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Mitigating inequality in educational outcomes:

Evidence from Early Childhood Policy Reforms in Five European countries

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Executive summary

This comprehensive report evaluates the long-term impacts of Early Childhood Education and Care (ECEC) reforms in five European countries (England, Poland, Hungary, Norway, and Denmark) with the objective of understanding how different policy approaches contribute to reducing educational inequalities. Using a consistent mixed-methods framework across all cases, the study integrates quantitative analyses, qualitative interviews with key policy-makers and practitioners, and media analyses to produce a multi-layered evaluation of ECEC policy design, implementation, and outcomes. Across all five countries early childhood education is widely perceived as a powerful mechanism for addressing educational disparities. Still, the design, scope and political motivations of reforms vary substantially.

Key-findings by country

England – Sure Start

The English case examines the long-term effects of Sure Start, a nationally significant early-years intervention aimed at disadvantaged areas. Quantitative analysis using the Millennium Cohort Study linked to administrative data shows small positive associations between Sure Start exposure and later educational outcomes, such as post-16 qualification attainment; however, these effects lose statistical significance once extensive controls are introduced. Qualitative interviews depict strong perceived benefits, including improved school readiness, socio-emotional development and family support, and highlight the program's substantial symbolic and community value. Media coverage portrays Sure Start as both an exemplar of early intervention and a politically contested programme due to funding cuts and shifting policy priorities.

Poland – Expansion of Preschool Access

Poland implemented a rolling series of reforms aimed at expanding access to preschool education, particularly in under-served rural regions. Quantitative analysis identifies a positive correlation between increased preschool availability and improved eighth-grade exam performance, especially in urban areas. Nevertheless, regional

inequalities persist, with access lagging in poorer eastern provinces and rural districts. Qualitative interviews highlight a long-term, multilevel process involving EU influence, national policy, strong NGO involvement and local grassroots initiatives, which collectively drove unprecedented expansion of ECEC provision. Media analysis reveals polarised narratives shaped by political alignment, but also broad public support for expanding early education.

Hungary – Mandatory kindergarten from age 3

Hungary introduced compulsory kindergarten attendance from age three with the aim of reducing educational inequalities. Quantitative evidence finds no average effect of the reform on later academic outcomes, but positive impacts for children from materially deprived families, particularly on reading and mathematics. Interviews indicate that policymakers believed in the reform's equalising potential, even though the targeted inequalities were not clearly defined. Media analysis shows broad support for kindergarten expansion but also highlights ongoing structural challenges, including teacher shortages, capacity constraints and political tensions.

Norway – 'Free Core Time' in kindergarten

Norway's initiative offered free core kindergarten hours to low-income and immigrant families in selected districts. Difference-in-difference analysis using population-wide registry data suggests small, positive but often statistically fragile effects on long-term Great Point Average (GPA) and school completion. Qualitative interviews provide targeted insights into policy design and implementation, emphasising strong outreach efforts to immigrant families and broad political consensus. Media narratives focus on social integration, labour-market activation, and the role of ECEC in supporting linguistic development.

Denmark – Mandatory language assessment

Denmark implemented mandatory language assessments for preschool-aged children to address early language gaps. Interrupted time-series analysis shows a small but statistically significant improvement in GPA. Effects were larger for low-income students, suggesting a modest equalising impact, while gains were more limited for students from low-education households. Mixed patterns emerged for immigrant-background children, with some evidence of particularly strong benefits. According to

the qualitative analysis the reform evolved from decentralised, varied practices to increasingly centralised standardisation and success varied significantly across municipalities. Lack of quality assurance for follow-up support created a 'black box' between assessment and intervention. Media analysis shows that initial coverage emphasised the early intervention necessity, highlighted insufficient resources for follow-up support and later raised concerns about negative effects on children's well-being and self-esteem.

