

Recent Developments in School Tracking Practices in Germany: An Overview and Outlook on Future Trends

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Abstract: Grouping students into different learning groups according to their achievement levels, often referred to as ability grouping or tracking, is an almost universal feature of secondary school structures. Explicit school tracking, i.e., providing different school types according to different levels of ability, is one way to implement ability grouping in school systems. Germany is still considered the prototypical example of explicit school tracking, often in reference to its three-tier structure. However, many are unaware that this structure is hardly present anymore. In recent decades, tracking practices in secondary school structures have been subject to substantial discussion and changes in Germany. As a result, several German states (*Länder*) have changed their tracking practices and now differ in the extent to which they implement explicit tracking. The article gives an overview of the specific structures of and changes in tracking practices and explores how the system in Germany can be described, both historically and currently. It also gives an outlook on the political and educational implications of these changes.

Keywords: secondary schools, school structure, ability grouping, school tracking, de-tracking reform

Most education systems, particularly at the secondary level, group students according to their achievement levels (a practice also known as ability grouping, tracking, or streaming; Chmielewski, Dumont, & Trautwein, 2013; Ireson & Hallam, 2001; LeTendre, Hofer, & Shimizu, 2003). Even elementary schools use strategies to divide students into learning groups (e.g., Hallam, Ireson, Lister, Chaudhury, & Davies, 2003). Yet, even if these measures are a central element in secondary education almost universally, they are also universally debated, both in terms of their general effectiveness and the extent to which ability grouping and tracking – in particular in the most rigid form, which involves grouping students into different school types – contribute to social inequality and achievement heterogeneity (Gamoran, 1992; Hattie, 2002; Lucas, 1999; Maaz, Trautwein, Lüdtke, & Baumert, 2008; Schofield, 2010).

In the international debates about tracking, the German case features prominently in comparative analyses as Germany is thought to have a very rigid form of explicit school tracking. This “classical” structure of tracking involves dividing students into three different secondary school tracks very early on (after 4th grade), with each track leading to a different type of school-leaving certificate (Maaz et al., 2008; Neumann, Maaz, & Becker, 2013). However, this picture is no longer up to date, and it is even debatable whether this classical tripartite system ever truly

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10 existed. This is because, in Germany, education is a state and not a federal matter, and due to this traditional regional sovereignty, there has never been *one* German educational system but at least 16 variations with differing degrees of similarity (Baumert, Cortina, & Leschinsky, 2008; Herrlitz, Hopf, Titze, & Cloer, 2008). Today, it is still true that students are divided into secondary school tracks in all German states. However, the prototype of a three-tier track system, involving a lower, intermediate, and academic track (*Hauptschule*, *Realschule*, and *Gymnasium*) that lead to corresponding school-leaving certificates, no longer exists in its pure form in any German state. Recent research has postulated a trend towards a two-paths-system (*Zwei-Wege-Modell*; cf. Hurrelmann, 2007, 2013). But even if this applies, there is still great heterogeneity among the various states and their development. There exists everything from a two-tier system to a six-tier system, and according to recent documents from German educational ministries, there are 17 different secondary school types (KMK – Sekretariat der Ständigen Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland, 2012). The only secondary school type that all federal states offer is the high-ability or academic track, i.e., *Gymnasium*. This situation has come about due to historical developments and more recent educational reform trends, which we will outline in this article.

In the following article, we will give an overview of the German tracking system, identify trends towards change in the tracking system, and suggest reasons for this. We will focus on tracking in the lower secondary school system (i.e., from 5th to 10th grade). Therefore, the first part will explicate terminology and theory, elaborate on the general assumptions of the debate on ability grouping and tracking, and discuss how to categorize the German situation in the international context. Then we will describe the historical and current setup of tracking in Germany. We will also give some insights into the drivers and current state of school structures and their reforms in Germany and how to systematize the current diversity. We will give an outlook on the recent momentum of de-tracking reforms.

