¹³ Heath & Cheung (2007) distinguish between 'net disadvantage' and 'gross disadvantage' depending on whether or not socioeconomic background is accounted for.

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as well. In doing this, I focus, first, on aspects related to educational attainment and, secondly, on differentials in educational achievement.

School attendance

A first indicator of educational attainment is school attendance. This indicator is given by the ratio of individuals attending school to the overall population of relative age. A detailed examination of foreigners' school participation is provided by Strozza (2008). The author, relying on Italian Census data of 2001, reports the existence of different patterns of school participation across immigrant generations¹⁴ and between different national-origin groups¹⁵. Although differences between Italians and SMB in school participation rates increase dramatically only at upper secondary education, the author shows that differences take place also at previous ages and, particularly, in pre-school period. In Italy pre-school education (scuola di infanzia) starts at the age of 3 and lasts till 5. Even though it is not compulsory, roughly 95% of children aged 3-5 attend it regularly¹⁶. The author also shows that children from countries like Pakistan, Macedonia, Ex-Yugoslavia, China, India, Egypt, Tunisia and Morocco display the lowest rates of pre-school attendance, whereas children from Peru, Colombia, Russia, and Brazil score the highest. The author speculates that this variability may be related to the different sex-composition of the various national-origin groups, since the former group of countries is mainly composed by males, while the second by women. Although this statement appears to be plausible, it calls for more research. More generally, further research is needed to investigate the existence of ethnic differences at early stages of education, which are found to play a major role in determining future academic outcomes (Cunha, et al., 2006; Becker 2009; Schlotter, et al., 2010). Large differences in school attendance exist in the 14-18 age class as well, and are positively associated with immigrant

¹⁴ Strozza, drawing upon the classification by Rumbaut (1997), identifies 'secondgeneration' as children born in the host country from foreigner parents; 'generation 1.75' as individuals who entered the host country with 0-5 years; 'generation 1.5' as those migrated at age 6-12; 'generation 1.25' who migrated at age 13-17; and 'first-generation' who migrated at 18 or later.

¹⁵ The author considers the thirty most represented nationalities in Italy.

¹⁶ Italian Census 2001.

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generational status: with second-generation immigrants showing higher levels of school attendance compared to first-generation students. The author also finds that the above reported variation in school attendance across national-origin groups is especially large in the 14-18 age class. The author argues this is mainly due to different risks of school dropout¹⁷.

Dropout

One of the possible causes of the different school participation rates between natives and foreigners is that the latter leave school earlier. Recent studies based on Italian Labor Force Survey found that SMB face higher risk of dropping out of school after completing lower secondary education (Canino, 2010; Azzolini & Barone, 2011). There is also strong evidence that dropout risk is reduced by time spent in the country. Indeed, firstgeneration students who have lived in Italy for longer than 10 years are more similar to native-Italians compared to other first-generation immigrants (Azzolini & Barone, 2011). Consistently with results on school participation, second-generation students tend to be less likely to dropout of school before 18, compared to students immigrated at later ages. In addition to this generational variation, dropout risk varies substantially across national-origin groups. Strozza (2008), finds that - controlling for birth cohort, area of residence and reason for migration but not for social origins - students from Macedonia, Ex-Yugoslavia, Pakistan, Morocco, India, Albania face the highest risks, while those from Russia, Peru, Poland, and Brazil the lowest¹⁸. Similar findings are provided by Azzolini and Barone (2011), who point to a greater dropout risk for North-African, Chinese and Indian students, even after controlling for social class.

¹⁷ However, the study tends to overestimate the immigrant-native differences, because of the presence of young immigrant workers, who reached the country exclusively for job purposes and do not attend schools in Italy.

¹⁸ Due to data constraints, the author defines dropouts as those individuals who are not enrolled in any school, and not as students who actually leave school.

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School Completion (Title attainment)

The flip side of dropout is title attainment (or school completion). According to Strozza (2008), students from Romania have the highest risk (roughly 25%) of not completing primary education, followed by students from Pakistan, Macedonia, Ex-Yugoslavia, while native students' rates are close to saturation. As far as lower secondary education is concerned, students from Pakistan, India, Macedonia, Ex-Yugoslavia, Morocco, China and Tunisia have the highest probability (around 40%) of not completing it¹⁹. Casacchia, Natale, *et al.* (2008), using panel data from Itagen2²⁰, confirm these findings showing that in Veneto the share of students who do not successfully and regularly complete lower secondary school among foreigners is twice as high as among Italians. Moreover, Checchi (2009) finds that being born abroad versus in Italy represents an obstacle to the attainment of an upper secondary level qualification, even after controlling for social origins. Indeed, the probability of completing upper secondary education is among foreign-born individuals aged 20-29.

