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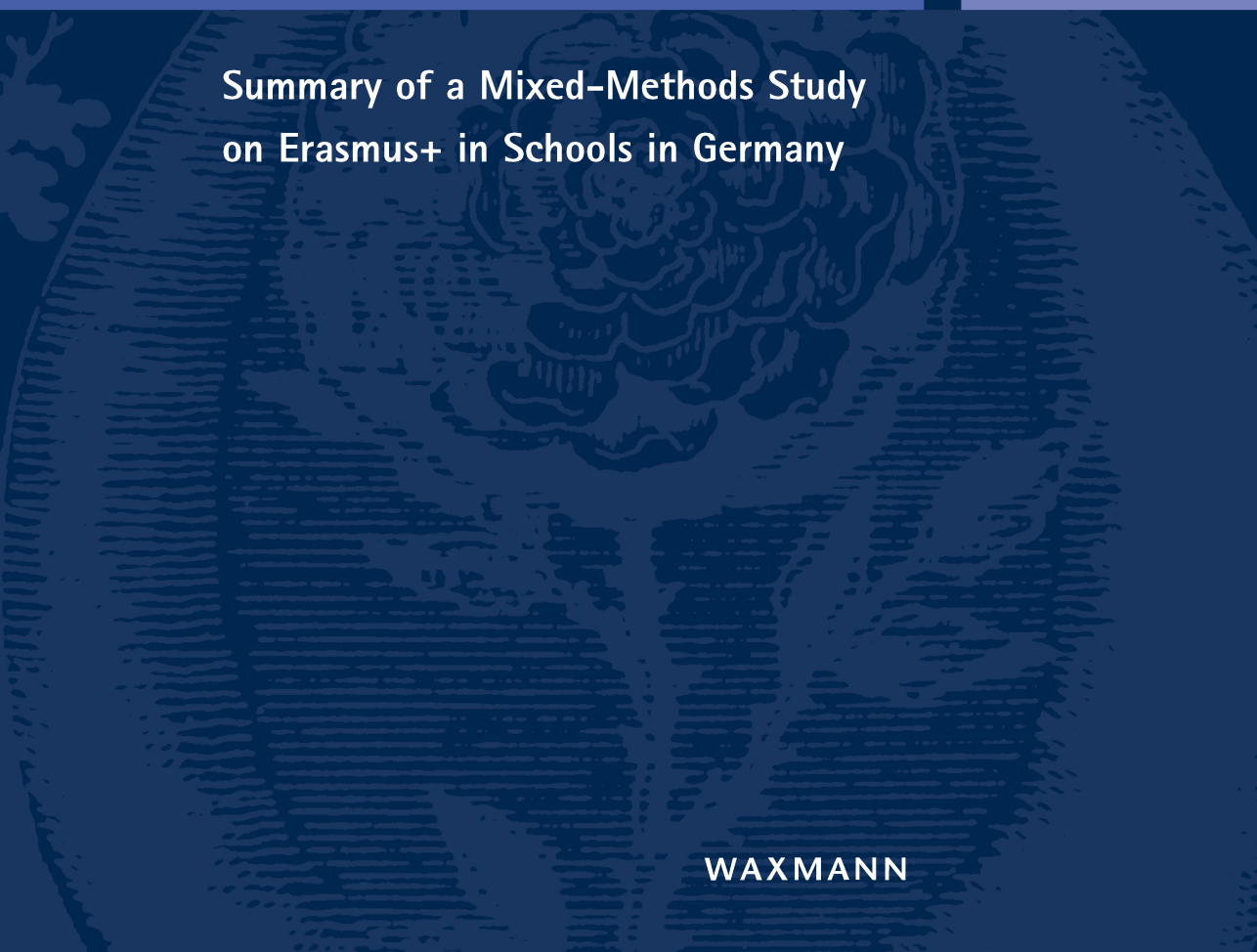
Nadine Sonnenburg, Marion Peitz, Carina Schreiber

Learning Mobility in Europe

Summary of a Mixed-Methods Study on Erasmus+ in Schools in Germany



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1 Introduction: The Erasmus+ Education Programme

Erasmus+ is a European Union (EU) programme to support general education and vocational training as well as the areas of youth and sport in the 27 EU member states and participating third countries. Launched by the EU in 1987, the Erasmus education programme initially aimed to promote exchange and international mobility in the European Higher Education Area, but it was then expanded in 2014 to include the areas of general education and vocational training as well as youth and sport, which had previously been funded in separate programmes. The programme was given a + in its name to mark this expansion. Since then, Erasmus+ has also funded learning mobility for individuals as well as for school administrators, teachers and students in the general education sector. As such, it allows participants to go abroad for stays in other European countries (Key Action 1) and supports international cooperation between organisations and institutions (Key Action 2). In addition, as part of Erasmus+, the EU offers the eTwinning digital platform, a protected digital space to support digital cooperation (European Commission, 2023). For the 2021 to 2027 programming period, the EU has made a total of around €28 billion available for Erasmus+ (European Commission, 2024), of which around €3 billion is allocated to the general school sector (PAD, 2024a). The decentralised components of the Erasmus+ programme are delivered by national agencies in the participating programme states; the Erasmus+ school education programme component is delivered in Germany by the *Pädagogischer Austauschdienst* (PAD)[1] of the Standing Conference of the Ministers of Education and Cultural Affairs (*Ständige Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland;* KMK) in Germany.

Erasmus+ and its predecessor programmes are central building blocks of European education policy and practice and have attracted increasing attention since the turn of the millennium. However, the research to date has concentrated on the higher education field and has devoted little attention to Erasmus+ in the general education sector. The *Study on the Impact of Erasmus+ in General Education Schools and Other Institutions in the School Sector* (abbreviated to ErasmuS⁺ in the following) fills this research gap by investigating Erasmus+ in Germany. It was carried out at TU Dortmund University from 2022 to 2024 on behalf of the PAD in its function as the national agency for Erasmus+ in the general school sector and co-financed by the EU. Prof. Dr. Sabine Hornberg and Prof. Dr. Michael Becker were jointly responsible for scientific management, while Dr. Na-

1 The PAD is a department of the Secretariat of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany (*Kultusministerkonferenz)* and the only state institution in Germany that promotes international exchange and cooperation in the school sector on behalf of the federal states (KMK, 2025). Further national agencies assigned with implementing Erasmus+ in Germany are the German Academic Exchange Service (DAAD) for the higher education sector, the Federal Institute for Vocational Education and Training (BiBB) and *Jugend für Europa* (JfE) at the International Youth Service of the Federal Republic of Germany for the areas of youth and sport.

dine Sonnenburg performed the operational management. Carina Schreiber and Marion Peitz were involved as research assistants and doctoral students.

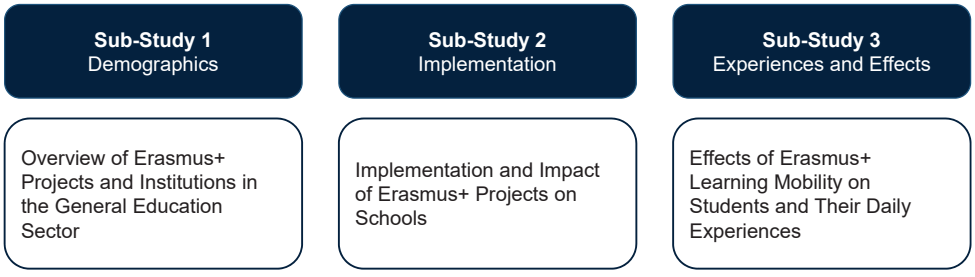
This summary presents the results of the ErasmuS+ study in condensed form in order to provide an overview of the study's key findings. After the introduction, the summary presents the most important results of the three sub-studies 1) "Demographics", 2) "Implementation" and 3) "Effects and Experience". It concludes with a brief summary. A more detailed description of the study, its methodology and the complete empirical analyses and resulting implications can be found in the final scientific report (Hornberg et al., 2025), which will be available at www.waxmann.com/buch200027.

2 Objectives and Design of the Study

The ErasmuS+ study aims to 1) empirically understand the effects of Erasmus+ in the general education school sector, 2) identify conditions for the success of Erasmus+ in the school sector and 3) put a spotlight on the effects of Erasmus+ in Germany in school practice, educational research and educational studies. The study focuses on the general education sector in Germany in the current Erasmus+ programme period (2021–2027). It applies a mixed-methods research design and is structured such that it moves from the general to the specific: Sub-Study 1 focuses on the macro-level and is based on secondary data analyses, providing an overview of the institutions involved in Erasmus+ in the general school sector and the activities they plan. Sub-Study 2 focuses on the meso- or organisational level: based on semi-structured interviews with experts, this sub-study examines the implementation and impact of Erasmus+ projects at the organisational level (e. g. individual schools) in more detail. Sub-Study 3 adopts a research approach combining the experience sampling method with a pre- and post-test design to gain deeper micro-level insights into the experiences and experiential processes of students during Erasmus+ learning mobility. Figure 2.1 provides an overview of the study and the different research focuses.