1 Types and effects of ability grouping and school tracking

Ability grouping may take various forms, but it seems to be an almost universal feature of secondary schooling (Chmielewski et al., 2013; Ireson & Hallam, 2001; LeTendre et al., 2003) – following the basic idea that optimal instruction is facilitated when the ability level of students is more homogenous (Baumert, Stanat, & Watermann, 2006; Hattie, 2002). The German form of ability grouping involves a tracking system that groups students into separate school types according to different ability levels. This is often labeled as explicit *between-school* tracking (or *between-school streaming*) and is considered the most rigid form of ability grouping, as it separates students into different schools. Other common forms of ability grouping place students within one school into different streams. This can take the

form of grouping students across all subjects into the same learning group (usually referred to as *within-school* tracking or streaming), or, it can take a weaker form, involving grouping students within schools into subject-specific learning groups, but with learning groups varying from subject to subject (also labeled as *course-by-course* tracking or setting). In Germany in recent times, all three forms of tracking have existed simultaneously: As mentioned above, all 16 states practice an explicit form of student tracking according to different ability levels into different school types. These types differ in their features: in how or to what extent they implement within-school tracking or course-by-course tracking.

The question of whether and to what extent these different tracking practices are effective has been a matter of intense debate (Hattie, 2002; Ireson & Hallam, 2001; Lucas, 1999; Schofield, 2006). On the one hand, Hattie (2002, 2009) showed in his meta-analysis that the average effect of ability grouping on student achievement is rather low, with $d = 0.05$. If there is any benefit to ability grouping at all, it appears to be accrued by higher-ability students rather than lower-achieving students, who may learn better in mixed-ability groups. On the other hand, Schofield (2006, 2010) pointed out that ability grouping cannot be considered as an isolated factor, as it typically goes hand in hand with entirely different curricula (similarly, Hallinan & Kubitschek, 1999), and effects seem to be, indeed, even more heterogeneous when ability grouping is associated with variations in curricula (Gamoran & Berends, 1987; Gamoran & Mare, 1989; Hoffer, 1992; Oakes, 1985). Empirically, there is support for the idea that various forms of ability grouping may have less of an effect on average achievement but increase the variance (e.g. Hanushek & Wößmann, 2006).

In Germany, there is evidence indicating that achievement gains differ between tracks (or school types) even when students' individual prior achievements and family backgrounds are accounted for (Becker, Lüdtke, Trautwein, Köller, & Baumert, 2012; Köller & Baumert, 2001; Retelsdorf, Becker, & Möller, 2011). Accordingly, tracks may be understood as differential learning environments within the secondary school system, offering students different opportunities to develop their abilities (Baumert et al., 2006; Trautwein, Dumont, & Dicke, 2015). Yet, the scientific debate on the consequences of tracking is inconclusive on many levels. In particular, in the case of Germany, it has become a prominent field of empirical research. However the empirical evidence is still mixed. For example, many studies have limited internal validity (Becker, 2009), and the size and direction of effects are rather domain dependent and may depend on types of ability grouping (e.g., Becker, 2009; Chmielewski et al., 2013; Dumont, Protsch, Jansen, & Becker, 2017). In the case of Germany, there are relatively few longitudinal studies with a higher internal validity. However, these studies suggest that the more academically oriented tracks foster higher learning. That holds more or less consistently for subjects like mathematics and English as a foreign language but far less so for reading skills. Additionally, the clarity of this pattern seems to depend on grade level (for an overview see, e.g., Becker, 2009). In contrast, for psychosocial constructs such as academic self-concept and interest, the opposite pattern was found, meaning that the academically oriented tracks seem to

12 have a negative impact on development and the more vocationally oriented tracks seem to foster more positive development. In these constructs, the specific effect pattern appears to be moderated by the specific school structures (mainly the presence of further within-school streaming; cf. Chmielewski et al., 2013) and the very specific psychosocial construct under consideration (Becker et al., 2014; Dumont et al., 2017; Knoppick, Becker, Neumann, Maaz, & Baumert, 2015). Additionally, recent research has highlighted that some of the effects, at least for psychosocial outcomes, were less bound to type of track than to the school-leaving certificates that students attained – and this was fairly independent of school track (Dumont et al., 2017).