Cross-country synthesis

Despite varied contexts and policy designs, several broad themes emerge:

1. Mixed but generally positive impacts

Quantitative findings show limited but meaningful improvements, often concentrated among specific subgroups (e.g., disadvantaged, immigrant or low-income children). Universal or broad-based reforms rarely produced large average effects, but targeted supports often yielded clearer benefits.

2. ECEC reforms are inherently political

Across all countries, ECEC policy was shaped not only by evidence but also by political agendas, local traditions, public expectations, and demographic pressures. Media analyses consistently reveal the instrumental use of early education in political debates on labour participation, migration, family policy and social welfare.

3. Implementation capacity varies sharply

Teacher shortages, uneven infrastructure, administrative burdens and funding inconsistency appear frequently across cases. These structural issues often limit the potential of ECEC reforms to reduce inequalities.

4. Stakeholder perspectives emphasise long-term and holistic value

Across interviews, policymakers and practitioners underline the importance of dignity, parental engagement, community ties and socio-emotional development, benefits not always captured in quantitative educational indicators.

5. Broad public support for ECEC expansion

Despite political contestation, all five cases reveal strong societal endorsement for publicly funded early education, reinforcing its status as a core pillar of welfare and social mobility policy.

Overall Conclusion

The evidence across all five countries demonstrates that ECEC reforms can contribute to reducing educational inequalities, but their impact is often modest, uneven and highly dependent on context, implementation quality and complementary policies. While qualitative and societal evidence points strongly to the value of early education as a foundation for child development and social equity, long-term statistical effects are sometimes small or uncertain.

Based on the report findings future progress requires:

- sustained investment in workforce and capacity
- clearer targeting of disadvantaged groups
- improved longitudinal data infrastructures
- cross-sector collaboration and community engagement
- continuity and political stability in policy design

Taken together, these findings underscore that while ECEC reforms alone cannot eliminate educational inequalities, they are an essential part of a broader, multi-layered strategy to support children and families and enhance long-term life chances.

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General Introduction

Educational inequality, characterised by the unequal distribution of educational success and achievement across diverse social groups, remains a persistent and critical issue in modern democratic societies, profoundly influencing individuals' life chances and shaping outcomes like work, pay, health and wealth (Farquharson et al., 2024; Breen and Müller, 2020). Disparities emerging from unequal access to educational resources frequently appear in the earliest stages of childhood, beginning to negatively affect the educational and life trajectories of children as young as 9 months old (Halle et al. 2009). Groups such as migrants, minorities and children from low-income families are the most likely to suffer from these early disparities and continue to be affected throughout their educational pathways (Halle et al., 2009).

To combat educational inequalities, researchers have increasingly underscored the role of Early Childhood Education (**ECE**) as an effective tool which can help facilitate educational equity from the earliest stages of development. Thus, this collated report evaluates the long-term effectiveness of major ECE policy interventions aimed at reducing educational disparities in five European contexts: England, Poland, Hungary, Norway and Denmark. By examining a range of national reforms, including England's *Sure Start Program*, Poland's *Comprehensive ECE Reforms,* Hungary's *Mandatory Kindergarten from age three*, Norway's *Free Core Time in Kindergarten Initiative* and Denmark's introduction of *Mandatory Language Assessments* at age six, this study seeks to obtain critical insights regarding what works to combat educational inequalities from an international perspective. Overall, this report aims to contribute to larger conversations and policy developments which will shape the future of ECE reforms and work to combat educational inequalities in the short, medium and long term.

Each national case study employs a mixed-methods approach, integrating quantitative analyses of longitudinal data with qualitative insights from interviews with policymakers and detailed media analyses. This methodological triangulation provides a comprehensive examination of both measurable policy effects and political and social phenomena which are crucial for a multidimensional understanding of these early childhood education policies. The primary objectives across each study include a critical evaluation of the policies' influence on long-term educational attainment, such as post-16 qualifications, standardized test scores and grade point averages, and their

capacity to reduce educational inequalities for children facing intersectional disadvantages. Furthermore, the studies explore how particular reforms were designed, implemented, perceived by key stakeholders and reflected in public discourse, offering explanations, details and insights that go beyond the numbers. Ultimately, by integrating diverse perspectives, this report aims to offer a thorough and coherent evaluation of the legacy of ECE interventions in addressing educational inequalities, thereby informing future policy development and research in the field.