This study focuses on learning mobility within the context of Erasmus+ projects. Erasmus+ in the school sector offers opportunities for international mobility to other European countries and third countries, which gives students, teachers and other school

Fig. 2.1: Study on the Impact of Erasmus+ in General Education Schools and Other Institutions in the School Sector (ErasmuS+): Structure and Research Focus



staff the chance to travel abroad for educational purposes for a limited period of time. For students, the formats include individual or group mobility in the form of international student exchanges. For teachers and other school staff, this includes participation in continuous professional development and education programmes, engagement in job shadowing, i. e. observing in an educational institution, teaching at a school abroad and accompanying students on group mobility (European Commission, 2023).

Below, we summarise the three sub-studies and the questions they pursue as well as the methodological approaches and selected results. This is the first time that empirical findings on the current Erasmus+ programme generation in schools and other institutions in the school sector in Germany have been available in this breadth and depth.

3 Overview of Erasmus+ Projects and Institutions in the General Education Sector

3.1 Research Questions and Methodology

Although Erasmus+ and its predecessor programmes for the general education sector have been promoting European cooperation between schools in Europe since 1995, there is no systematic overview that describes the distribution and type of participating institutions in the German school sector. The reason for this is the very rudimentary collection of data on the various school forms in the EU databank systems, which are used by national agencies to administer Erasmus+. Hence, there is a lack of knowledge about how different target groups in the school sector benefit from Erasmus+ and where systematic differences may exist. To fill this research gap, Sub-Study 1 asked the following research questions:

1) What Erasmus+ projects are being implemented in the general education school sector in Germany?
2) What institutions are participating in Erasmus+?
3) What target groups are involved?
4) How are the institutions distributed nationwide?
5) What differences in participation in Erasmus+ can be identified between the types of institutions?

In addressing these research questions, we differentiated between institutions in the school sector that participate in Erasmus+ learning mobility (Key Action 1) or partnerships (Key Action 2) and institutions that are registered on the eTwinning digital Erasmus+ platform. The data for the analyses of learning mobility and partnerships were compiled, first, from data lists on all Erasmus+ projects, activities and accreditations that

were applied for in the general education sector in Germany for the current programme[2] period in the years 2020 to 2023. Second, data lists on the eTwinning platform were used, based on information provided by teachers and other school staff who have registered with eTwinning in Germany. All data lists were provided by the PAD. In the following, we report results, giving special consideration to the schools participating in Erasmus+ by school form, as they are an indicator of the mitigation of disadvantages and inclusion of all students the EU aims to achieve.

3.2 Learning Mobility and Partnerships: School Types and Other Institutions

To get an overview of the schools and other institutions participating in Erasmus+ in Germany, we included schools and other institutions whose project applications had been approved and whose corresponding contract had already been signed by the PAD and categorised them as "participating". In the process, we collected data on 2,311 projects in 1,702 participating institutions. A new accreditation procedure was introduced as part of the current Erasmus+ programme generation, which gives schools a kind of Erasmus+ season ticket. It is advertised on the internet with the phrase: "Get accredited once, participate in Erasmus+ until 2027" (Deutsche Nationale Agenturen im EU-Bildungsprogramm Erasmus+, n. d.). The new procedure is having an impact: by 2023, almost three-quarters of the participating schools and other institutions had been accredited for the current programme period. The possibility of getting regular financial support for Erasmus+ activities appears to be an attractive offer for institutions in the school sector.

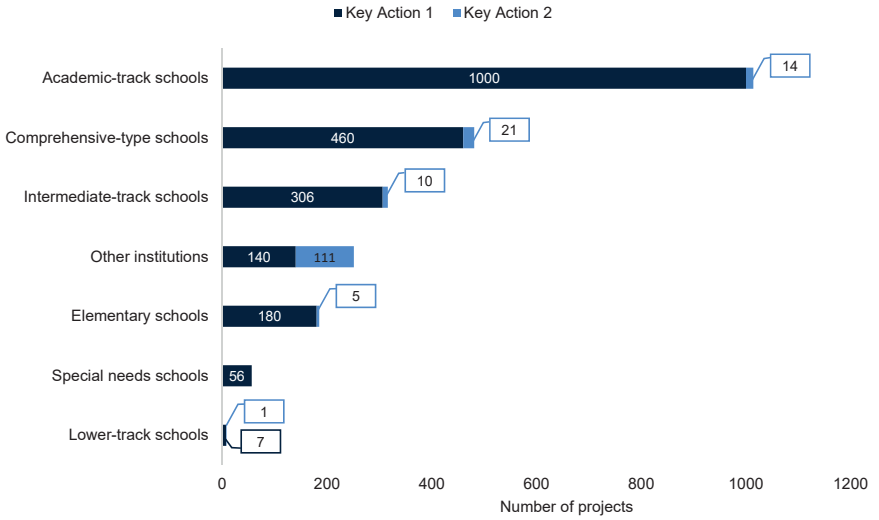
The results show that schools and other institutions mostly use the opportunities provided by Key Action 1 to promote and fund learning mobility by individuals to other countries (see Figure 3.1). This finding reflects the overarching programme conditions, as the EU allocates significantly more funding to Key Action 1 than Key Action 2. Participating institutions make less use of the opportunity to enter into partnerships with other institutions as part of Key Action 2. This appears to be of particular interest to other institutions in the school sector, such as education centres, universities or vocational colleges. In the general education sector, relevant government authorities such as education ministries and similar state authorities and institutes hardly participate at all in Key Action 2.

A more differentiated look at the planned activities under Key Action 1 reveals that students typically take part in group mobility and that individual mobility is much less common. Teachers and other school staff not only accompany learners but also take part in courses and training as well as in programmes in the context of job shadowing (see Figure 3.2).

How are the students and teachers distributed among the different types of schools and other institutions? Looking at the target groups, it is clear that it is primarily students, teachers and other staff from academic-track schools (*Gymnasien*) who go abroad to gain experience with Erasmus+ (see Table 3.1). In contrast, students, teachers and other staff from

2 Although the current programme period only started in 2021, the institutions were able to apply for accreditation for Erasmus+ as early as 2020.

Fig. 3.1: Approved Erasmus+ Projects by School Type and Other Institutions in the General Education Sector (Application Period 2020–2023)



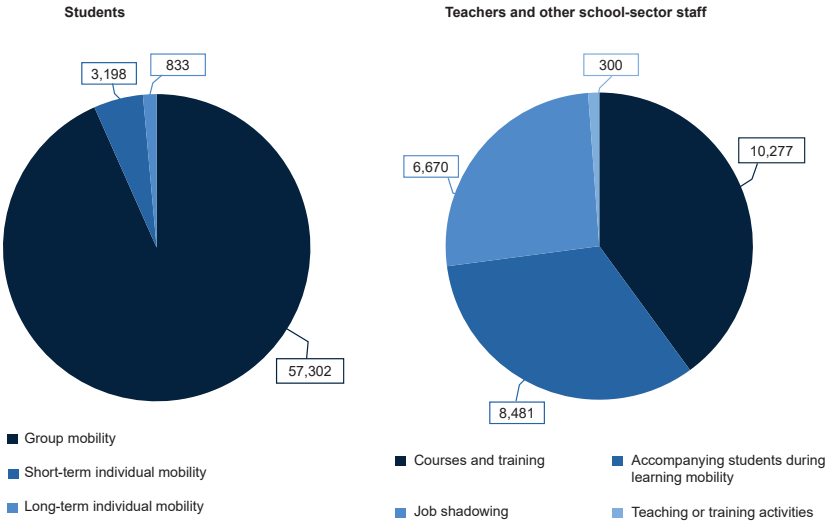
Notes: Academic-track schools = schools at which *Abitur*/university entrance qualification can be obtained (*Gymnasien*); Comprehensive-type schools = schools at which all qualifications can potentially be obtained (*Schulen mit Gesamtschulcharakter*); Intermediate-track schools = schools at which all qualifications except the *Abitur*/university entrance qualification can be obtained (*Realschulen und ähnliche Schulen*); other institutions = specific schools (e.g. vocational colleges, international schools, schools that only offer upper-secondary level etc.), education centres, further education institutions, district governments, ministries of education, school supervisory authorities, teacher training colleges, state institutions, municipal institutions and higher education institutions/universities and daycare centres; elementary schools = elementary schools up to 4th/6th grade (differs depending on the state) (*Grundschulen*); special needs schools = schools for students with special educational needs (*Förderschulen*); lower-track schools = *Hauptschulen*.

elementary schools (*Grundschulen*), special-needs schools (*Förderschulen*) and lower-track schools (*Hauptschulen*) are the least likely to participate. Overall, these results clearly show the dominance of secondary school institutions, particularly academic-track schools.

In addition, the nationwide distribution shows that although institutions from all federal states are represented in Erasmus+, there are clear differences between the individual federal states. As far as the number of schools in the individual federal states is concerned, Bremen (9.7%), Hamburg (9.4%), Rhineland-Palatinate (7.2%) and North Rhine-Westphalia (7.2%) stand out as having the most participating schools. A further evaluation also shows that schools in metropolitan areas (especially in large urban areas[3]) participate more in learning mobility than schools in smaller towns.

3 According to the Federal Institute for Research on Building, Urban Affairs and Spatial Development, large urban areas are all cities with more than 480,000 inhabitants (Bundesinstitut für Bau-, Stadt- und Raumforschung, 2023). These include Berlin, Hamburg, Munich, Cologne, Frankfurt am Main, Stuttgart, Düsseldorf, Leipzig, Dortmund, Essen, Bremen, Dresden, Hanover, Nuremberg and Duisburg.