In a similar vein, the practice of between-school tracking has been criticized from a social reproduction perspective, because transition processes from primary to secondary schools are not influenced only by ability. Track assignment in Germany is largely based on achievement, but beyond achievement, social class and also ethnicity also play a role in these transition processes, one that is much less important than achievement, but also not negligible (Dumont, Maaz, Neumann, & Becker, 2014; Maaz et al., 2008). Additionally, students' predominant form of between-track mobility is downward, meaning that they leave the more academically oriented tracks, due to insufficient achievement, and join the more vocationally oriented tracks, and this again has a socially selective component (Bellenberg, 2012; Cortina, 2003).

On the other side, during the last decades a system evolved in which a student can continue his or her education and, for example, attain a university entrance certificate even though he or she may have originally decided against an academic track at the transition from primary into secondary school (sometimes labeled vertical permeability; Köller, Baumert, Cortina, Trautwein, & Watermann, 2004; Köller, Baumert, & Schnabel, 1999; Maaz et al., 2008; Trautwein, Nagy, & Maaz, 2011; see also below). Because of these manifold, partly contradictory aspects the long-term consequences of school track decisions for students' overall academic careers and life courses are only partly understood so far (Maaz et al., 2008).

All these general elements have featured in the arguments of proponents and opponents of tracking practices in the public and political debate in Germany (Baumert, Maaz, Neumann, Becker, & Dumont, 2013; Neumann, Maaz, et al., 2013). The proponents of tracking have highlighted that tracking may provide an opportunity for better instruction and avoid the risks of demanding too much or too little from the students. The opponents have highlighted the risks that more rigid and earlier forms of ability grouping imply for the low-achieving and socially less privileged children. It may reproduce societal strata that are ability-based but simultaneously socially exclusive. These arguments have also formed part of the historical public and political discussion in Germany, which has led to the structure of today's secondary school system in Germany.

2 The classical structure of school types in German secondary schooling: Basic ideas, features, and consequences

In Germany, the “traditional” three-tier secondary system dates back to 19th century school structures (Herrlitz et al., 2008), which differentiated between a “lower” education system, oriented towards practical vocational training in craftsmanship and manual labor, and a “higher” track oriented towards academic professions. But it was only in the 1950s in West Germany that the ideas and image of the prototypical German three-tier system were refined (Baumert et al., 2008; Baumert et al., 2013). After four years of non-tracked elementary school, students were selected into three different types of secondary schools: low-, intermediate- and academic-track schools (*Hauptschule*, *Realschule*, and *Gymnasium*). As the low-track school type, the *Hauptschule* provided a slower-paced and vocationally oriented curriculum. The *Realschule*, an intermediate-track school type, also delivered a vocational curriculum, but the focus was less on manual labor and more on administrative and commercial work. The *Gymnasium*, the high-track school type, provided students with an academic curriculum that prepared them for higher education and academia (Baumert et al., 2008; Hurrelmann, 2013; Neumann, Maaz, et al., 2013).

These secondary school types corresponded closely with different secondary school-leaving certificates: the *Hauptschulabschluss* (the lowest school-leaving certificate, received after 9th grade), the *Mittlerer Schulabschluss* (the intermediate school-leaving certificate, received after 10th grade) and the *Abitur* (the highest school-leaving certificate, received after 12th or 13th grade). These different certificates did and still do largely determine a person’s future occupational options. In particular, they are prerequisites for certain professions, with the broadest range of opportunities for the *Abitur*, which also allows for university enrollment, and the narrowest range for the *Hauptschulabschluss*, which mainly qualifies students for manual labor apprenticeships (Baumert et al., 2008).

Even today, an echo of this model is discernible in many of the German states but, in fact, this pure form has scarcely existed in the German states, both historically and today. For example, in West Germany in the 1950s and 1960s, around 80% of students attended the low-track school and about 10–15% attended the academic-track school. Yet, enrollment in the intermediate track varied substantially across states, ranging from 4% to 24% of students (Baumert et al., 2008).

