The PISA (Programme for International Student Assessment) study ranks countries according to the academic performance of the students in those countries. In 2001, the PISA study had already identified a close connection between social background and deficits in equal opportunities in Germany: Children from socially disadvantaged families were significantly below the results of their better-off classmates (Stanat et al. 2002). The German Federal Ministry of Education and Research (BMBF) reports that after the so-called 'PISA shock' in 2001, Germany was one of the few countries that had continuously improved its ranking (BMBF 2019). However, in 2019 the BMBF also states that since PISA 2012 the results have either stagnated or declined. Although the influence of social background on educational achievement has decreased in Germany, it remains high in comparison to other countries (BMBF 2019).

Given the importance of written language skills and multilingualism in the school and social context, the present study examines two overarching questions (a) at what level of complexity do Turkish-German bilingual students at secondary levels I and II write and which type of compound and complex sentences do they use when writing argumentative texts in their two languages; and (b) how much does the first-language input in the school context influence the written language development of students in their two languages (for research questions, see 2.1). To answer these questions, written texts from Turkish-German bilingual students in the 7th, 10th, and 12th grades in their first language Turkish and in their second language German are studied, using texts from bilingual students from two different schools. The first group of pupils received Turkish as their first language and as a language of instruction (pupils with TU1), the second group of pupils received Turkish as their second language and as a foreign language (pupils with TU7). The data is taken from the MULTILIT project of the University of Potsdam.

The study is divided into a theoretical and an empirical part. In chapter 1.1, it is shown that multilingualism is not a rigid term that describes a single phenomenon. Rather, one can speak of the different types of multilingualism, e.g. individual and societal multilingualism, which can in turn be divided into subtypes depending on the focus of the descriptive approach.

Chapter 1.2 addresses multilingualism in the migration context in order to better understand and locate the multilingual everyday life and language use of the pupils examined here with regards to the (educational) political framework. First, a general report is given on "Europe and its multilingualism" (1.2.1). In this sub-chapter it is shown that although the European Union values its linguistic diversity in written documents, in practice, with regard to multilingualism and the equal treatment of the languages of Europe, it mainly takes into account the

officially recognized languages of the European Union (see the Commission's core line on multilingualism, European Commission 2006: 1; European Commission 2012: 138). Subsequently, the offer of Turkish as a family language in the German school system (1.2.2) is outlined, including the recruitment procedures and criteria for teaching personnel in Germany. According to this, Turkish is rarely taught as a regular foreign language in Germany, but more often as a heritage language. Chapter 1.2.3 on the Turkish language in a migration context demonstrates that the acquisition of Turkish in a multilingual migration context differs from monolingual Turkish acquisition in Turkey.

Chapter 1.3 presents the historical development of the research area German as a Second Language. It is shown that the main focus of most studies in the 1970s was the language learning problems of "guest workers", their reduced use of German, the pidgin German ("Gastarbeiterdeutsch"). In the 1980s, the focus of research shifted to the language behavior of Germans directed at migrant workers (Foreigner Talk). Partly as a result of international comparative studies such as PISA, IGLU and TIMSS, multilingualism and second language acquisition in the context of school success as well as the educational opportunities of the "migrant children" (in the study "multilingual children") of the second or third generation moved more and more into focus. According to the results of the international comparative studies, the socioeconomic status of the students was and is a determining factor with regard to equal education opportunities. Following the publication of these results, further studies have been and are being carried out to investigate, among other things, the second language acquisition of multilingual pupils (1.3.1). There are more and more studies that also consider the development of the first language and its influence on the second language acquisition of children and adolescents growing up in Germany. A selection of these studies on the first and second language acquisition of multilingual pupils was discussed in Chapter 1.3.2. In addition, a number of studies were conducted to investigate the changes to which first languages or family languages are subject in the migration context as a result of language contact situations (1.3.3).

Chapter 1.4 discusses the different approaches to explain language acquisition. After an overview of the most influential explanatory models (1.4), the language acquisition theories relevant for this study, namely the interdependence hypothesis (Cummins 1976) (1.4.1.1), the Cummins' theoretical framework, BICS-CALP differentiation (1.4.1.2) (1980; Cummins/Swain 1986), and the Interlanguage Hypothesis (1.4.2) are described in more detail.