This report is meticulously structured to provide a comprehensive and multi-faceted evaluation of ECE policy interventions. It commences with an overview of the national context for each participating country (England, Poland, Hungary, Norway and Denmark), followed by a review of relevant country-based literature that situates the study within the broader academic discourse and identifies existing research gaps. This foundational material then leads to the articulation of specific research questions and hypotheses for each case study.

The methods section details a mixed-methods approach, which is central to novelty of this collated report and allows for a more comprehensive understanding of policy effectiveness.

Regarding quantitative analyses, this collated report involves a quasi-experimental design for England, utilizing longitudinal data such as the *Millennium Cohort Study* (MCS) linked with the *National Pupil Database* (NPD) to examine the long-term impact of access to *Sure Start* on post-16 educational attainment among disadvantaged students. The Polish report includes publicly available data from the *Central Statistical Office / Statistics Poland* and *Central Examination Commission* which is used to analyse changes in preschool access and evaluate its correlation with eighth-grade exam performance, addressing regional disparities. Hungary's quantitative section includes a secondary analysis of the *Hungarian Life Course Survey*, using ordinary least squares regression and instrumental variable approaches to assess the effect of kindergarten attendance on 8th-grade reading and mathematics test scores and high school diploma attainment, particularly for disadvantaged families. Norway uses difference-in-difference analyses with population-wide registry data to examine the effects of its ECE initiative on-grade point average (GPA) and dropout rates, focusing on immigrant populations. Denmark's study employs an interrupted time series design to assess the impact of *Mandatory Language Assessments* on GPA.

Interviewees for the qualitative sections of the case study reports were chosen according to policy specificity and interview availability. In England, interviews were

conducted with policymakers and key stakeholders in the development and implementation of *Sure Start*. Poland's case study report includes more local stakeholders relevant to its reform such as teachers, activists and local authority heads. Hungary's study includes interviews with government officials, legislators, and kindergarten teachers. In Norway, interviews were conducted with a policymaker and an implementation lead. Denmark's study consists of interviewees critical to the implementation of *Mandatory Language Assessment* from its initial development phases. Overall, these interviews aim to gather insights into policy design, implementation, evaluation, perceived mechanisms of action and retrospective views on effectiveness and challenges.

The media analysis components of each study investigate perceived policy effectiveness and public opinion evidenced in some of the most influential newspapers across each country throughout the policy duration. This analysis reveals public and political discourse, identifying themes, disputes and broader societal contexts during the implementation of the policies.

Following the methodological sections, the report presents results from each analytical component, which are then synthesised, respective to national policies, in the discussion and conclusion sections. The final section provides a summary of main findings, discusses implications and offers suggestions for future policy development and research.

1. England Case study Report

1.1 Introduction

This country report evaluates the long-term effects of the *Sure Start* program on reducing disparities in educational outcomes in England. Educational inequality, the unequal distribution of educational success and achievement across different social groups (e.g., based on socioeconomic status, ethnicity, or gender), remains a critical issue in England (Sutton Trust, 2021). These inequalities often emerge early in childhood and can significantly influence an individual's life chances and social mobility (Heckman, 2006). Prior to the implementation of ECE programmes like *Sure Start*, evidence of substantial differences in childhood development and educational attainment existed more frequently in England, particularly for children from disadvantaged backgrounds (Sylva et al., 2007). *Sure Start*, a major early childhood intervention program launched in 1998, was designed to tackle these inequalities by offering a range of support services to children and families in deprived communities. The program aimed to enhance children's health, development and preparedness for school, with the ultimate goal of closing the achievement gap.