School delay

Empirical research gives interesting insight on the phenomenon of school delay. Firstly, Dalla Zuanna, Farina, *et al.* (2009), relying on nationally representative data from Itagen2, find that the higher is the age of arrival of the student, the larger tends to be his/her risk to experience scholastic delay. More precisely, the authors show that the share of students experiencing school delay is roughly the same for foreigners born in Italy and for Italians with low-educated parents, while the percentage among other immigrant students is much higher and increases with age of arrival. This similarity between second-generation students and natives with low educated parents represents a clue that family socioeconomic background accounts for a substantial part of the gap between second-generation and

¹⁹ The estimates of primary schools completion refers to individuals aged from 11 to 13, and as regards lower secondary education to individuals from 13 to 18. This measure is partially affected by school delay, which is not detectable with census data, as reported by the author (Strozza 2008, p. 708).

²⁰ Itagen2 is a national-scale survey conducted on 10,150 native and 10,554 foreign (with at least one parent born abroad) students in lower secondary schools.

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native-Italian students. Other studies, realized on regional sub-samples of Itagen2 (Campania & Lombardia), confirm the positive association between age of arrival and delay in upper secondary education (Casacchia, Natale, et al., 2008). However, according to these authors, the group of children arrived during lower secondary education (11-14 years) display higher incidence of delay compared to other groups arrived either before or after the 'adolescence' period. On the basis of this evidence, the authors speculate that 'adolescence' could represent a particularly critical period for migrating, which negatively affects future educational outcomes²¹. Although these studies shed light on the SMB-natives differentials in school delay, they do not allow overcoming the problem of isolating from each other the different causes of it. As a matter of fact, delay is not exclusively due to grade retention but to a mix of other different factors. Among these, a major role is played by the practice of 'lower class enrolment' which consists of enrolling SMB in one class behind the class corresponding to their age as they enter Italian education system for the first time. Even though officially discouraged, this practice is in fact quite widespread, probably as a consequence of the lack of resources and programs aimed at facilitating language acquisition for the new comers (CNEL-CENSIS 2008; Mantovani 2008b; Mantovani & Martini, 2008)²². Dalla Zuanna, Farina, et al. (2009) argue that this practice represents a source of cumulative disadvantage for SMB, primarily because it may hinder relations with class mates; and secondly because it may affect their future academic outcomes²³. On this last point, Mantovani (2008b), using a sample of students in the first grade of technical and vocational schools in the province of Bologna, shows that students enrolled in lower classes are less likely to experience grade retention in following school years compared to students regularly enrolled²⁴.

 ²¹ In order to further corroborate this hypothesis one would need to be able to control for cohort effects, since the correlation could reflect a peculiar composition of the cohort considered in the analysis instead of an effect of age at migration.
²² For an overview of the practices of schools towards foreign students, and their relations

 ²² For an overview of the practices of schools towards foreign students, and their relations with foreign families, see CNEL-CENSIS (2008).
²³ The author speculates that delay can affect future education decisions, since students with

²³ The author speculates that delay can affect future education decisions, since students with delay mostly underestimate their skills and their future academic potentials and therefore have higher probability of choosing shorter school tracks or to leave school earlier.

²⁴ However, this relationship between 'class enrollment' and future grade repetition is not to be interpreted in causal terms, because it is affected by two sources of 'selection bias' which stem from both school and individual level. First, school boards' decisions on 'class

Upper Secondary School Choice

If SMB continue their education after completing lower secondary schools they end up being disproportionately concentrated in vocational schools and, conversely, display lower propensity to choose general schools (Barban & White, 2009; Checchi, 2009; Canino, 2010; Azzolini & Barone, 2011). Azzolini & Barone (2011) point to a substantial variation across national-origin groups, indicating Chinese, North Africans and Indians as the groups displaying lower propensity to general schools enrolment. In the same study, the authors argue that social class plays a crucial role in determining school choice, estimating that on average the immigrant-native gap would be halved if foreign-born students had the same social class distribution as natives. The authors also detect a substantial variation of social class contribution to the gap across country of origin groups, which happens to be smaller for the most disadvantaged groups and higher for the less disadvantaged ones (students from Eastern Europe and Western countries). In the same study, the authors argue that social class stratifies native-born and foreign-born students in much the same way, since they do not find any substantial interaction between social class and migration background. Barban and White (2009) show that marks obtained in the final exam of lower secondary school do not fully explain differences between SMB and natives with regard to upper secondary school choice, even after taking into account socioeconomic background. Furthermore, their analysis indicates that while recently arrived immigrants display lower probability to enroll in *licei* and higher probability to enroll in vocational schools compared to Italians, second-generation students do not significantly differ from natives (Barban & White, 2009; Azzolini & Barone, 2011). However, these results are to be interpreted bearing in mind that in this age class second-generation is large part composed by children of return migrants (Azzolini & Barone, 2011). While several other studies agree in indicating socioeconomic characteristics of the families as the most powerful determinants of upper secondary school track choice

enrollment' are not independent on school characteristics (e.g., financial and human resources) which could affect both the overall educational outcomes of students and the probability of foreign students of accessing targeted programmes (e.g., extra-language courses). Second, even within the same school, the selection of immigrant students into lower classes is not random, but, on the contrary, it is probably highly correlated with their cognitive and non-cognitive skills.