Picht’s (1964) seminal works in the 1960s and the diagnosis of a *Bildungskatastrophe* (“educational catastrophe”) prompted a debate about social distributional justice and permeability of the German school system and called into question the functionality of the three-tier structure (Dahrendorf, 1965; Peisert, 1967). This debate led to several initiatives, including experiments with school structures and the introduction of a *Gesamtschule*, a comprehensive school type comprising all ability levels, usually implementing a course-by-course tracking system (Köller, 2008). The introduction of the comprehensive school in the late 1960s and 1970s was done

14 with the aim of abandoning the traditional three-tier system, and implementation differed state-by-state – some states had a large proportion of students attending comprehensive schools, while other states did not have this school type at all. In all states in which the comprehensive school was introduced, it did not replace the three-tier system entirely but added a fourth school track alongside the other three school types (Baumert et al., 2008; Köller, 2008). This led to the paradoxical situation that states that had implemented de-tracking reforms ultimately had more school types than states that held on to the tracking system; for example, Bavaria was one of the most vigorous proponents of early and rigid tracking but – in terms of the number of tracks – the least tracked state in western Germany, at least until the early 2000s (Baik, 2011; Tillmann, 2012).

At the same time, this development was exclusive to the states of West Germany. The states of the former German Democratic Republic (GDR) in eastern Germany implemented a unified secondary school system in the 1960s (*Polytechnische Oberschule*; Baumert et al., 2008). It was an untracked system with only weak course-by-course tracking to the end of lower secondary schooling. Students' educations mainly differed in their durations, typically ending after 10 years; a minority continued to upper secondary education (*Erweiterte Oberschule*) in preparation for higher education. This system existed all over the former GDR, but it was almost immediately abandoned after the fall of the wall and German reunification. On paper, the new eastern German states adopted a tracking system similar to that of the western German states, but in effect, they created new school types, mainly by introducing a combined school track for the lower and intermediate school tracks by means of within-school streaming. This resulted in the establishment of a two-tier system right from the start in Saxony, Saxony-Anhalt, and Thuringia (Baumert et al., 2008; Baumert et al., 2013). But even in eastern German states that followed a three-tier system more closely, such as Mecklenburg-Western Pomerania and Brandenburg, a two-tier system was at least established in areas with lower population densities, where the three-tier system proved impractical.

3 Recent trends towards a two-tiered system

In recent years, there has been a renewed debate on tracking practices in Germany for various reasons. Most of this discourse revolves around the maintenance of the lower tracks, mainly the *Hauptschule* (Baumert et al., 2013; Hurrelmann, 2013; Neumann, Maaz, et al., 2013). As a result, de-tracking reforms have taken place in several states. Even though each state has different tracking practices and thus a different secondary school structure, there is a general trend towards a two-tier secondary school system (Hurrelmann, 2013; Tillmann, 2012). There are various reasons for these de-tracking policies:

- Demographic change has led to low population densities in various areas, a trend that is predicted to intensify in coming years, mainly in rural Germany. Like in

the early 1990s in some parts of the eastern German states, such as Mecklenburg-Western Pomerania, where low population density made the three-tier system unsuitable early on, the current demographic trends make the maintenance of a multi-tier track system less attractive (Baumert et al., 2013).