Fig. 3.2: Predicted Number of Students, Teachers and Other Staff in the School Sector for Erasmus+ Key Action 1 by Type of Activity (Application Period 2020–2023)



Tab. 3.1: Distribution of Students, Teachers and other Staff by Type of School and Other Educational Institutions (Application Period 2020–2023)

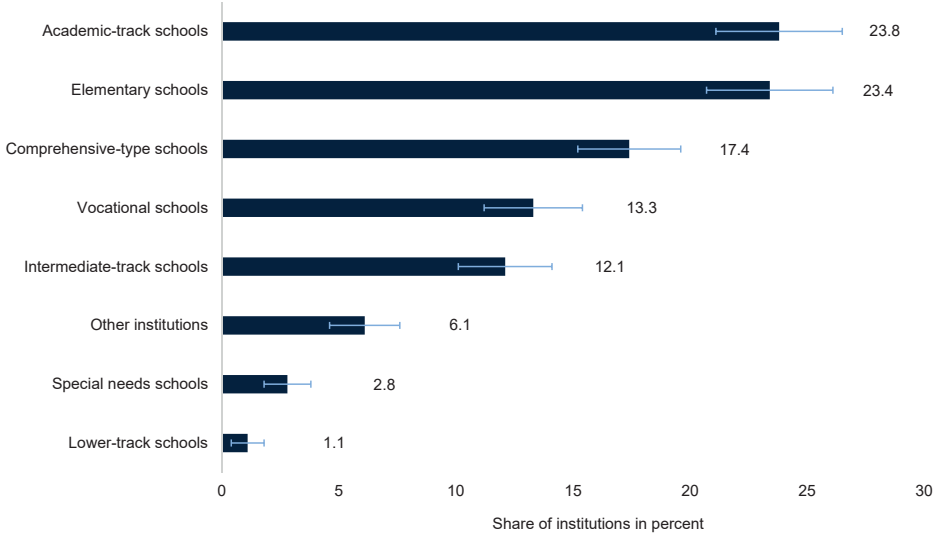
Type of institution	Students *N* (share in %)	Teachers and other staff in the school area *N* (share in %)
Academic-track schools	33,568 (54.7%)	8,353 (32.5%)
Comprehensive-type schools	12,994 (21.2%)	4,115 (16.0%)
Other institutions	6,959 (11.3%)	7,987 (31.0%)
Intermediate-track schools	5,901 (9.6%)	2,726 (10.6%)
Elementary schools	1,500 (2.4%)	1,788 (7.0%)
Special needs schools	344 (0.6%)	711 (2.8%)
Lower-track schools	117 (0.2%)	48 (0.2%)
Total	61,383 (100%)	25,728 (100%)

Notes: Academic-track schools = schools at which *Abitur*/university entrance qualification can be obtained (*Gymnasien*); Comprehensive-type schools = schools at which all qualifications can potentially be obtained (*Schulen mit Gesamtschulcharakter*); other institutions = specific schools (e.g. vocational colleges, international schools, schools that only offer upper-secondary level etc.), education centres, further education institutions, district governments, ministries of education, school supervisory authorities, teacher training colleges, state institutions, municipal institutions and higher education institutions/universities and daycare centres; Intermediate-track schools = schools at which all qualifications except the *Abitur*/university entrance qualification can be obtained (*Realschulen und ähnliche Schulen*); elementary schools = elementary schools up to 4th/6th grade (differs depending on the state) (*Grundschulen*); special needs schools = schools for students with special educational needs (*Förderschulen*); lower-track schools = *Hauptschulen*.

3.3 eTwinning: School Types and Other Institutions

With the digital eTwinning platform provided as part of Erasmus+, the EU promotes digital exchange in Europe in order to boost international networking and exchanges between teachers and students, encourage cooperation across schools, classes and countries and facilitate the acquisition of the necessary skills. From the launch of eTwinning in 2005 up to and including 2021, 9,564 institutions registered on the platform. No data were available to us for the period of interest (after 2021) due to modifications to the platform in 2022. For the period from 2005 to 2021, we determined that almost half of the schools and other institutions had only one person registered on the platform and just over a quarter had more than three people registered. Furthermore, almost half of the schools and institutions did not implement any eTwinning projects at all, just under 20% implemented just one project and a third of the institutions implemented several projects. This means that institutions implemented joint projects, for instance, by having

Fig. 3.3: Institutions Involved in eTwinning by Type of School and Other Institutions in Percent (2005–2021)



Notes: Academic-track schools = schools at which *Abitur*/university entrance qualification can be obtained (*Gymnasien*); elementary schools = elementary schools up to 4th/6th grade (differs depending on the state) (*Grundschulen*); Comprehensive-type schools = schools at which all qualifications can potentially be obtained (*Schulen mit Gesamtschulcharakter*); vocational schools (*Berufskollegs/Berufsschulen*); Intermediate-track schools = schools at which all qualifications except the *Abitur*/university entrance qualification can be obtained (*Realschulen und ähnliche Schulen*); other institutions = specific schools (e.g. international schools, schools that only offer upper-secondary level etc.), education centres, further education institutions, district governments, ministries of education, school supervisory authorities, teacher training colleges, state institutions, municipal institutions and higher education institutions/universities and daycare centres; special needs schools = schools for students with special educational needs (*Förderschulen*); lower-track schools = *Hauptschulen*. *N* = 1000 (random sample). Error indicators (light blue lines) represent the standard errors (bootstrapped *SE*).

teachers set up virtual classrooms for their students (PAD, 2024b). These results indicate that eTwinning was not systematically used by the majority of registered schools in Germany between 2005 and 2021, nor was it used by a large proportion of the teaching staff. With regard to the school types, it is evident that academic-track schools (*Gymnasien*) are disproportionately strongly represented (see Figure 3.3) and that elementary schools (*Grundschulen*) are significantly more involved in eTwinning than in learning mobility.

A look at the nationwide distribution shows that institutions in all federal states are registered with eTwinning, albeit to a significantly different extent. Taking into account the number of schools in the individual federal states, it is also evident that Rhineland-Palatinate (44.8% of all schools involved) and the city-states of Bremen (44.6%) and Hamburg (40.5%) proportionally have the most schools registered with eTwinning and that schools from large cities are more strongly represented overall than those from other areas.

4 Implementation and Impact of Erasmus+ Projects on Schools

4.1 Research Questions and Methodology

In Sub-Study 2, we chose a qualitative research approach in order to gain deeper insights into the implementation of Erasmus+ in schools and other educational institutions in the general education sector in Germany, which has been little researched to date. We were guided by the following questions:

1) What experiences do schools and teachers have when implementing Erasmus+ projects[4]?
2) What conditions facilitate the implementation of Erasmus+ from the perspective of schools and other educational institutions?
3) What challenges can be identified with regard to implementation?
4) What effects[5] on schools and their school development do the various stakeholders describe?

4 To narrow down the selection of schools given the breadth of activities and because Key Action 2 is poorly represented in the school sector (see Chapter 3), the focus below will be exclusively on the activities within the framework of Key Action 1.

5 In the following, we will highlight the conditions and challenges associated with the implementation of Erasmus+ as well as the effects on schools and their development, based on a qualitative research approach. The resulting analyses reported here are based on the observations and assessments of the experts we interviewed. It should be noted that the insights into their professional practice gained in this way are based on self-reports and a simplified, everyday understanding of the term "effects".

In methodological terms, we used 35 semi-structured interviews with experts. Of these, 28 interviews were conducted with principals, Erasmus+ coordinators and teachers at two elementary schools (*Grundschulen*), one intermediate-track secondary school (*Realschulen und ähnliche Schulen*) three academic-track secondary schools (*Gymnasien*) and four comprehensive-type schools (*Schulen mit Gesamtschulcharakter*) (10 schools in total) in four regions in the north, east, south and west of Germany. In addition, a further seven interviews were conducted with representatives in management positions and officials from five education ministries and similar state authorities. The interviews were evaluated using qualitative content analysis (QCA). This method enables researchers to extract relevant content from the interview material, summarise it across the board and thus analyse even large amounts of data material. The necessary categorisation was carried out deductively-inductively based on the guiding research questions and using a specially created coding guide to ensure the greatest possible openness towards the analytical material through the use of the inductive approach in addition to the deductive approach.

4.2 Implementation of Erasmus+ Projects in Schools

The analysis of the qualitative data shows that the schools involved in this study address the four thematic priorities set by the EU for the current Erasmus+ programme period (2021–2027): "Inclusion and Diversity", "Digital Transformation", "Environment and Fight Against Climate Change" and "Participation in Democratic Life, Common Values and Civic Engagement" (European Commission, 2023, pp. 7–10) with different focuses and, overall, they carry out a wide variety of Erasmus+ projects. As far as teachers' project preparations and follow-up are concerned, our analyses show that the interviewees primarily reported doing organisational preparatory work. However, due to the amount of time needed to organise mobility projects, there were only a few cases where thematic preparation took place. In one case, an interviewee reported agreeing specific learning objectives and observation focuses with the participating teachers in consultation with the school management – as part of job shadowing, which enables teachers to observe and participate at a school abroad. Many of the interviewees also reported preparing the students for their learning mobility, for example, with regard to organisational aspects or country-specific features. Because this organisation mostly occurs above the level of single classes, it often takes place outside of regular lessons. Thematic preparation only takes place occasionally, for example, via homework or as part of project weeks.