(Queirolo Palmas, 2002; Besozzi & Colombo 2007; Mantovani, 2008b), some authors underline that parental education plays a weaker role for SMB compared to natives. Queirolo Palmas (2002), on a survey carried out in 1999 in ten Italian towns, finds that parental education does not reduce differences between natives and immigrants, who tend to choose shorter schools anyway. Similarly, Mantovani (2008b) shows that parental education affects the choice between vocational and technical schools both for Italians and immigrants, but less intensively for the latter. Some authors, in line with the above cited European empirical literature, point out also that differences in school choice could be partially explained by the scarce knowledge of the Italian school system among foreign parents (Casacchia, Natale, *et al.*, 2008). According to this explanation, immigrant parents are assumed to be more risk adverse and to expect lower returns to education compared to Italians, and, as a consequence, opt for less time-demanding and more work-oriented schools for their children.

Grade retention

While research largely confirms the existence of a systematic gap between immigrants and natives with regard to the risk of grade retention, mixed evidence exists on whether or not time spent in the country contributes to this risk. On one hand, Casacchia, Natale, et al. (2008), controlling for a rich set of covariates (like parental education, number of siblings, and social relations), find that students who have spent less than two years in Italy display the highest risk of grade repetition. On the contrary, Mantovani (2008b), using a sample of students in the first grade of technical and vocational schools in the province of Bologna, finds a roughly similar distribution of school retentions between first-generations and natives. Moreover, second-generation students surprisingly display a slightly higher incidence of grade retentions. In addition to these findings, the author shows that the gap between native and immigrant students in the risk of grade retention at upper secondary education is smallest in vocational schools. This could be explained again by the more pronounced negative selection of natives in vocational schools. Indeed, as we saw before, upper secondary school choice is more dependent on ability and previous academic outcomes for native-Italians than for SMB (Barban & White, 2009). This means that if we compare a foreign student and a native

student both with good marks in lower secondary education, the former is much more likely to choose a vocational school over a technical school.

Marks

A traditional indicator of learning achievement is marks. With respect to this dimension, research provides interesting evidence on at least three aspects. In the first place, several studies prove the existence of a systematic gap between SMB and natives (Casacchia et al., 2008; Barban & White, 2009; Checchi, 2009). Barban and White (2009), using national Itagen2 data, focus on outcomes in lower secondary school's final exam, finding that migration background affects marks, although family characteristics (i.e., household possession, parental education, number of siblings) turn out to be more powerful determinants. Support for these findings is provided by Checchi (2009) as well. The author, relying on a local survey conducted in Lombardia, shows that marks of foreign students are systematically lower than marks obtained by Italians, controlling for both results of a standardized learning test and parental education. According to the author, this gap may be due to differences in the way teachers evaluate students. Indeed, marks appear to be influenced not only by students' competencies but also by their family characteristics. More precisely, marks of SMB appear to be affected by a downward bias, suggesting the possibility that teachers tend to systematically underestimate skills of SMB. However, the author controls for parental education and not for parental occupation, which - as seen before - is a much more powerful determinant of differences between native and foreign students.

Research converges in identifying an overall gap between SMB and natives, but provides mixed evidence on the relationship between them and age of arrival. While Barban and White (2009) find a disadvantage of recent immigrants, net of family background, and no significant differences between second-generation students and natives, Mantovani (2008b) reaches an opposite conclusion, relying on a survey conducted in Bologna province on students of vocational and technical schools. The author finds that first-generation students get better marks than native-born and secondgeneration students, controlling for both social origins and parental education. The author speculates that one of the reasons of the relative advantage of first-generation students in is due to the higher effort in

studying and homework of first-generation children, compared to foreigners born in Italy. Indeed, to support this hypothesis the author shows that first-generation students declare to spend much more hours a week in doing homework compared to Italians and second-generation students. A further possible explanation advanced by the author is the different composition of the two groups (first and second-generation) with respect to country of origin. Indeed, once controlled for country of origin, the negative correlation turns out to be insignificant. Nevertheless, as the author herself points out, these results are to be interpreted bearing in mind that the sample used is not representative of the whole student population of lower secondary schools, since students enrolled in *licei* are not included in the analysis²⁵.

With respect to school subjects, all cited studies consistently indicate that SMB-natives differences are systematically larger in reading and writing compared to mathematics. Length of residence in Italy is found to massively influence school performances, even though some differences according to country of origin exist (Barban & White, 2009). For instance, Chinese students are found to outperform all other groups, including Italians, in mathematics (Casacchia, Natale, *et al.* 2008; Barban & White 2009). Romanians are also found to achieve higher marks than natives in mathematics (Casacchia, Natale, *et al.*, 2008).