The present study uses a mixed-methods approach to explore the effectiveness of *Sure Start* in reducing long term inequalities in educational outcomes. The report consists of three core components: a quantitative analysis examining the program's impact using longitudinal data from the *Millennium Cohort Study* (MCS) linked with the *National Pupil Dataset* (NPD); interviews with policymakers to gain insights into the program's implementation, operation, and intended mechanisms of action; and a media analysis investigating how perceptions of *Sure Start's* effectiveness were reflected in six influential tabloid and broadsheet newspapers throughout the duration of the programme. By integrating these multifaceted perspectives, this report seeks to provide a thorough and nuanced evaluation of *Sure Start's* long-term legacy in addressing educational inequality in England, considering both its measurable effects and its broader social and political context.

This case study begins with an overview of the national context, followed by a review of relevant literature and research questions. The methods section details a mixed methods approach consisting of a quantitative analysis, qualitative interviews with

policy makers and a qualitative media analysis. The report then presents the results and concludes with a brief summary of main findings and suggestions for future research.

1.2. National Context

The launch of Sure Start

In the realm of social and education policy, Sure Start provides a novel example of how early intervention can shape the trajectory of children's lives. Launched in England in 1998, the ambitious program sought to provide comprehensive support to families with young children in disadvantaged areas, giving them the best possible start in life. To that end, the intervention aimed to provide a range of services including childcare, early education, health and family support. Local partnerships involving voluntary groups, parents and local authorities were crucial in running the *Sure Start* local programs (**SSLP**). These programs offered core services like outreach, play and healthcare, along with additional services designed to meet local needs. Specifically, *Sure Start* offered pre- and post-natal healthcare; parenting support through stay-and-play sessions as well as more structured and often evidence-based programmes; early learning and childcare; support to families of children with special educational needs (**SEN**); and support to parents for (re-)entering employment.

Sure Start's origins lie in the then Labour government's emphasis on social inclusion and commitment to tackling child poverty. While drawing inspiration from existing early childhood programs both domestically and internationally, *Sure Start* aimed to establish a more integrated and holistic support system. The physical embodiment of the *Sure Start programme* is *Sure Start Children's Centres (**SSCC**),* which were considered central activity hubs, providing a diverse range of services tailored to the needs of families with children under the age of five. These centres were not merely childcare facilities but also vibrant community hubs where parents could access support and resources related to child health, parenting and family well-being. From parenting classes and health advice to early learning activities and childcare support, *Sure Start* aimed to create a nurturing environment where children could thrive. This multifaceted approach reflected the understanding that child development is influenced by a range of interconnected factors, including health, social, emotional, and cognitive development.

Sure Start services and activities

As presented above, *Sure Start centres* acted as local hubs, offering integrated services tailored to support children under five and their parents. A wide range of activities and services were provided, including early education and childcare, health services such as health visitor clinics and breastfeeding support, parenting programmes, speech and language therapy and family support services. Table 1 illustrates an overview of *Sure Start* services and activities. As seen in Table 1, *Sure Start centres* offered stay-and-play sessions, baby groups, advice on nutrition and child development and employment and training guidance for parents. These activities aimed to ensure that children had the best possible start to life by supporting their health, cognitive, social and emotional development. *Sure Start* aimed not only to help children thrive during their early years but also to strengthen family bonds and reduce inequalities by making services more accessible and coordinated.

Sure Start, at its core, was driven by a profound commitment to reducing inequality in educational outcomes, recognising that the seeds of success are often sown in the earliest years of life. Thus, the program's focus on early learning and development aimed to equip children with the foundational skills and knowledge they needed to succeed in school and beyond. This focus was informed by research demonstrating the importance of early language development, cognitive stimulation and social-emotional skills for later academic achievement (Heckman, 2006; Mesut et al., 2010). *Sure Start* aimed to provide these crucial inputs to children from disadvantaged backgrounds, helping to close the gap in developmental outcomes.