For teachers, follow-up on learning mobility mainly takes place through informal discussions with colleagues, in which they reflect on and discuss their experiences. One teacher explains:

> "Just in a verbal conversation where you review how certain components of such mobilities went, like how the accommodation was, how the cooperation was, how the distribution of responsibilities among colleagues was, whether it was well chosen by the group and whether the topics were appropriate. But that's not something that we have internal

> school questionnaires or anything like that for; it's just something that comes out in conversation." (E3-GYL, position 209)

Furthermore, interviewees reported that participants' results and experiences are incorporated into professional development courses provided by the school and made available to the teaching staff via digital platforms or presentations, for example, during conferences. In some cases, the content developed is also specifically introduced to steering groups or subject-related groups. Occasionally, final review meetings with the school management and standardised evaluations are also carried out. The forms of follow-up described by the interviewees enable teachers to share their experiences with other teachers but do not represent a systematic follow-up in the sense that guided reflection on learning mobility takes place.

According to the interviewees, student follow-up on learning mobility involves documenting the projects and writing reports or presentations on the students' experiences abroad, which are presented both within the class and at events such as school open days, parents' evenings, project days or on the school website. In some cases, the projects continue even after the learning mobility is over. On the part of the students, too, learning mobility is usually evaluated in informal feedback discussions; standardised evaluation procedures, such as the use of questionnaires, are only used in isolated cases.

4.3 Changes Since the Introduction of Accreditation

With the current programme generation (2021–2027) of Erasmus+, fundamental changes have been made to the programme in order to address the problems and challenges with the predecessor programme (KMK, 2017). For example, the new programme includes the option of accreditation, which initially requires a one-off and more extensive application, including a school development plan covering several years (the so-called Erasmus Plan). Schools that receive accreditation have guaranteed funding until the end of the current programme phase in 2027 and can draw down their funds annually as needed (European Commission, 2023; PAD, 2024c). At the same time, schools that are not accredited can continue to apply for individual projects under the short-term project scheme, which boasts a simplified application process compared to the predecessor programme (PAD, 2024c). In light of this, the implementation of Erasmus+ has led to some changes for schools that are positively perceived and some that are perceived negatively (see Figures 4.1 and 4.2).

Overall, the school representatives interviewed rated the introduction of accreditation positively. Although they regarded the application process as time-consuming, this disadvantage was counterbalanced by the fact that they only had to do it once for the entire duration of the current programme and by the simplicity of the annual funding requirements. Early accreditation therefore enables schools to offer learning mobility options over a long period of time with comparatively little effort. In contrast, getting accredited at a later point in the programme period is considered less worthwhile, as the accreditation is only valid for a shorter period of time but the amount of work is the same.

Fig. 4.1: Positive Changes Since the Introduction of Accreditation

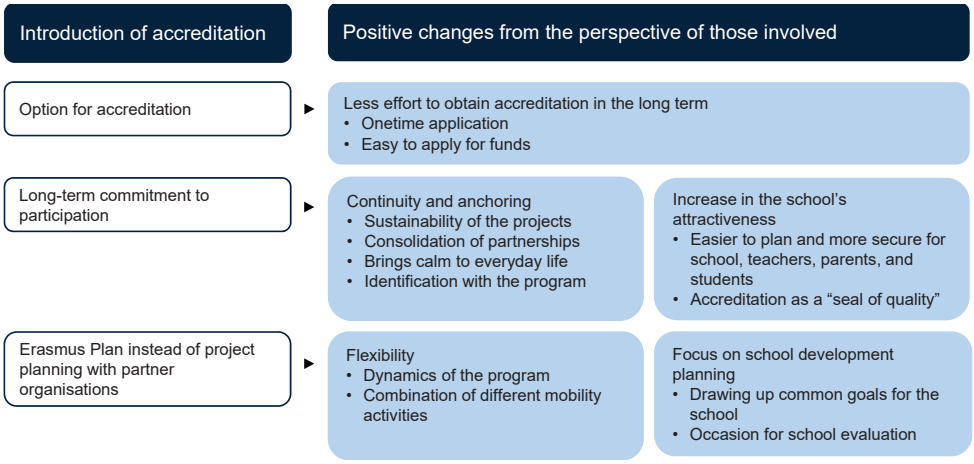
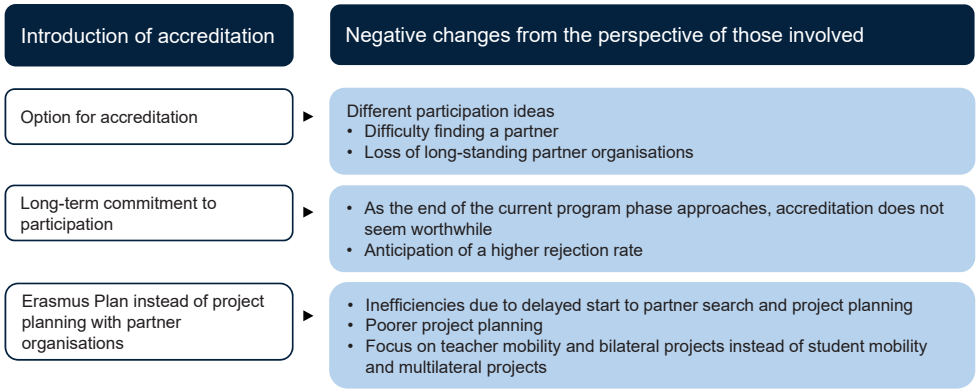


Fig. 4.2: Negative Changes Since the Introduction of Accreditation



Some schools are critical of the various options, such as participation within the accreditation framework or as part of a short-term project, as they make it more difficult to find partners, for example, if the intended partner school was not accredited and therefore had no financial support, which meant that long-term collaborations were no longer possible (see Figure 4.2). Interviewees predominantly saw the long-term commitment associated with accreditation as an advantage. Some raised the concern that significantly more schools could now participate in Erasmus+ and that there could therefore be a successively higher rejection rate over time. Overall, however, our analyses suggest that this innovation has led to predominantly positive changes: The long-term participation commitment creates security and predictability, which ensure continuity and stability within the institutions. This creates a certain calm in everyday school life, as repeated negotiation processes are no longer necessary. According to the interviewees, this consistency strengthens the school community's identification with the programme, supports

the consolidation of partnerships with schools abroad and improves the viability of Erasmus+ projects. The following statement from a principal makes this clear:

> "If you do a one-off project, then it has no lasting effect, yes? It's a nice memory, but it doesn't have a lasting effect. In principle, you can only achieve this by making processes permanent. So if you want to change something, if you want to do school development, then you always have to think over longer periods of time. You won't change much in people's minds, whether it's people outside of school or students or parents, if you don't make it more permanent." (A1-GESL, position 78)

Finally, accreditation and the long-term perspective associated with it is also an aspect that, according to interviewees, increases a school's attractiveness and can have a positive effect on the recruitment of future students. Schools must develop and submit an Erasmus Plan with school development goals as part of the accreditation application. Some interviewees also describe this shift in focus from project planning to school development planning as delivering added value compared to the previous programme, as it prompts school stakeholders to work together on their future projects and goals for their school, meaning they conduct a kind of school evaluation, as one school principal describes:

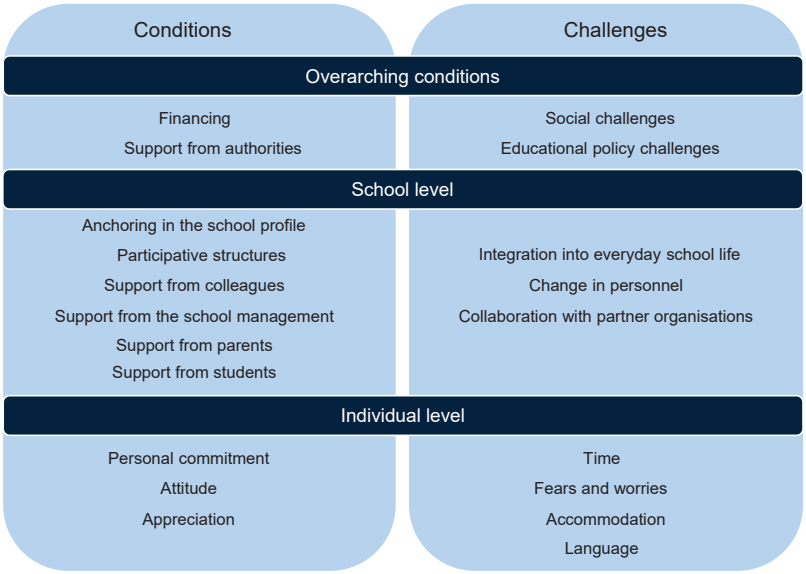
> "It took a lot of work and a lot of talking. But at the same time, I think it's also a school evaluation, where you think again and reflect on what is actually important to us. So in that respect, it's an effort, but I think it's actually worth it." (G1-GYSL, position 743–747)

At the same time, interviewees also identified negative aspects emerging from the introduction of the Erasmus Plan. For example, long-term planning was challenging for some schools. In addition, applications were drafted without the involvement of partner schools, as the Erasmus Plan refers to development goals for the individual school. According to some of the schools, this means that, in the event of approval, the projects had not yet been designed and planned concretely enough and, in some cases, they did not have partner organisations to cooperate with. As a result, the start of the learning mobility was delayed. Some interviewees also stated that the changes had led to a shift in focus in terms of activities, namely from student mobility to teacher mobility. In summary, the development of an Erasmus Plan gave the schools an occasion for school development but also led to a shift from cross-school project planning to individual school-related development and project planning.