Mantovani (2008b) analyzes the association between social origins and marks. According to her analysis, the correlation between parental occupation and marks is weaker among immigrants than among natives. This evidence leads the author to argue that a 'downward assimilation' process in job condition is in place, which implies that immigrant adults tend to have lower occupations regardless of their education. Indeed, as far as the relationship between parental education and marks is concerned, the author finds a similar and positive pattern both for Italians and foreigners. In addition to this, the author also shows that the immigrants-natives gaps are larger among children with low educated parents and are inversely correlated with family cultural level, suggesting the existence of cumulative disadvantages.

²⁵ More precisely, the estimated immigrants-natives differences in marks obtained in lower secondary school's final exam are likely to be underestimated, given the different selection processes of SMB and natives in the different tracks of upper secondary education. As already mentioned above, SMB tend to have higher probability of choosing vocational schools compared to natives regardless of previous academic outcomes.

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Learning Achievement

Even though marks represent an important indicator of academic performance, they are largely recognized as an unreliable measure of learning achievement, since they are affected by bias due to variation in teachers, schools, and classes. Standardized learning tests provide useful information to overcome this type of bias. International surveys like PIRLS, TIMSS and PISA represent highly useful sources of information, even in a comparative perspective. However, these surveys are still underexploited in Italy because of the small numbers of immigrants included in the samples²⁶. Nevertheless, a few studies conducted at local level show that immigrants perform worse than Italians in reading, science, and mathematics (Borrione, et al., 2006; Mantovani, 2008a; Amistadi, et al,. 2009; Checchi & Braga, 2009). The narrowest gap is found in mathematics. This result is confirmed by preliminary results from a national-wide test carried out by the National Institute for the Evaluation of the Education System (INVALSI) on students of primary schools (INVALSI-SNV 2010)²⁷. Mantovani (2008a) finds an immigrant-native gap in all three domains, even after controlling for socioeconomic and cultural background, type of school and language spoken at home.

Mantovani 2008a, Amistadi, Bazzanella, *et al.* (2009) also show that achievement in the three domains is strongly associated with socioeconomic background (the smallest differences are found among children of non-qualified workers), while parental education is found to be a weak determinant of the observed differences, since it is similarly distributed between Italians and foreigners. Moreover, the authors find substantial differences across schools, in the sense that the largest differences between SMB and natives are found in *licei*. In line with what observed with regards to grade retention and marks, these differences in the gap across upper secondary schools are mostly explained by selection in the choice of upper secondary education.

²⁶ For instance, in the Oecd (2006) report on immigrants performances in school Italy is not included in the comparative review, because foreign students amounted to less than 3% of the sample.

²⁷ The nationwide survey for academic year 2008-09 has been carried out in the 2^{nd} and 5^{th} grades of primary schools, and in the 3^{rd} grade of lower secondary schools as well.

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Self-assessment

A proxy for student performance is student self-assessment. Consistently with all other aspects so far considered, a systematic gap between natives and SMB exists on how students assess their own performances (Casacchia, Natale, *et al.*, 2008; Dalla Zuanna, Farina, *et al.*, 2009). While these studies points to a negative correlation between self-assessment and age at migration, Colombo (2009), relying on data from a survey conducted in Lombardia on immigrant students aged from 14 to 20, points out that newly arrived immigrants declare higher school performances compared to second-generation students. Moreover, the author argues that, within the group of SMB, differences would be mainly accounted by 'individual' factors (such as attitudes towards education and scholastic background) rather than by 'structural' ones (i.e., age of arrival and socioeconomic background and parental education).

4. Not just a problem of socioeconomic deprivation: other explanations for the gap

In the previous section, we saw that a significant gap between immigrants and natives persists even after adjusting for family socioeconomic background. However, the educational disadvantage of SMB can not be reduced to socioeconomic related factors only. According to empirical research in Italy, further explanations are to be searched among at least four major aspects: language proficiency, help received by parents, educational aspirations and friendship relationships in the class.

An adequate knowledge of the Italian language is largely recognized as the *conditio sine qua non* for a successful schooling career for CMB. Language acquisition is a long term process, which – needless to say – is positively correlated with time spent in the host country. Differences according to gender and country of origin also exist. Indeed, it is largely recognized that females tend to perform systematically better than males (Giovannini & Queirolo Palmas, 2002; Casacchia, Natale, *et al.*, 2008; Mantovani, 2008b).

Drawing upon the assumption that Italian schools are mostly 'designed' for students who can manage a personal and individual study at home, some studies investigate the role played by parents in helping children with

their homework (Casacchia, Natale, et al. 2008; Dalla Zuanna, Farina, et al, 2009). These studies show that children of immigrants, regardless of their age of arrival, receive less help by parents compared to native children. The authors also find that children of immigrants are quite similar to Italians with low educated parents. In addition to this, Giovannini and Queirolo Palmas (2002) point out that differences in school performances could also be a consequence of the higher instability in immigrant family composition (i.e., absence of one parent) as well as of the quality of the relationship between teachers and immigrant parents. Interesting evidence on the condition of children of mixed-couples is brought out by (Casacchia, Natale, et al,. 2008), who find that they receive less support and perform worse in school relative to children with both Italian parents. However, it seems that children of mixed couples do not display any significant difference in upper secondary school participation compared to natives (Azzolini & Barone, 2011). Finally, Gilardoni (2010), relying on a survey conducted in Lombardia on pre-adolescents (aged 11 to 14), shows that SMB are more likely than Italians to form intercultural relations. All in all, these studies indicate that school inequality 'begins at home', where several factors of differentiation between SMB and natives - not directly related to economic resources – come about.