Table 1.1. *Sure Start* Services and Activities

Sure Start Local Programmes (SSLP) Services	Sure Start Children's Centres (SSCC) Core Offer	Examples
Play, learning and childcare	Access to (or provision of) childcare Support for local childminders Drop-in sessions for families	• On-site nursery • Childminder network • Childcare subsidies
Support for parents	Information and advice for parents	• Evidence-based parenting programmes • Community support groups • 'Stay-and-play' sessions
Community healthcare	Child and family health services	• Support for maternal mental health • Additional midwife or health visitor capacity • Baby weighing clinics • Information about sage home environments • Diet and nutrition support
Special needs support	Access to specialist services	• Specific play groups for children with additional needs
Employment Support	Links to Jobcentre Plus	• Further education classes • Volunteering opportunities • CV clinics
Outreach and home visiting	Visits to families within two months of child's birth	• Leafleting • One-off events • Door-knocking campaigns and home visits

Source: Carneiro et al., 2025

Building on this national context, the following section reviews existing literature to situate the study within the broader academic discourse and identify relevant research questions.

1.3. Country based literature review

Since its launch, the *Sure Start* policy has been subject to rigorous evaluation. Researchers have employed a variety of methodological approaches, including wait-list control designs, cross-sectional studies and longitudinal analyses to assess the short and medium-term impacts of *Sure Start* on child educational outcomes and associated factors.

Concerning the short-term impacts of *Sure Start* on the behavioural and social competencies of 3-year-old children, two influential cross-sectional studies conducted by the *National Evaluation of Sure Start* (NESS) team (Belsky et al., 2006; Melhuish et al., 2008) revealed mixed findings. The main results showed that children in *Sure Start Local Programme* (*SSLP*) areas revealed better social development than those in non-*SSLP* areas, with more positive social behaviour and self-regulation. These findings indicated that the effects vary by degree of family disadvantage. More specifically, children of non-teen mothers showed fewer behavioural problems and greater social competencies when living in *SSLP* areas than in comparison areas. Along the same line, a study by Melhuish et al. (2010) was undertaken to measure the impact of *Sure Start* on the development of children at age 5. The findings revealed that children in *SSLP* areas overall were not showing greater language development by age 5 than children in non-*SSLP* areas. An additional quasi-experimental study was implemented by Melhuish et al. (2010) to evaluate the impacts of *Sure Start* on 5-year-old children and their families. In this study, more than 7000 families in 150 *SSLP* areas were compared to about 2000 families who participated in *Millenium Cohort Study* (MCS). The key findings indicated that there were no differences found between the *NESS* and *MCS* groups on several measures of cognitive and social development based on the surveys and reports completed by teachers and mothers. As research studies did not find significant impacts of *Sure Start Local Programs* on the language development of children in a short-term period, Melhuish et al. (2010) suggested to optimise the quality of the childcare centres to boost the language development of participating children.

Regarding the medium-term impacts of the project, several longitudinal studies were designed and implemented to examine changes in children's educational outcomes at differing points after several years of engaging in *Sure Start*. Like previous studies, Melhuish et al. (2012) indicate that there were no consistent effects of *SSLPS* on children's development based on a comparison between *SSLP* and non-*SSLP* groups at seven years. Melhuish et al. (2012) explain that one reason for this could be the high

levels of 3- and 4-year-old preschool participation due to free Entitlement to preschool across England, which impacted *Sure Start* and non-*Sure Start* groups. Interestingly, a recent study conducted by Carneiro et al. (2024) found that access to a *Sure Start centre* between the ages of 0 and 5 significantly improved the educational achievement of children, with benefits lasting at least until their General Certificate of Secondary Education (GCSEs, age 16). Children who lived within a short distance (2.5 kilometres) of a *Sure Start centre* for their first five years performed 0.8 grades better on their GCSEs. These are average impacts across all children living near a centre, regardless of whether those families used the centre. In addition, the study found significant effects of *Sure Start* on the proportion of children recorded as having special education needs **(SEN)**. While it increased the likelihood of children being identified with SEN at age 5, it significantly reduced the proportion recorded as having SEN at ages 11 and 16. This means *Sure Start* may have initially led to more children being identified with SEN, but in the long run, the program could have also reduced the number of children needing ongoing SEN support (Carneiro et al., 2024).