4.4 Conditions and Challenges in Implementing Erasmus+ in Schools

When implementing Erasmus+ in schools, schools have to deal with conditions and challenges, which can be differentiated into the following levels: the level of 1) overarching conditions, 2) the school as an organisation and 3) individuals. With regard to these levels, Figure 4.3 shows which conditions and challenges are relevant for the implemen-

Fig. 4.3: Conditions and Challenges in Implementing Erasmus+ in Schools



tation of Erasmus+ in the general education sector according to our findings. They are examined in more detail below.

With regard to the overarching conditions, our findings show that EU funding and support from the authorities are important aspects. They make it easier for schools to participate in international mobility, which consequently becomes more attractive for teachers and students. In addition, financial support offers the opportunity to promote greater social justice by largely decoupling international mobility from the economic resources available to children and young people privately, as the following statement by a teacher illustrates:

> "The positive thing about it is that we don't have to make a social choice, because the children are able to have the costs of these exchange programmes covered. And I personally find that […] really good, because many children from socially disadvantaged families are given a chance to really experience something." (B3-GYL, position 101)

Challenges arise if the financial support is insufficient or when the schools have to deal with particular educational regulations, some specific to the federal states, which make financial settlement more difficult when implementing Erasmus+. Support from ministries and state authorities is also an essential condition for schools: beneficial factors include transparent information structures and set contact people, networking among participating schools and the implementation of consortia. Erasmus+ consortia based at ministries and state authorities can also reduce the burden on schools by facilitating access to Erasmus+ and supporting them in administratively managing Erasmus+, as representatives of ministries and state authorities explained:

> "That's why we're now trying to build a consortium that addresses the 30 schools that are in a more disadvantaged position, so that these schools can also benefit from support. […] we know based on the Access Study that there are other obstacles besides financial ones and that these schools therefore also need support to a certain extent in order to establish international contacts/so that the students can gain international experience." (LK3H, position 111)

Given that they are a part of society, schools are also influenced by overall societal challenges that can make the conditions for Erasmus+ projects more complicated. One example of this is the COVID-19 pandemic, during which contact between people and travel abroad was prohibited or greatly limited for infection-control reasons. As our interviews show, the uncertainties regarding cancellations, re-bookings and the increased administrative workload unsettled some schools. The effects of the pandemic are still being felt today: some interviewees reported that students were fearful of social exchange as part of Erasmus+ as a result of the COVID-19 pandemic. In addition, there were reports of worries due to the war in Ukraine as well as concerns due to the departure of a popular cooperation country due to Brexit, which led to the dissolution of existing school partnerships.

With regard to school conditions and challenges, the findings show that certain organisational conditions can support the implementation of Erasmus+, such as anchoring Erasmus+ in the school profile. This is because the programme is not isolated in the school context; it is embedded in the school programme and should be linked to other school priorities, for example, those pertaining to Europeanisation or internationalisation. Such anchoring can aid the long-term implementation of the programme at schools and also represent a basis for legitimation that can be referenced if necessary. Our analyses have also shown that the integration of Erasmus+ projects in everyday school life is sometimes perceived as challenging, for example, when it comes to connecting the projects to the curricula. In addition, the cross-class organisation of learning mobility means that the content-related and organisational preparation with the students takes place outside of the classroom. The absence of students and teachers during stays abroad means that substitutes are required and influences scheduling, for example, of exams or school events. As one school principal put it:

> "All Erasmus+ measures […] disrupt everyday school life. Staff members are gone. Students are gone. New students are there. […] That means it's always bumpy." (E1-GYSL, position 5)

In this context, the special role of the school management, which has a central support function in implementing Erasmus+, becomes clear. On the one hand, it is responsible for implementing the project, and on the other hand, it is responsible for approving and organising teachers' leave requests. In addition, the active involvement of the school management signals that the projects are highly relevant, as one principal explains:

> "Such bilateral exchanges always depend on people. And if the bond is lost there, if there is no will of the decision-makers, the principal, that is great for our school, that is important for our school, then something like this gets lost. And that's why I'm there every three or four years […] and have visited the principal there and have also given importance or significance to it by virtue of my presence." (B1-GYSL, position 21)

The findings indicate that support from the school management encourages cooperation with partner organisations, broad participation among the teaching staff and communication about Erasmus+, both internally, within the school, and externally, in the school environment. In addition to this, at least basic acceptance, and, ideally, active support for Erasmus+ among the teaching staff seems necessary, as the implementation impacts the regular school day – even if not all teachers are actively involved in planning and implementing Erasmus+. One conducive factor is introducing and implementing Erasmus+ at schools as part of a democratic and transparent participation process (e. g. via a vote on participation during the School Council), assigning fixed responsibilities and creating appropriate structures in order to achieve broad support and active participation in the school. One school principal commented on this:

> "What's important at a school is simply […] that all committees are involved in a very, very transparent way, that everyone is informed and everyone is behind it, the majority is behind it. Of course, that also has an impact on a school, on the staff. […] And in this respect, I think it is always very, very important that it is approved by all school committees." (G1-GYSL, position 665–667)

Our results also show that support from students and parents are also conducive conditions, for example, when they show an interest in international mobility projects and actively help with their implementation. Parents should also be open to mobility projects, as their consent is required for their children's participation and the acceptance of guest students in local families.

With regard to the conditions at school level, the findings indicate that appropriate organisational conditions greatly aid the implementation of Erasmus+ projects in schools, as they provide the actors involved in the schools with a basis that supports and legitimises their work and commitment, which is what matters in the end. For example, turnover of school staff can prove problematic for the continuity of Erasmus+, as it can result in a loss of expertise and, in some cases, important contacts to schools abroad. The importance of fixed structures and task allocations is also evident here, as they can be helpful in facilitating the search for partner organisations, which many interviewees described as challenging. In this respect, existing contacts abroad can provide significant support and reduce the workload.

At the individual level, the implementation of Erasmus+ at schools depends largely on individuals and their commitment to the programme, as they are the ones who initiate the projects and invest the necessary time. Therefore, individuals' personal commitment, their positive attitude towards the programme and the appreciation they receive for their work can be identified as important conditions: The investment of time required for or-

ganising, preparing, following up on and implementing Erasmus+ requires a high level of interest and commitment, as the following interview passage shows:

> "The basic prerequisite is, of course, interest on the part of the teachers. That there is someone who genuinely wants to advance this project." (B4-GYW, position 173)

Participation requires not only people to invest a considerable amount of time but also to take responsibility for the students and for the organisation of learning mobility projects. Our findings show that, in most cases, specific individuals take primary responsibility for coordinating the programme and continuously updating themselves about the current status. As a rule, they also act as central contact persons, develop the programme within the school and represent it externally. One school principal reported:

> "[Erasmus+ coordinator] has been doing this for 14, 15 years. It's well established here. There are people committed to it. […] That's what makes it what it is, that a school continues to promote it when someone is so dedicated." (E1-GYSL, position 9)

Hence, the underlying attitude of the people involved in Erasmus+ is another condition for success. Many of the teachers interviewed consider it their task to enable pupils to gain international experience and use foreign languages abroad. They report that they enjoy travelling with their students, getting to know them outside the school context, observing their development and giving them the opportunity to make international connections. In addition, some respondents showed an interest in Europe, the EU and international collaboration. Some teachers see educating people about Europe as their personal responsibility and are convinced of the social significance and multiplier effects of international mobility.

> "So that's the most important thing for me, that they know we are Europeans." (C2-RK, position 11)

Another beneficial factor is the added value of Erasmus+ mobilities that individuals perceive – for instance, in the form of further training opportunities, the opportunity to travel or the change of scenery. Furthermore, as the interviews show, the appreciation has a motivating effect on the individuals involved. They are encouraged when they receive praise and thanks for their commitment from school management, colleagues, students and parents. Other forms of appreciation include active participation in Erasmus+ by the teaching staff, a reduction in the teaching load or official awards for the school.

The conditions for success outlined above are particularly important, as one of the biggest challenges is time: implementing the programme requires those involved to do a considerable amount of extra work, which, according to the interviewees in ministries, state authorities and schools, often goes beyond any teaching-hour reductions they get as compensation. The following statement by an Erasmus+ coordinator illustrates the extra workload:

> "I don't get anything for organising this, […] not even fewer hours […]/everything I do […] for Erasmus, I do on top." (A2-GEK, position 130–132)

The time required includes formalities such as submitting applications and final documentation, but in particular, the planning, organisation, preparation and follow-up as well as the implementation of Erasmus+ projects. On the other hand, substitution for absent teachers when they are away on mobility projects is an important point: it requires the approval and support of the teaching staff, as the time has to be compensated in order to avoid teaching absences. One Erasmus+ coordinator describes this as follows:

> "So if I'm somewhere with students for a week, then my classes at home are on their own. Yes and then they have to be substituted or cancelled." (C2-RK, position 199)

Schools with small teaching staff or those suffering from a shortage of teachers face particular challenges in this respect, as the additional workload has to be distributed among a small number of people. This can make it more difficult to ensure regular lessons can continue. Another issue is that teachers must be available privately for the duration of their time abroad. For example, for people who have to do care work at home, absences can often be difficult or impossible to manage.