Research seems to leave out the existence of higher educational aspirations among SMB compared to natives, backing the argument that SMB educational aspirations are narrowed by the expectations of lower returns to education. Dalla Zuanna, Farina, *et al.* (2009) show that foreignborn students declare a lower intention to enroll in *licei* and university compared to natives. The authors also show that SMB are more similar to Italians with medium educated parents, rather than to Italians with low educated ones, who appear to have even lower expectations than children of immigrants (Casacchia, Natale, *et al.*, 2008; Dalla Zuanna, Farina, *et al.*, 2009). Similar results are provided by Queirolo Palmas (2002), who argues that social origins and parental education matters more than immigrant status in transition choices. On the other hand, both studies agree in finding substantial differences across national-origin groups, showing that Chinese, Albanians, Moroccans, and more generally Africans and Middle-East Nationals, declare particularly low educational aspirations.

Finally, the issue of friendship and peer relationships in the class is also considered as an important determinant of educational success. Empirical research reports that the intensity of relationships within classes is smaller

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for foreigners, though it tends to increase with time spent in the host country (Casacchia, Natale, *et al.*, 2008; Mantovani & Martini, 2008). On the association between class relationships and school performance, interesting evidence is brought out by Martini (2009) and Rivellini and Terzera (2009) who – relying on a survey on upper secondary schools in Trentino and on Itagen2 in Lombardia respectively – find that recently arrived children benefit more than native-Italian and second-generation students from having many relationships with class mates, net of family socioeconomic background and previous scholastic career.

5. A balance: what we know and what we (still) do not know

The empirical studies reviewed in this article point to the existence of substantial immigrant-native differentials along several dimensions of educational attainment and achievement. SMB display lower school attendance rates and lower probability of school completion. Moreover, they face higher risks of grade retention, school delay, and dropout. SMB also display higher probability of enrolling in vocational schools and lower chances to enrol in general and pre-academic schools. In addition to these aspects, research findings converge in pointing out that SMB lag behind in marks and skills, especially in subjects like writing and reading.

This gap is a consequence of a double disadvantage faced by SMB. On one hand, SMB are more likely than natives to live in socioeconomically deprived families and this accounts for a substantial part of their educational disadvantage. In addition to this traditional form of inequality, SMB face the hurdles of a new form of inequality, which is specifically linked to their migration background. That is to say, SMB are not disadvantaged because of their poor socioeconomic conditions only, but also as a consequence of their migration background.

Migration background is a concept that covers very different conditions. Three main features of the individuals' migration background – time spent in the country, generational status, and country of origin – contribute in explaining a substantial part of the observed differentials between SMB and natives. The longer SMB live in Italy, the higher are their educational performances. At the same time, high heterogeneity is found with regard to country of origin, e.g., students from Northern Africa, China and Indian Subcontinent display particularly low educational attainment. As far as

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immigrant generational status is concerned, most research finds that second-generation students are better-off than first-generations.

Even acknowledging the increased widespread of quantitative studies at national level, educational research on this issue remains quite underdeveloped, compared to other European countries. Empirical studies have been carried out mainly on small-scale and convenience samples. This has led to a general weakness in terms of generalizability of most of the empirical findings. In general, more research is needed also to raise cumulative evidence for testing actual knowledge on the problem.

One of the first points on which research should focus is the conditions of second generations. Given the novelty of the migratory phenomenon in Italy, this group is still young and small, but it is growing at fast pace. Looking at how this group fares is crucial for understanding the patterns of assimilation of immigrants in our country. Research should focus on second-generation, taking into consideration both its national-origin composition and its performances at early stages of the educational careers.

Secondly, research has been primarily focused on educational attainment rather than educational achievement. International surveys like PIRLS, TIMSS and PISA, thanks to the growing number of surveyed foreigners, are valued sources to exploit in the near future. Moreover, these data sources will eventually allow conducting international comparisons, considering that Italy has hardly been included in any international comparative study so far.

Third, research has investigated the phenomenon at lower and upper secondary education, leaving primary education and pre-school education substantially unexplored. Research should urgently redress this gap, since strong international evidence indicates that educational inequality generates at early childhood.

Fourth, socioeconomic background is found to contribute in a differentiated way in explaining country of origin differences in upper secondary school's participation. Nevertheless, a research gap exists on how socioeconomic background and migration background interact with regard to other educational outcomes and at other stages of education.