- In general, parental educational aspirations have increased steadily over the last few decades. This has led to relatively high participation in academic-track schools and has prompted a dramatic change in the distribution of students: Even where the lower track school still exists, it usually only caters to a minority of 5 to 20% of the student body. At the same time, the once very exclusive Gymnasium now represents the main school. Educating about 40% of the students, it is now the most popular and the most homogeneous school track (Baumert et al., 2006). Indeed, it is the only track that exists in all 16 German states.
- In parallel, the prerequisites for entering vocational training and the labor market have increased. Jobs that do not require elaborate general schooling and vocational training have lost their importance, and with them the lower track school-leaving certificate has lost its appeal (see also Protsch & Solga, 2015).
- International comparative large-scale studies, particularly the PISA Study, fueled an intense educational debate in Germany because a large share of students seemingly failed to reach a minimum achievement level by the end of their compulsory education (Artelt, Stanat, Schneider, & Schiefele, 2001; Maaz & Baumert, 2011).
- Additionally, the PISA Study showed that the correlation between achievement and social background in Germany was among the highest of the countries studied. Consequently, there was heated debate on the extent to which school structures were adding to these problems. In particular, in urban areas in which the share of low-track school attendees was minimal, research evidence suggested that the student body composition hindered instruction and academic achievement development (Baumert et al., 2006).
- In recent decades, the association between school track and school-leaving certificate has weakened. There were various drivers of this, including the introduction of comprehensive schools in West Germany, the establishment of the two-tier system in the eastern German states, and the introduction of a vocationally based but general upper-secondary school system allowing students to attain a university entrance diploma outside of the “classical” way (Neumann & Brauckmann, 2004). These factors led to the greater openness now discernible in the educational systems of all 16 states (Köller et al., 2004; Köller et al., 1999).

These elements led to implicit or explicit changes in the German school systems, thus creating substantial heterogeneity. Students at the end of primary education are confronted with very different options depending on their state of residence. The heterogeneity inheres in the school tracks offered beside the academic track school, in the number of these other tracks, in their implementation, and in the labeling of these non-academic school tracks (cf. Appendix, Table A1; Neumann, Maaz et al., 2013). From the “original” three tier-track system, the low-track

- 16 Hauptschule remains only in four states and the intermediate Realschule in five states. Additionally, the comprehensive schools that emerged from the structural reforms in the 1970s have continued to exist in eight states. The remaining school types represent new school types. Counting across all states, 17 different school types exist in the 16 states of Germany. Although the heterogeneity signaled by the different labels may appear bewildering, it can be interpreted as a strategic attempt to avoid an association with the heated debate about school structures in the 1970s (Baumert et al., 2013). Additionally, the schools may be labeled differently, but they have similar school structures. For example, western states have started to copy the system introduced in the former GDR states. The schools have new labels (e.g., *Regionale Schule*, “Regional School”), but the school tracks all practice the eastern German “innovation” of within-school streaming. Meanwhile, the eastern German schools also operate under different labels (e.g., *Regelschule*, “Standard school”; *Sekundarschule*, “Secondary school”). At the same time, the number of school tracks is also not homogenous within the states. Due to local differences and specific regional needs, not all school tracks are available across all local school districts. For example, the high number of schools tracks seen in the state of Hesse, which has five different types of academic school tracks, varies locally, and most areas do not offer all five school tracks (Baumert et al., 2013).

A systematization of recent school structures

One way to group these heterogeneous systems focuses on the permeability of schools, specifically whether the same school offers different school-leaving certificates. Hurrelmann (2013) and Tillmann (2012) have suggested that instead of speaking of a “tier” system, it would be more appropriate to speak of a “path” system, as students can acquire equivalent school-leaving certificates in multiple ways (Hurrelmann, 2013; Tillmann, 2012). The states do vary in how open “school tracks” are. One could speak of a “paths” system if the system is more based on within-school streaming or course-by-course tracking systems, with school tracks generally providing all school-leaving certificates under one roof. A system based more on explicit school tracks, focusing mainly on the curriculum bound to one school-leaving certificate would be labeled a “track” system (Hurrelmann, 2013; Tillmann, 2012).

By applying this systematization, we can identify six more or less distinct groups (see Table 1). The groups are systematized according to how closely they correspond to a “track” or a “path” system and according to how differentiated the school system is. The first group contains the majority of reduced “two-paths-system” types (*Zwei-Wege-Modell*; Hurrelmann, 1988, 2013). In addition to the academic-track school, these systems provide only one other track, which also offers all school-leaving certificates, including university entrance diplomas; this model exists in three states (Bremen, Hamburg, Saarland). A closely related model is the “two-paths-system-extended” (*Zwei-Wege-Modell-erweitert*) system present in Ber-

lin and Schleswig-Holstein; these states do have one dominant non-academic school track offering all school-leaving certificates, but one additional school track exists, which is only of marginal importance quantitatively.