Other individual-level challenges identified included finding accommodation abroad, general fears and worries about how to cope abroad and foreign language skills. Some teachers see staying with host families as a beneficial opportunity to learn about other ways of life and cultural contexts. At the same time, however, there can also be challenges linked to this kind of accommodation: it can cause anxiety and insecurity among students when they are going abroad but also if their own family is unable or unwilling to host guests. The reasons for this can be a lack of space, family problems or problems due to working hours, which make it difficult to look after guests outside of school hours. For teachers, staying with colleagues abroad can mean they do not have the space and time they need for themselves, and poor foreign language skills can make communication more difficult. Parents also worry about the well-being of their children and students are afraid of homesickness.

4.5 Conditions and Challenges for Ministries and State Authorities in Implementing Erasmus+

Ministries and state authorities can provide considerable support for Erasmus+ in the school sector, but they also encounter difficult circumstances and challenges, as our interviews show. With regard to the overarching conditions, interviewees identified benefits arising from the support provided by the PAD as well as the training courses and networking seminars offered for the Erasmus+ education programme and the previously existing Erasmus+ moderators. Like schools, ministries and state authorities also noted the impact of social (e. g. COVID-19 pandemic) and educational policy challenges (e. g. state business travel regulations and state-specific peculiarities in the financial management of Erasmus+ projects). Our analyses of public authorities show that the promotion

of internationalisation in the school sector requires a clear political will. This is crucial for recognising the commitment of schools and teachers and their support by ministries and state authorities. For example, there are occasional reports of state-specific regulations that stipulate that learning mobility abroad may only take place during holidays. However, political will is not only expressed in legal or administrative requirements but also in the provision of financial and human resources that are necessary for developing and sustainably implementing support services for schools. The interviews show that some authorities do not have enough staff and therefore have too little time to implement projects that involve establishing consortia or promoting schools networking and collaboration. At the same time, the task of creating school networks and structures for individual schools to support the implementation of Erasmus+ is a central one with a view to establishing and consolidating Erasmus+ more broadly in the general education sector. Besides the organisational structures at schools, ministries and state authorities view fixed task allocations and responsibilities as well as structures with regard to Erasmus+ as positive. For example, they see the benefits of the involvement of representatives of higher-level authorities in steering groups, in order to strengthen the exchange between political decision-makers and those who support the programme in ministries and state authorities.

4.6 Effects on Schools and Their Development

In the ErasmuS$^+$ study, we asked school principals, Erasmus+ coordinators and teachers (hereinafter referred to collectively as teachers) about the effects of participation in Erasmus+ on school development. We look at school development using a model of school development proposed by Rolff (2023), which accounts for translocal and international networking of schools as well as organisational and human resources and teaching development. We have modified and expanded the model's content for the present study and assigned the results we have obtained to these four areas (see Figure 4.4).

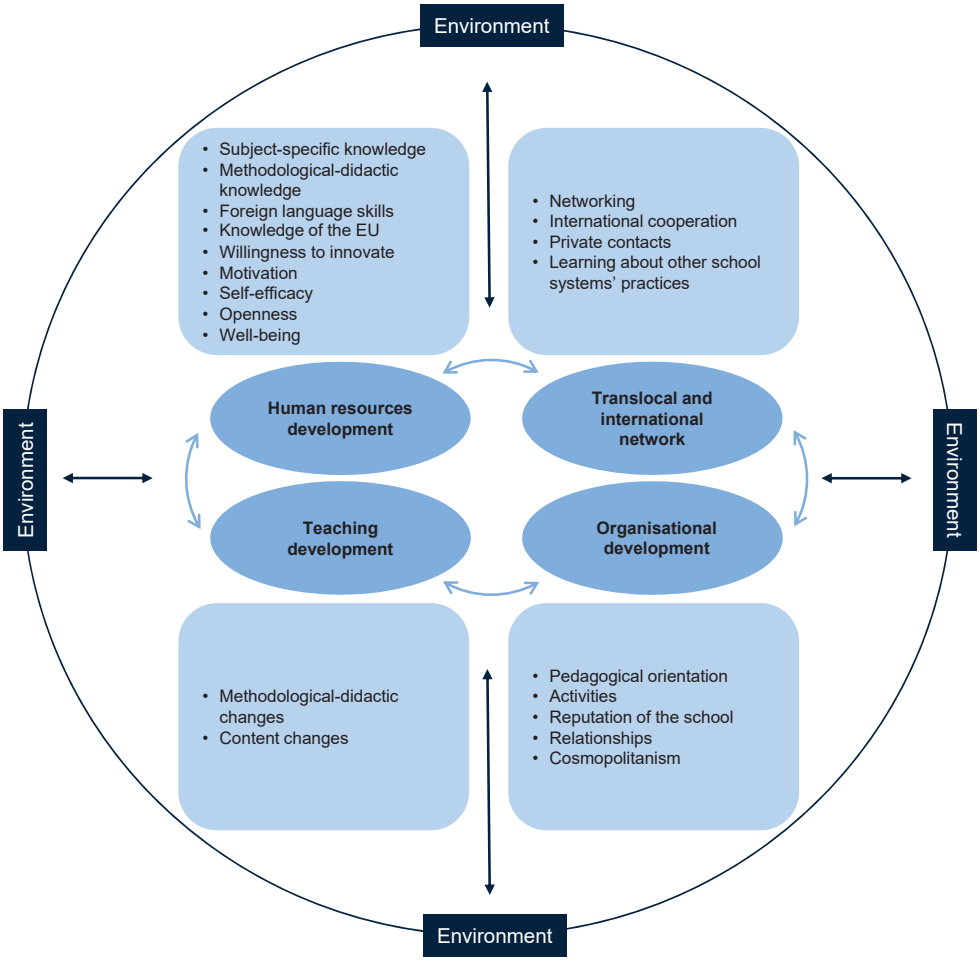
In the area of translocal and international networking, the results show that schools develop and expand their networks through participation in Erasmus+. On the one hand, schools cooperate with local and nationwide partners from the school and non-school sector. On the other hand, the schools cooperate with other schools and organisations abroad and thus establish contacts in European countries. Networks develop in this context, for example, from individual learning mobility for continuous professional development or job shadowing programmes, where teachers from different countries get to know each other and new forms of European cooperation open up. As a result, teachers plan and organise projects together across national borders and exchange views on school and teaching, which they perceive as an enrichment that also broadens their own perspective. The Erasmus+ coordinator at one school describes this as follows:

> "Well, I have to say that all the professional development courses I've done so far […] have an incredible impact on the way you teach afterward, because the discussion with other colleagues is something that is incredibly beneficial. You come back with more motiva-

tion, with new ideas […]. The exchange with colleagues from all over Europe is always the most beneficial thing." (A2-GEK, position 214–218)

This exchange does not just take place in the context of official events but also in informal discussions. In some cases, such European contacts and collaborations even go beyond the professional context, leading to friendships and private networks in several countries.

Fig. 4.4: Model for Categorising the Impact of Erasmus+ on Schools and Their Development



Note: Initial model by Rolff (2023, p. 204), modified and expanded for this study.

Teachers who participate in Erasmus+ get to know the educational and school practices of other countries during their international mobility (e. g. as part of job shadowing or when accompanying students on group mobility) and thus gain insights into other forms of school organisation, development and lesson design. International mobility projects can encourage teachers to take a step back from their own everyday school life, to reflect on their own pedagogic practice and organisational conditions and to adopt new per-

spectives. They provide the participants with new ideas for school development and for designing their lessons, as a statement by one teacher shows:

> "So you […] just see what else is possible. And if you're always here in your 'hood', I say, in [school location], then, yes, at some point you don't really know what other possibilities you have. And that helps a lot, just to get different impressions, right? And to see how school life is experienced elsewhere." (F3-GEL, position 113)

Against this backdrop, the results also allow us to identify an impact on organisational development. According to our analyses, the programme helps to develop schools' orientation towards Europeanisation and internationalisation and to sharpen school profiles. It is actively used by some schools to promote school development in areas such as digitalisation and can provide an impetus for a more intense examination and reorientation of the school, for example, in the areas of environmental protection and sustainability. As part of Erasmus+, schools organise events on Europe or action days on European policy and they celebrate Europe Day or *ErasmusDays* to present their own projects, to name just a few examples. Furthermore, according to the interviewees, the schools' participation in Erasmus+ is recognised by the public and can also increase their attractiveness for potential teachers. The boost in school attractiveness is especially emphasised with regard to potential students and their parents. According to some teachers, the funding for international mobility associated with Erasmus+ can be a factor that influences the choice of school. As our interview analyses further show, the planning and implementation of joint learning mobilities can have an impact on relationships at schools, as they enable teachers and students to get to know each other and talk on a more personal level beyond the everyday routines of school. Contact with parents can also improve as a result of joint mobilities, for example, in the form of greater cooperation. The same applies to teaching staff and their interactions and cohesion: they can be strengthened if teachers collectively prepare learning mobility projects and participate in them together. Some interviewees also reported a stronger sense of belonging to a European community and a greater openness to the world within the school. Implementing the programme appears to be an opportunity to promote Europeanisation in schools.