Fifth, empirical research, in line with European literature, indicates factors like language proficiency, family support, educational aspirations, and peer relationships in class as important determinants of SMB educational outcomes. Other hypotheses for the SMB-natives gap, like the existence of contextual effects at school level, remain untested.

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Finally, one of the most controversial aspects pointed out by empirical research is the practice of 'lower class enrollment'. This practice accounts for a large part of the differences between Italians and foreigners with regard to school delay. However, its effectiveness in improving future academic performances of children has not been empirically tested yet. Other policy measures, like the recent introduction of a cap of 30% of SMB per class, and several other school practices aimed at enhancing SMB school performances could be object of empirical assessment. Quantitative studies employing randomized assignment or quasi-experimental research designs, largely unknown to Italian educational research but increasingly widespread in Anglo-Saxon countries, are an appropriate methodological way to question the real effectiveness of such policy measures (Angrist 2004; Morgan & Winship, 2007; Schlotter, Schwerdt, *et al.*, 2010).

References

- Alba, R. D., Nee, V. (2003). Remaking the American Mainstream: Assimilation and Contemporary Immigration. Cambridge MA: Harvard University Press.
- Ambrosini, M. (2001). La Fatica Di Integrarsi, Bologna: il Mulino.
- Ambrosini, M., Molina, S. (Eds.) (2004). Seconde Generazioni. Un'introduzione Al Futuro Dell'immigrazione in Italia, Torino: Fondazione Giovanni Agnelli.
- Amistadi, V., Bazzanella, A., Buzzi, C. (2009). Genere, Immigrazione E Differenze Di Performance in Scienze, Matematica E Lettura. In *Rapporto Provinciale Pisa 2006. I Dati Ocse-Pisa 2006 Per Il Trentino* (pp. 143-162). Ed. M. Gentile. Trento: Iprase.
- Angrist, J. (2004). American Education Research Changes Tack. Oxford Review of economic policy, 20, 198-212.
- Arum, R., Gamoran, A., and Shavit, Y. (2006). Più Inclusione Che Deviazione: Espansione, Differenziazione E Struttura Di Mercato Dell'istruzione Superiore. In G. Ballarino and D. Checchi Sistema Scolastico E Disuguaglianza Sociale. Scelte Individuali E Vincoli Strutturali. (Eds.). Bologna: Il Mulino.
- Azzolini, D., Barone, C. (2011). The Ethnic Gap in Italian Upper Secondary Education and Its Interplay with Social Class. *Migrations, social stratification and educational inequality: Italy in comparative perspective, January 27th, Bologna, Italy.*
- Ballarino, G., and Checchi, D. (Eds.) (2006). Sistema Scolastico E Diseguaglianza Sociale. Scelte Individuali E Vincoli Strutturali. Bologna: Il Mulino.
- Barban, N., White, M. (2009). The Transition to Secondary School of the Second Generation of Immigrants in Italy, XXVI IUSSP International Population Conference.
- Barone, C., Luijkx, R., Schizzerotto, A. (2010). Elogio Dei Grandi Numeri: Il Lento Declino Delle Disuguaglianze Nelle Opportunità Di Istruzione in Italia. *Polis*, XXIV, 5-34.