The “two-tier-system” (*Zweigliedrigkeit*) refers to those states that have only one alternative school track besides the academic track school, but that alternative track does not offer university entrance diplomas. It currently only applies to the state of Saxony. Similarly, the “two-tier-system-extended” (*Zweigliedrigkeit-erweitert*) relies mainly on one school track besides the academic-track school, but other school tracks that are numerically marginal also exist. This is currently the largest group, with five states (Brandenburg, Mecklenburg-Western Pomerania, Rhineland-Palatinate, Saxony-Anhalt, and Thuringia). Bavaria can be categorized as a “three-tier-modified-system” (*Dreigliedrigkeit-modifiziert*) as it has maintained a three-track system, but the original low-track school type was reorganized to create a school type that not only provides the lower school-leaving certificate but also other school-leaving certificates (with the exception of the university entrance diploma). Still, this school structure is the closest to the stereotype of the classical German school tracking system. The last category of school type can be labeled as the “three-tier-system-extended” (*Dreigliedrigkeit-erweitert*), in which both the classical lower- and intermediate-track schools exist alongside other school types that offer direct access to the university entrance diploma. This category comprises Baden-Wuerttemberg, Hesse, Lower Saxony, and North Rhine-Westphalia. Tillmann (2012) also proposed to classify Hesse, Lower Saxony, and North Rhine-Westphalia as a “four-tier-system” due to the tradition of comprehensive schools going back to the 1970s (Tillmann, 2012).

It is important to note here that this categorization holds only to a certain degree. States do vary in how they implement vertical mobility, i.e., how one can gain another school certificate after acquiring an initial certificate. In the “paths” systems, this is solved within schools that provide options for all school-leaving certificates. Yet, states have also implemented systems in which tracks build on each other such that they appear to be one path. For example, schools in Baden-Wuerttemberg and a few other states created an upper “vocational” Gymnasium track that connects directly to the intermediate track (Realschule). It is well-established that students can combine these tracks to attain a university entrance diploma, and there are direct preparatory courses, which exist as a form of within-school streaming, to link the lower secondary school track to this type of upper secondary general education in a path-like fashion (Neumann & Brauckmann, 2004).

In summary, the majority of the German states have now adopted a “two-paths” model, which mainly consists of the Gymnasium as the academic track, principally providing access to university training, and a second school type that also opens the path to university training but does not primarily serve this purpose. The other states that lean more towards a “tier system” seem to have developed a system that allows them to institutionalize vertical mobility in a less direct but nevertheless potentially explicit way; perhaps most importantly, this allows the states to adapt their school

18 Table 1 Types of secondary school structures in the 16 states of Germany (at the beginning of the school year 2013/2014)

Type of school structure	State
Two-paths	Bremen
	Hamburg
	Saarland
Two-paths-extended	Berlin
	Schleswig-Holstein
Two-tier	Saxony
	Brandenburg
Two-tier-extended	Mecklenburg-Western Pomerania
	Rhineland-Palatinate
	Saxony-Anhalt
	Thuringia
Three-tier-modified	Bavaria
	Baden-Württemberg
Three-/four-tier-extended	Hesse
	Lower Saxony
	North Rhine-Westphalia

systems depending on specific regional demands, for example, where low population density makes multiple tracks too costly (Tillmann, 2012). It is likely that these states will use this currently implicit adaptive reform strategy to reduce the complexity of their school structures, at least in the long run (Baumert et al., 2013; Hurrelmann, 2013).