Participating in Erasmus+ learning mobilities can also be classified as a form of continuous professional development for teachers and can have an impact on staff development (see also Sonnenburg et al., in press): This is evident in the increase in knowledge reported to us in the areas of subject-specific and methodological/didactic skills, foreign languages and, in a few cases, knowledge of the EU. Teachers can, for example, expand their subject-related knowledge and organisational skills as part of the project preparation and engage with the respective destination countries. According to the interviewees, their engagement with the EU is more about the organisational aspects, such as where the euro is used or which national languages are spoken. Communication with colleagues and students in other countries can also improve foreign language skills for those involved, boosting motivation to pursue further training in this area and improving their confidence in using foreign languages. When teachers take part in learning mobility, they have the opportunity to exchange ideas with other teachers, plan projects and lessons

together with them and take part in targeted professional development with them. On these occasions, especially when they are directly observing teaching and school practice in other European countries, such as in the context of job shadowing, they learn new methods and thus expand their methodological and didactic repertoire, as the following quote from an Erasmus+ coordinator illustrates:

> "I learned about a lot of other methods, including ones from different countries. […] And afterwards, I think, okay, I don't like that. But I like this, yes, I'll take it with me. […] You always have to adapt it. But one changes it. […] And that's why my job is so interesting, if you continue to develop. So I learn an awful lot from the others." (B2-GYK, position 45–49)

This shows that the impressions gained abroad can strengthen teachers' motivation and willingness to initiate innovations and development processes at their own schools and to introduce innovations into teaching. One principal said:

> "As I said, colleagues have come back with a huge list of things to potentially change." (F1-GESL, position 149)

In this context, however, our analyses also reveal a tension between a willingness to innovate and resignation. This means that if teachers cannot transfer the newly acquired ideas into their own school practice, this can also lead them to become demotivated or even demoralised. On the other hand, the interviewees also reported greater openness and a greater perception of self-efficacy, as they had successfully dealt with unfamiliar situations and influenced school development processes following learning mobility. As our analyses show, some teachers perceive participation in learning mobility as a welcome change from everyday working life that increases their motivation and well-being at work, as the following quote shows.

> "Such mobility projects naturally give you a whole new motivation, both professionally and privately, […] you are also motivated to do projects again, because you have suddenly regained a vision, meaning this variety contributes to my well-being in my teaching job." (E3-GYL, position 113)

With regard to teaching development, the findings show that the interviewees integrate the newly learned methods into their lessons and increasingly work in an interdisciplinary and project-oriented manner. Teachers reflect on what they have newly learned with regard to their own school and its conditions as well as their own lessons and adapt accordingly. With regard to the content of lessons, most interviewees do not see Erasmus+ as having a direct influence on the design of curricula and lessons at school level. However, they sometimes integrate the project content or current European topics in lessons.

5 Effects of Erasmus+ Learning Mobility on Students and Their Daily Experiences

5.1 Research Questions and Methodology

In Sub-Study 3, we selected a quantitative research approach to describe students' experiences in Erasmus+ learning mobility projects in other European countries and to analyse their effects on students. The focus here is on group mobility, which is the most common form of learning mobility within the Erasmus+ framework in the general education sector (see Section 3). The aim is to gain specific insights into the following key questions:

1) Who takes part in learning mobility in other European countries as part of Erasmus+?
2) What activities and experiences do students have during their stays abroad?
3) What effects does participation have on students?
4) What role do students' individual characteristics play in their development during learning mobility?
5) What role do the individual experiences that the students have during their mobility play?
6) How do overarching conditions surrounding learning mobility projects influence the effects on students?

To answer these research questions, we chose a survey design that allowed us to ask questions to the students before, after and during learning mobility. As part of the pre-test, students were asked about their school and social background, their intercultural competence, and their interest in other countries, Europe and politics a few days before their stay abroad. During their stay abroad, the experience sampling method was used to ask them about their activities and social contacts abroad once a day via an app. And finally, they were asked again about their intercultural competence and interests as part

Fig. 5.1: Sub-Study 3: Pre- and Post-Test Design in Conjunction with the Experience Sampling Method to Record the Daily Experiences of Students During Erasmus+ Learning Mobility

Notes: Light blue circles: More detailed surveys as part of the pre- and post-test; dark blue circles: Short daily surveys; …: The duration of the survey varied depending on the length of the stay abroad.

of the post-test following their stay abroad. Figure 5.1 shows the basic survey design of Sub-Study 3.

A total of 483 students and 74 accompanying teachers from 23 schools were surveyed as part of 46 different learning mobility stays. The schools included nine comprehensive-type schools (*Schulen mit Gesamtschulcharakter*), one elementary school (*Grundschule*), ten academic-track schools (*Gymnasien*) and three intermediate-track schools (*Realschulen*) spread across different regions in the north, east, south and west of Germany. The students were 16 years old on average ($SD = 1.56$), 62.9% of them were female and the most frequently attended type of school was the academic-track school (46.8%).

In line with the questions outlined at the outset, we described students' demographic background as well as their daily activities and social contacts during their stay abroad. Furthermore, we analysed the development of their intercultural skills and their interest in other countries, Europe and politics as well as the differences in these development trajectories in latent difference score models. Finally, we examined the role of students' individual characteristics and experiences and the role of the different overarching conditions framing the stay abroad for development through learning mobility in multivariate regression models.

5.2 Description of the Students Participating in Erasmus+ Learning Mobility

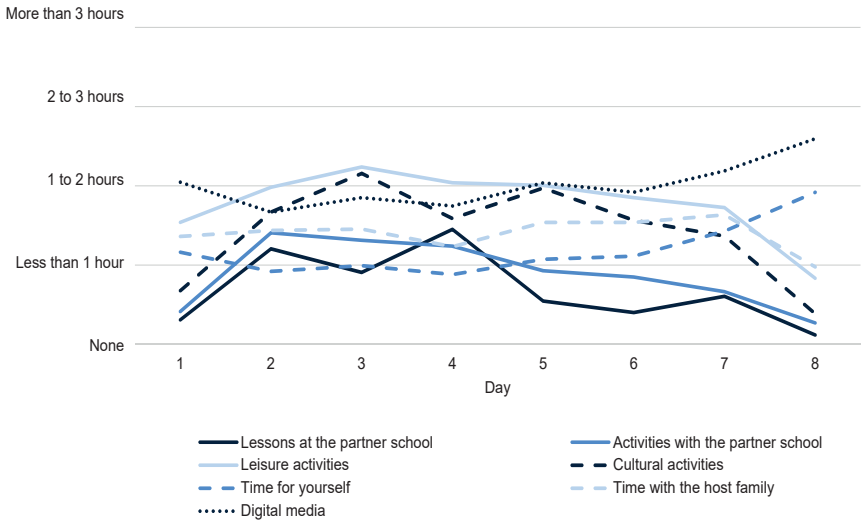
With regard to who participates in Erasmus+ learning mobility, we find a rather positively selected student population in terms of performance and social background when compared with the student population at the federal level (Beese et al., 2022; Mang et al., 2021). Students from academic-track schools and comprehensive-type schools make up the majority of our sample. The composition of the sample is a relatively good reflection of how Erasmus+ learning mobility is used overall (see also Sub-Study 1). This means that academic-track schools and comprehensive-type schools participate more in Erasmus+ than other types of schools, although comprehensive-type schools are slightly overrepresented in our sample. This is partly, but not exclusively, due to our analytical sampling. In some of the school-type categories, there were hardly any schools that planned learning mobility stays in the period under investigation or wanted to participate in the study. Lower-track and special-needs schools, in particular, hardly take part in Erasmus+, at least at the student level. This supports the assumption that the more privileged schools and students are more likely to take part in learning mobility. However, we find this tendency to be moderate when comparing our sample or Erasmus+ learning mobility in general (see also Section 3) with the profiles of students who traditionally participate in international mobility projects – especially those that were not funded by Erasmus+ (Büchner, 2004; Gerhards et al., 2016; Hübner et al., 2021).

5.3 Everyday Experiences of Students During Erasmus+ Learning Mobility

As far as students' daily activities and social contacts during their time abroad are concerned, the data show that activities at the partner school are most frequent in the first few days abroad in another European country (see Figure 5.2). However, this decreases over the course of the trip, meaning that lessons and other school-related activities at the partner school are generally less frequent during learning mobility than other activities, such as leisure activities, cultural activities or time spent with digital media. Regarding this generally low level of participation in lessons at the partner schools, it should, however, be borne in mind that English is the dominant foreign language for most of the students' learning mobility stays and that the local language is used far less frequently. A relatively substantial proportion of students never even use the local language of their partner country during their stays abroad. This indicates that, due to linguistic difficulties, participation in lessons may appear less meaningful than, for example, participation in less structured activities at and with the partner schools, which are easier to orchestrate due to the common lingua franca, English.