Chapter 1.5 presents the theoretical framework, which is divided into three sections: First, the framework conditions are outlined by providing insight into the schools' (Turkish) instruction and curricula (1.5.1); then, chapter 1.5.2 discusses the theoretical foundation, beginning with the parallels between the orate-literate distinction of Maas (2010) and the BICS-CALP differentiation of Cummins (1980;

Cummins/Swain 1986). It is then argued why the concept of language enhancement ("Sprachausbau") of Maas (2010) was chosen as the theoretical framework for the present empirical study. Furthermore, the notion of syntactic complexity is explained, with a description of earlier work on syntactic complexity that supports Maas' idea of language enhancement. The second part of the theoretical framework focuses on Maas' concept of language enhancement (1.5.2.1), which was the basis for the linguistic analysis of the present study. In the presentation of the concept of language enhancement, differences between Maas' model on the degree of syntactic complexity and its adaptation in the present analysis are mentioned. The third part of the theoretical framework is the overview of complex sentences in Turkish and German (1.5.3), to facilitate the understanding of the data analysis in the empirical part (2).

In the part 2, the aim is not only to quantify the linguistic structures used by the subjects (for subject profile, see 2.3), but also to create an overview of the frequency and type of sentences used, in order to then be able to make a qualitative analysis (2.5.2). In Chapter 2.4 – after the data elicitation (2.4.2) and the presentation of the data corpus (2.4.3) - a complexity scale for both languages was designed for data analysis based on Maas' model of language enhancement while taking into account the typological differences between Turkish and German (see 2.4.4.1 "Evaluation procedure"). Using this tool, in the quantitative analysis first the text length results (2.5.1.1) and then the results regarding compound and complex sentences in Turkish texts (2.5.1.2) and in German texts (2.5.1.3) are described with regards to their occurrence and frequency. In addition to frequently and rarely used compound and complex sentences, the analysis also deals with those complex sentences that appeared difficult for the students at the time of the survey (2.5.1.2 and 2.5.1.3). In 2.5.1.4 the morphological and syntactic errors as well as norm deviations in Turkish and German texts are identified. For this purpose of qualitative analysis (2.5.2), the metadata are presented in the form of language biographies (2.5.2.1). In chapter 2.5.2.4 possible correlations between the students' language biographies and their language use are discussed and reference is made to the working hypotheses (2.2) at appropriate points.

The results of this study (2.5.2.2.4 and 2.5.2.3.4) show that both the Turk-ish-German bilingually and German monolingually schooled groups of bilingual pupils use complex sentences more frequently with increasing age in both languages, similar to monolingual language acquisition. However, the two groups differ from each other in that the bilingually schooled group uses simple and compound sentences less frequently over time than the monolingually schooled group, and instead uses complex sentences more often. Furthermore, the bilingually schooled group uses participle constructions earlier than the monolingually schooled group. Additionally, the bilingually schooled group also shows fewer errors and norm deviations in morphological and syntactic areas, especially in Turkish, but also in

German. The investigation of possible correlations between the language biographies of the students and their language use (2.5.2.4) shows that in contrast to the monolingually schooled group that prefers German, the bilingually schooled group (a) chooses both German and Turkish for reading newspapers and magazines; (b) prefers both German and Turkish for writing; and (c) feels almost equally familiar with both German and Turkish in spoken and written contexts. These results, in turn, indicate that family language instruction provides expanded access to literary structures through media in both languages, without neglecting the second language in terms of language choice for both media and writing contexts. The comparison of the two groups also demonstrates that written language acquisition requires school instruction of that language to be integrated into the official curriculum (see also Herkenrath 2012).

In the concluding section 3 ("Summary of the study and outlook") – further research perspectives (3.3) – reference is made to the didactic benefits of linguistic analyses, such as those conducted in this study, in supplementing or modifying curricula (3.4). Furthermore, the present study argues for a different approach regarding norm deviations and multilingualism in the classroom and - following Diehl et al. (2000) and Sieber/Sitta (1994) – proposes a change of perspective from the deficit-oriented perspective to the development perspective (3.4). This proposal as well as this study is addressed to all stakeholders in educational policy and the education sector, such as schools, teachers, parents, but also universities, research institutes and researchers, because social inequality and educational barriers are also reproduced by and in higher education and research. As mentioned in the opening paragraph, despite the improvement since the 'PISA shock' in 2001, the results for Germany have stagnated since PISA 2012 and the influence of social background on educational achievement is still high compared to other countries. In view of this fact, it can be said that the starting point for the present study (2014) is similar in 2020.

Keywords

Linguistics, multilingualism, multilingual education, written language acquisition in L1 and L2, academic register, corpus linguistics, language typology, educational inequality, teacher training, language policy.

Sprachwissenschaft, Mehrsprachigkeit, mehrsprachige Erziehung, Schriftspracherwerb in L1 und L2, formelles Register, Korpuslinguistik, Sprachtypologie, Bildungsbenachteiligung, Lehrerbildung, Sprachenpolitik.