4 Future opportunities and challenges of structural reforms

In this section, we will elaborate on some of the main aspects implied by the current state of affairs against the aforementioned background and identify drivers that may become relevant for remodeling school structures. Structural reforms have focused on non-Gymnasium tracks, creating school structures that serve mainly to dissolve negatively selected school environments (Baumert et al., 2013). This has been accompanied by measures that strengthen and open alternative pathways towards university education in non-Gymnasium school tracks and simultaneously reduce the number of alternative school tracks – despite the heterogeneity that exists *prima facie* between the 16 states.

What is remarkable in the recent trend towards “two-tier” or even “two-paths” systems is that the debate around it has been less dogmatic and more pragmatic than the debate about school structures in previous decades. Even conservative proponents have not uniformly held onto the three-tier system but have even argued in favor of a two-tier or even a two-paths system (Neumann, Maaz, et al., 2013). On

the other hand, proponents of a unified comprehensive system can also accept the current movement as it implies a reduction of school tracks and as such represents a step into the “right direction” (although it represents only an in-between step; cf. Hurrelmann, 2007, 2013). Whether the structural reforms will stop with a two-tier/-paths system and how this debate will continue will emerge in the future. Currently, at least based on public opinion, neither parents nor teachers nor school leaders are mostly in favor of a unified comprehensive school system; the majority has argued for a two-tier system (Vodafone Stiftung Deutschland, 2013). The results of scientific studies point into the same direction. In the so-called BERLIN study, which looked at a structural de-tracking reform that reduced the former five-tier school system to the aforementioned two-paths-extended system in Berlin (Maaz, Baumert, Neumann, Becker, & Dumont, 2013), almost 70% of all parents were opposed to unifying all school types and students into one comprehensive school type (Böse, Neumann, Becker, Maaz, & Baumert, 2013).

Finally, referendum voters in the state of Hamburg opposed a unified comprehensive system, overruling state government plans to extend primary education (in the comprehensive elementary schools, which are without explicit tracking) from 4 to 6 years (Bale, 2013). In contrast, it proved possible to unify all non-Gymnasium school tracks into one type of comprehensive *Stadtteilschule* (not including the Gymnasium-track student body).

The relatively non-dogmatic discussion about the recent reduction of school tracks and the absence of pedagogical trench warfare makes it possible to consider those aspects of school life that are likely to have more impact: the actual implementation and organization of instruction. As Hattie (2002, 2009) has highlighted, these processes are much more predictive of successful schooling than structures per se. Indeed, the German system, with its 16 versions of school tracking, has illustrated exactly this: Recent national comparative studies have not identified a clear relationship between the number of tracks and average achievement across various competencies domains (e.g., Köller, Knigge, & Tesch, 2010; Prenzel et al., 2008). The high-achieving states were both three-tier systems (Bavaria and Baden-Wuerttemberg) but also two-tier models (Thuringia and Saxony). Additionally, the correlations between achievement and social origin were only weakly associated with the tracking structures of states (e.g., Ehmke & Baumert, 2008; Knigge & Leucht, 2010). What the reduced structures and/or the strengthening of the path system over the tier system implies for student learning is still an open question.

These debates are also connected to the question of transition decision. Placing students into tracks at an early age has been a particular focal point of critique, as research has provided evidence that the groupings are not only based on ability but also biased by social origin (“secondary” disparities; Maaz et al., 2008). Whether the reduced track/paths system in Germany will perform better in these respects is not yet clear. The first results from the BERLIN study, which evaluates the aforementioned de-tracking reform in the state of Berlin, suggest that transition decisions remained relatively comparable, regardless of the reduction in school tracks. This may be due

20 to the fact that, in the state of Berlin, secondary social disparities were relatively low in comparison to other states, and de-tracking in this context may have less relevance for transitions (Dumont et al., 2014; Dumont, Neumann, Maaz, Becker, & Baumert, 2013). On the other hand, decision patterns in the state of Berlin seemed to be stable because there is a decision pattern still attached to the specific local school. In particular, the decisions were related to the salience of the information that a school offered all school-leaving certification options (Dumont et al., 2013; Neumann, Kropf, et al., 2013). That may point towards the problems of de-tracking reforms in general: first, to what extent do old structures continue in new structures via school administrations and staff, and second, to what extent may parental knowledge continue to be based (and biased) by preceding school structures (Hurrelmann, 2007; Tillmann, 2012)? In a reformed system, school transition decisions are crucially impacted by how new structures are used to establish a new environment for learning and the extent to which the impact of a reform is actually acknowledged and accepted by parents. The implications of decision patterns at the end of elementary school for absolute achievement, the correlation between social origin and achievement, and educational attainment in terms of school-leaving certification require further exploration.