- Becker, B. (2009). Who Profits Most from Early Parental Investments? The Effects of Activities inside and Outside the Family on German and Turkish Children's Language Development. C28 Spring Meeting at the School of Sociology and Population Studies, May 14-16, 2009.
- Besozzi, E., Colombo, M. (Eds.) (2007). *Giovani Stranieri in Lombardia Tra Presente E Futuro. Rapporto 2006.* Milano: Fondazione Ismu.
- Borjas, G. (1992). Ethnic Capital and Intergenerational Mobility. The Quarterly Journal of Economics, 107, 123-150.
- Borrione, P., Donato, L., Landini, S., Valletti, R. (2006). Alunni Stranieri, Futuri Cittadini: Un Confronto Tra Gli Studenti Italiani E Stranieri in Piemonte Attraverso I Dati Pisa 2003. In Pisa 2003: Bravi Come Gli Altri. Nuova Luce Sulle Competenze Dei Quindicenni Nel Confronto Tra Regioni Italiane Ed Europee, ed. L. Abburrà, Milano: Franco Angeli, pp. 129-148.
- Bratti, M., Checchi, D., and Filippin, A. (Eds.) (2007). Da Dove Vengono Le Competenze Degli Studenti? I Divari Territoriali Nell'indagine Ocse Pisa 2003. Bologna: Il Mulino.
- Breen, R., and Jonsson, J. O. (2005). Inequality of Opportunity in Comparative Perspective: Recent Research on Educational Attainment and Social Mobility. *Annual Review of Sociology*, 31, 223-243.
- Breen, R., Luijkx, R., Müller, W., and Pollak, R. (2009). Non-Persistent Inequality in Educational Attainment: Evidence from Eight European Countries. *American Journal of Sociology*, 114, 1475-1521.
- Brinbaum, Y., Cebolla-Boado, H. (2007). The School Careers of Ethnic Minority Youth in France. Success or Disillusion?. *Ethnicities*, *7*, 445–474.
- Cameron, S. V., and Heckman, J. J. (2001). The Dynamics of Educational Attainment for Black, Hispanic, and White Males. *Journal of Political Economy*, 109, 455-499.
- Canino, P. (2010). Stranieri Si Nasce...E Si Rimane? Differenziali Nelle Scelte Scolastiche Tra Giovani Italiani E Stranieri. Fondazione Cariplo.
- Caritas (2009). Immigrazione: Dossier Statistico 2009. Roma: Arti grafiche Srl.
- Casacchia, O., Natale, L., Paterno, A., Terzera, L. (2008). Studiare Insieme, Crescere Insieme? Un'indagine Sulle Seconde Generazioni in Dieci Regioni Italiane. Milano: Franco Angeli.
- Checchi, D. (2009). Uguaglianza Delle Opportunità Nella Scuola Secondaria Italiana. Università di Milano, working paper, 3rd and 5th version - august/october 2009.
- Checchi, D., Braga, M. (2009). Divario Territoriale E Formazione Delle Competenze Degli Studenti Quindicenni. *Ricercazione*, *1*, 115-131.
- CNEL-CENSIS. (2008). Vissuti Ed Esiti Della Scolarizzazione Dei Minori Di Origine Immigrata in Italia.
- Colombo, A., and Sciortino, G. (2004). Italian Immigration: The Origins, Nature and Evolution of Italy's Migratory Systems. *Journal of Modern Italian Studies*, 9, 49-70.
- Colombo, C. (2009). Il Successo Formativo: Una Chance Personale E Contestuale. In Besozzi, E., Colombo, M., Santagati, M. (Eds.) Giovani Stranieri, Nuovi Cittadini. Le Strategie Di Una Generazione Ponte. Milano: Franco Angeli.
- Cunha, F., Heckman, J.J., Lochner, L., Masterov, D.V. (2006). Interpreting the Evidence on Life Cycle Skill Formation. In Hanushek E., Welch F., (Eds.) *Handbook of the Economics of Education* (Vol. 1). Amsterdam: Elsevier.
- Dalla Zuanna, G., Farina, P., and Strozza, S. (2009). Nuovi Italiani. I Giovani Immigrati Cambieranno Il Nostro Paese?. Bologna: Il Mulino.

- Esser, H. (2006). Migration, Language and Integration. *AKI Research Review WZB Berlin*, 4.
- Fekjær, S. N. (2007). New Differences, Old Explanations Can Educational Differences between Ethnic Groups in Norway Be Explained by Social Background?. *Ethnicities*, 7, 367–389.
- Gabrielli, G., Paterno, A., Castiglioni, B., and Dalla Zuanna, G. (2009). Two Years Later: Integration Process of Second Generation Migrants in Italy. *XXVI IUSSP International Population Conference*.
- Gilardoni, G. (2010). Cross-Cutting Social Circle Configurations in the Lives of the Sons and Daughters of Mixed Parentage. *Italian Journal of Sociology of Education*, *4*, 154-191.
- Giovannini, G., Queirolo Palmas, L. (Eds.) (2002). Una Scuola in Comune. Esperienze Scolastiche in Contesti Multietnici Italiani. Torino: Fondazione Giovanni Agnelli.
- Giovannini, G., Queirolo Palmas, L. (2010). Schools, Migrants and Generations: Introduction. *Italian Journal of Sociology of Education*, *4*, 3-8.
- Heath, A., Brinbaum, Y. (2007). Explaining Ethnic Inequalities in Educational Attainment. *Ethnicities*, 7, 291-305.
- Heath, A. F., and Cheung, S. Y. (2007). *Unequal Chances: Ethnic Minorities in Western Labour Markets*. Oxford: Oxford University Press for the British Academy.
- Heath, A. F., Rothon, C., Kilpi, E. (2008). The Second Generation in Western Europe: Education, Unemployment and Occupational Attainment. *Annual Review of Sociology*, 34, 211-235.
- INVALSI-SNV (2010), Rilevazione Degli Apprendimenti Scuola Primaria. Prime Analisi.
- Kao, G., Thompson, J. S. (2003). Racial and Ethnic Stratification in Educational Achievement and Attainment. *Annual Review of Sociology*, 29, 417–442.
- Kao, G., and Tienda, M. (1995). Optimism and Achievement: The Educational Performance of Immigrant Youth. Social Science Quarterly, 76.
- Kao, G., and Tienda, M. (1998). Educational Aspirations of Minority Youth. American Journal of Education, 106, 349-384.
- Kristen, C., Granato, N. (2007), The Educational Attainment of the Second Generation in Germany. Social Origins and Ethnic Inequality. *Ethnicities*, 7, 343–366.
- Levels, M., Dronkers, J., Kraaykamp, G. (2008). Immigrant Children's Educational Achievement in Western Countries: Origin, Destination, and Community Effects on Mathematical Performance. *American Sociological Review*, 73, 835-853.
- Mantovani, D. (2008a). Gli Studenti Stranieri Sui Banchi Di Scuola in Emilia-Romagna. In Gasperoni G. (Ed.) Le Competenze Degli Studenti in Emilia-Romagna. I Risultati Di Pisa 2006 (pp. 161-196). Bologna: Il Mulino.
- Mantovani, D. (2008b). Integrazione E Riuscita Scolastica Delle Seconde Generazioni Nella Provincia Di Bologna. University of Trento, Department of Sociology and Social Research.
- Mantovani, D. (2010). Italiano O Straniero? La Ricerca Sociologica E La Rilevazione Degli Studenti Stranieri. *Working paper*.
- Mantovani, D., Martini, E. (2008). Children of Immigrants in Trento: Educational Achievement through the Lens of Friendship. *Intercultural Education*, 19, 435-447.
- Marks, G.N. (2005). Accounting for Immigrant Non-Immigrant Differences in Reading and Mathematics in Twenty Countries. *Ethnic and Racial Studies*, 28, 925-946.