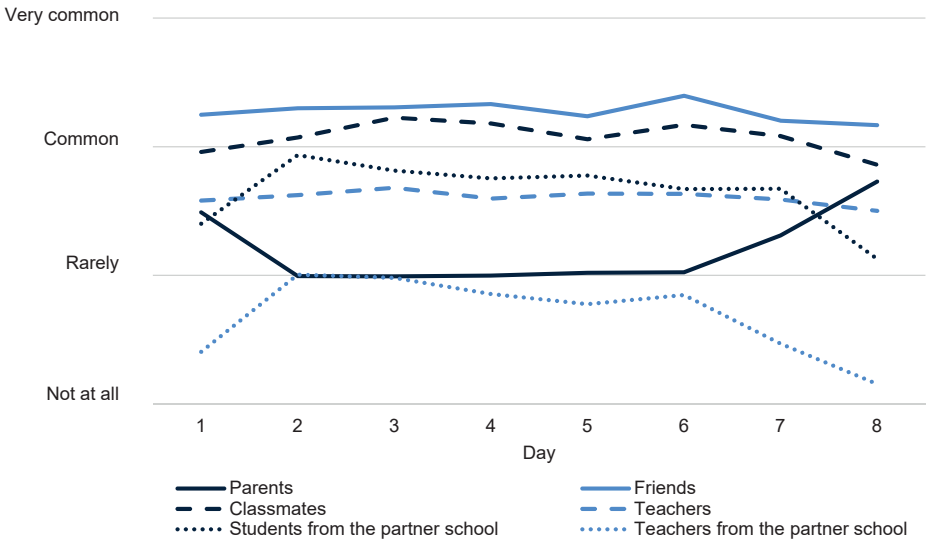
Furthermore, students spend a relatively constant amount of time with their friends or classmates during their stay abroad (see Figure 5.3). As expected, the frequency of contact with the partner school's students runs more or less parallel to the activities with the partner school in general and is more intensive in the first few days than in the further course of the stay abroad. Students speak least frequently with their parents and teachers at the partner school, although contact with parents intensifies somewhat, both at the beginning and at the end of the stay abroad.

Fig. 5.2: Average Frequencies of Various Student Activities During Erasmus+ Learning Mobility Abroad Over the Period of the First Eight Days (Averaged per Day)



Notes: $N = 224–474$ observations per day from $N = 378$ students. For information about the activities, we calculated the average values for the individual days.

Fig. 5.3: Average Frequencies of Students' Social Contacts with Different Groups of People During Erasmus+ Learning Mobility Abroad Over the Period of the First Eight Days (Averaged per Day)



Notes: $N = 224–474$ observations per day from $N = 378$ students. For information on conversations and contacts, we calculated the average values for the individual days.

5.4 Change in Students After Erasmus+ Learning Mobility

With regard to the effects of international learning mobility on students (see Table 5.1), we find a positive change in their cognitive flexibility. According to this, after their learning mobility, they feel more able to deal with unfamiliar situations, adapt their behaviour to the demands of new situations and overcome difficulties in dealing with people from other cultural contexts. With regard to the constructs of perspective-taking and self-concept in English, as well as the students' interest in other countries, Europe and politics, we could not demonstrate any changes as a result of participation in international mobility. They remained stable on average between the pre- and post-test.

Both the positive change in cognitive flexibility and the stability of the other constructs are remarkable given that the students already had relatively high values in the scales examined before their stays abroad. Thus, it was, on the one hand, relatively unlikely that these already high initial values would increase further as a result of learning mobility. On the other hand, from a purely methodological-statistical point of view, it is unlikely for relatively high initial values to remain stable over time, as there is a "natural" tendency towards the middle with such high initial values (cf. Campbell & Kenny, 1999). We could therefore reasonably assume that students' scores would tend to decrease after

Tab. 5.1: Change in Students' Intercultural Skills and Interest From the Pre-Test to the Post-Test (Before and After International Mobility)

	Mean (*M*)		Standardised mean differences Post-test – Pre-test	
Construct	**Pre-test**	**Post-test**	M_{diff}	**Var**
Intercultural competence				
Cognitive flexibility	7.74	8.02	**0.27**	**0.88**
Perspective taking	5.94	5.91	-0.03	**0.65**
Self-concept English	6.52	6.55	0.03	**0.18**
Interest in …				
other countries	6.42	6.36	-0.06	**1.14**
Europe	3.54	3.58	0.04	**0.72**
politics	2.97	2.91	-0.05	**0.63**

Note: Statistically significant changes from pre-test to post-test ($p < .05$ different from 0) are in bold. M_{diff} = standardised mean differences between the pre-test and post-test measurements.

international mobility rather than remain stable or even increase. From this perspective, stability is a finding that should be viewed positively overall. Nevertheless, particularly with regard to interest in Europe and politics after learning mobility, the question is to what extent stays in other European countries can be designed to have even more positive effects, to boost this interest even further. These topics do not seem to be addressed particularly directly during the stays abroad (see also Sub-Study 2) and may not be explicit enough for the students.

However, the analyses also show that there were significant differences in the changes of all variables between the students. This means that the participants definitely differ in their development trajectories: Some students tend to change in a positive direction, others change negatively and some do not change at all. This raises the question of what factors can explain these differences. The following section therefore describes the role played by the students' individual characteristics, their social contacts and activities abroad in other European countries and the overarching conditions framing international learning mobility.

5.5 Predicting Different Changes in Students

With regard to the role that individual characteristics play in students' development, we do not find the classic patterns that are generally evident in school-based learning (cf. e. g. Hattie, 2011). The beneficiaries appear to be those who otherwise have less favourable learning profiles and are normally less likely to participate in extracurricular school activities or "classic" privately organised international and global stays abroad. This study finds that boys and students from non-academic-track school types and those who receive less support from their parents in school matters benefit in particular. Only with regard to political interest does the "classic" pattern emerge, according to which the higher-achieving students (i. e. those with better grades) tend to benefit more. While

the results indicate that Erasmus+ learning mobility is used somewhat more by higher-achieving students (see also Sub-Study 1), the beneficiaries are also those students who are less likely to participate.

With regard to the activities and social contacts in other European countries and the different conditions framing international mobility, the overall effects are rather low. The study finds positive effects of cultural activities on interest in Europe and of leisure activities on interest in people from other countries in specific cases, but there are no significant overarching effects. In addition, there are indications that contact with parents and friends has positive implications for some developmental dimensions (cognitive flexibility, perspective taking, interest in Europe). This may indicate that the interpersonal dimension in particular is also important and that young people need socio-emotional support in order to reflect on the experiences they have during their learning mobility and ultimately to be able to benefit from them. In this regard, a consistent finding is that contact with students and teachers at partner schools has no (clear) effect on students' development, although they do appear to benefit in terms of their interest in politics and Europe in general when they are accommodated in hostels rather than with host families.

Last but not least, there is one null finding that strikes us as important: There is no systematic correlation between the duration of the trip and the changes brought about by international mobility. The stimulus provided by learning mobility abroad therefore appears to be important regardless of the trip's duration. This is unsurprising given that the international learning mobility stays we studied did not vary greatly in their duration and, with an average of just under 7 days, only fluctuated by a few days and were rarely substantially longer. From a developmental psychology perspective, we might expect to find other effects if the learning mobility differed in length more substantially and the variability ranged from a few days to several weeks or even months. For the differences investigated here, however, the duration does not appear to have any systematic differential effects.

6 Conclusion

The *Study on the Impact of Erasmus+ in General Education Schools and Other Institutions in the School Sector* (ErasmuS^{+}) in Germany employs an innovative mixed-methods-design and provides in-depth findings in this previously little-researched area of European educational practice. First, we carried out secondary data analyses to provide an overview of the institutions involved in Erasmus+ in the general education sector and their Erasmus+ activities. Secondly, we conducted qualitative interviews with school principals, teachers and coordinators at schools as well as representatives of ministries and state authorities tasked with working on Erasmus+. Finally, we gained insights into the experiences of students during learning mobility using the experience sampling method and a pre- and post-test design, allowing us to examine the effects of learning mobility on the students.

The findings obtained in ErasmuS+ show that the implementation of Erasmus+ in schools is subject to conditions and entails challenges. At the student level, for example, it is clear that, first, Erasmus+ succeeds in involving adolescents who otherwise rarely participate in stays abroad, and second, that students with less favourable learning profiles benefit from learning mobility abroad too. These findings indicate that it would be worthwhile to specifically encourage these students to participate in Erasmus+. With regard to teachers, our results show that participation in learning mobility abroad can contribute to their professional development and thus represent a worthwhile form of continuing education – especially in view of increasing internationalisation and the opportunity to learn from other school systems and their pedagogic practices. At the level of individual schools, participation in Erasmus+ can stimulate school development processes. It is therefore advisable for schools not to view the implementation of Erasmus+ in isolation but as part of an overall school development process. The teachers and coordinators who are already involved in Erasmus+ should not bear sole responsibility for this; they should be supported by appropriate structures. Building on this, ministries and state authorities should consider structural integration within their institutions as well as the proactive provision of resources within the framework of Erasmus+ at schools. In view of the goals the EU has tied to Erasmus+, increases in participation would be desirable. Further to some of the findings reported here, it must be borne in mind that this will hardly be possible in the context of the current programme. The majority of the projects are focused on short-term mobility; more expensive, long-term mobility projects are the exception rather than the rule, and there is little scope to expand the range of targeted persons and institutions, for instance, by allowing for even shorter stays abroad. Accordingly, if the goal is to ensure that considerably more schools benefit from participating in Erasmus+ in the general school sector than is presently the case, more expansive funding of the programme would be required.

The results and explanations provided here offer an initial glimpse into our study ErasmuS+ (for further information, see Hornberg et al., 2025). We would like to thank the students, teachers, principals, Erasmus+ coordinators and representatives of the ministries and state authorities who took the time to participate in our surveys and thus provided the data for this study. We would also like to thank the PAD, the national agency for Erasmus+ in the general education sector, for its support in providing data lists and information whenever necessary.

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