5 Synopsis and outlook

The current German school system and its recent history can be described in terms of two developments, which appear somewhat contradictory on the surface (Neumann, Maaz, et al., 2013). On the one hand, structures in lower secondary schooling are converging towards a situation in which most states provide only two different school tracks: the academic track and another, alternative, secondary school track. This development has its origins in the abolition of the lower track, *Hauptschule*, in most western German states and the simultaneous strengthening of school types that use within-school or course-by-course tracking. At the same time, three- or four-tier systems continue to exist, in some places with an even higher number of school tracks but with local variations (or, alternatively expressed, local limitations). Whether these developments represent pragmatic steps towards an overall reduction of school structure complexity or implies rather an increased heterogeneity on the school district level remains to be seen.

Even assuming a trend towards a two-tier/paths system exists, the heterogeneous labeling and organization of these paths and tiers is still substantial. To a certain extent, the situation is much less transparent than two decades ago. It mainly revolves around the form taken by non-academic track schools and how access to university entrance diplomas is organized (directly or with separate vertical transition options). Even now, it is entirely unclear which of these strategies will be most successful in terms of general student learning and attainment of school-leaving certificates, and in terms of avoiding school drop-out and achievement levels below the minimal requirements for further professional development. Information

about these systems must be gathered (Maaz et al., 2013) as knowledge about these changes is still anecdotal. To that end, it remains to be seen whether the hypothesized two-paths system will become the new “classical” German system, representing an example of a less rigidly tracked system, and whether this will contribute to addressing and solving some of the problems attributed to the German school system.

Appendix

Table A1: Number and labels of non-Gymnasium (non-GY) school tracks in all 16 states for lower secondary schools at the beginning of the school year 2013/2014 (differentiated whether school track provides direct access to university entrance diplomas).

State	N°. of non-GY school tracks	Label of non-GY school track
Baden-Württemberg	4	Hauptschule, Werkrealschule, Realschule, Gemeinschaftsschule*
Bavaria	2	Mittelschule, Realschule
Berlin	2	Integrierte Sekundarschule*, Gemeinschaftsschule*
Brandenburg	2	Oberschule, Gesamtschule* (integr.)
Bremen	1	Oberschule*
Hamburg	1	Stadtteilschule*
Hesse	5	Hauptschule, verbundene Haupt- & Realschule, Mittelstufenschule, Realschule, Gesamtschule* (coop. or integr.)
Mecklenburg-Western Pomerania	2	Regionale Schule, Gesamtschule* (coop. or integr.)
Lower Saxony	4	Hauptschule, Realschule, Oberschule*, Gesamtschule* (coop. or integr.)
North Rhine-Westphalia	4	Hauptschule, Realschule, Sekundarschule*, Gesamtschule* (integr.)
Rhineland-Palatinate	2	Realschule plus, Gesamtschule* (integr.),
Saarland	1	Gemeinschaftsschule*
Saxony	1	Mittelschule
Saxony-Anhalt	3	Sekundarschule, Gesamtschule* (coop. or integr.), Gemeinschaftsschule*
Schleswig-Holstein	2	Regionalschule, Gemeinschaftsschule*
Thuringia	3	Regelschule, Gemeinschaftsschule*, Gesamtschule* (coop. or integr.)

Notes:

*School tracks with direct access to university entrance diploma.

coop. = within-school tracking (“kooperativ”); integr. = course-by-course tracking (“integriert”);

Source: Neumann, Maaz et al. (2013).

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