Martini, E. (2009). Il Ruolo Delle Relazioni Amicali Nelle Performance Scolastiche Dei Figli Di Immigrati. Convegno nazionale dell'Osservatorio Nazionale sulla famiglia "I giovani immigrati e le loro famiglie", Ancona, November 27-28, 2008.

Migrantes (2009). Rapporto Italiani Nel Mondo 2009.

- Miur. (2009). Alunni Con Cittadinanza Non Italiana Scuole Statali E Non Statali. Anno Scolastico 2007/2008."
- Morgan, S. L. (2005). On the Edge of Commitment. Educational Attainment and Race in the United States. Standford: Standford University Press.
- Morgan, S. L., Winship, C. (2007). Counterfactuals and Causal Inference. Methods and Principles for Social Research, ed. C. U. Press, Cambridge and New York:
- Oecd (2006). Where Immigrant Students Succeeds. A Comparative Review of Performance and Engagement in Pisa 2003. Paris: Oecd Publishing.
- OECD (2010). International Migration Outlook 2010. Paris: OECD Publishing
- Pisati, M. (2002). La Partecipazione Al Sistema Scolastico. In Schizzerotto A. (Ed.) Vite Ineguali. Bologna: Il Mulino.
- Portes, A., Aparicio, R., Haller, W., Vickstrom, E. (2010). Moving Ahead in Madrid: Aspirations and Expectations in the Spanish Second Generation. *International Migration Review*, 44, 767-801.
- Portes, A., Fernandez-Kelly, P., Haller, W. (2009). The Adaptation of the Immigrant Second Generation in America: A Theoretical Overview and Recent Evidence. *Journal of Ethnic and Migration Studies*, 35, 1077-1104.
- Portes, A., MacLeod, D. (1996). Educational Progress of Children of Immigrants: The Roles of Class, Ethnicity, and School Context. Sociology of Education, 69, 255-275.
- Portes, A., MacLeod, D. (1999). Educating the Second Generation: Determinants of Academic Achievement among Children of Immigrants in the United States. *Journal of Ethnic and Migration Studies*, 25, 373-396.
- Portes, A., Zhou, M. (1993). The New Second Generation: Segmented Assimilation and Its Variants. Annals of the American Academy of Political and Social Science, 530, 74-96.
- Queirolo Palmas, L. (2002). Etnicamente Diversi? Alunni Di Origine Straniera E Scelte Scolastiche. Studi di sociologia, XL, 199-213.
- Rivellini, G., Terzera, L. (2009). The Measurement of Social Integration among the Pupils: School and Outside Friendships. XXVI IUSSP International Population Conference.
- Rothon, C. (2007). Can Achievement Differentials Be Explained by Social Class Alone? An Examination of Minority Ethnic Educational Performance in England and Wales at the End of Compulsory Schooling. *Ethnicities*, 7, 306-322.
- Rumbaut, R.G. (1997). Assimilation and Its Discontents: Between Rethoric and Reality. International Migration Review, 31, 923-960.
- Schizzerotto, A., Barone, C. (2006). Sociologia Dell'istruzione. Bologna: Il Mulino.
- Schlotter, M., Schwerdt, G., Wößmann, L. (2010). Econometric Methods for Causal Evaluation of Education Policies and Practices: A Non-Technical Guide. *IZA Discussion* Series Paper, No 4725.
- Schnepf, S. V. (2004), "How Different Are Immigrants? A Cross-Country and Cross-Survey Analysis of Educational Achievement," *IZA working paper*, 1398.
- Strozza, S. (2008). Partecipazione E Ritardo Scolastico Dei Ragazzi Stranieri E D'origine Straniera. *Studi emigrazione*, 171, 699-722.