Previous research on *Sure Start* has yielded mixed findings. While studies have demonstrated significant positive impacts on family support during the early years, effects on immediate child development, including cognitive skills and behaviour, have not consistently shown significant impacts. However, evidence suggests that the *Sure Start programme* may have had a more substantial and enduring impact on children's academic performance in the mid-term, over a decade after its implementation. In other words, previous studies suggest that investing in early years programmes, which offer integrated services like healthcare, social and educational support, may have the potential to yield long-term benefits for children across a range of outcomes. To further strengthen this evidence base, additional research is necessary to comprehensively assess the long-term impacts of *Sure Start* on student achievement. This constitutes the primary objective of the present study, which will be examined more thoroughly through hypotheses, research questions and methods in the following sections.

1.4. Research questions/ hypotheses

- Hypothesis: The *Sure Start* policy increases the chances of **disadvantaged students** obtaining at least one post 16 qualifications- ISCED level 3 by age 18 (A-level qualification, technical/vocational qualification level 3 or equivalences).
- How was the design, implementation and evaluation of the *Sure Start* policy perceived by policy makers?
- To what extent does the media content found identify *Sure Start* as being effective at reducing inequalities in education outcomes?

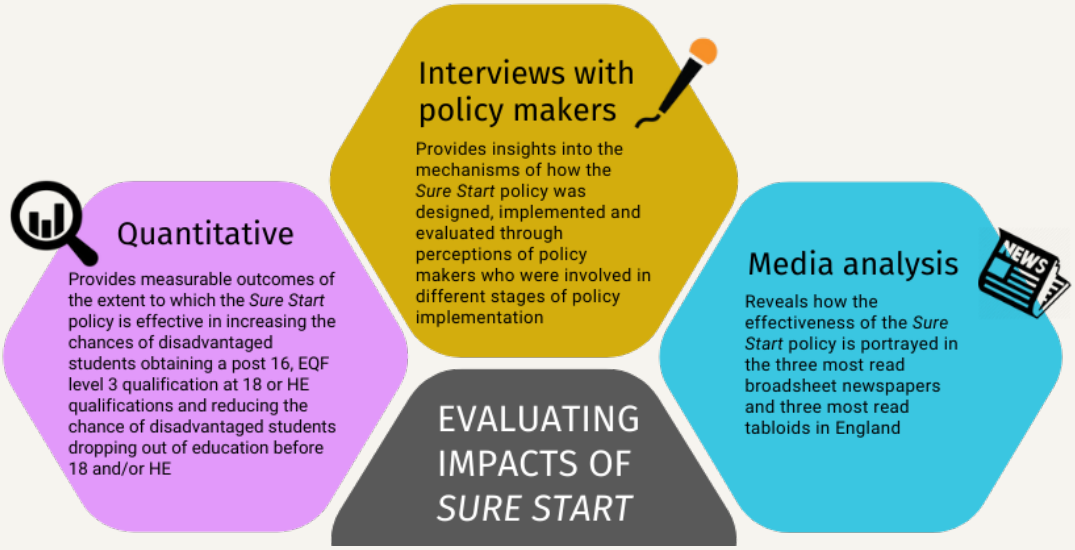
1.5. Methods

1.5.1. Overall research design

Mixed methods, which combine both quantitative and qualitative approaches, were used in our current study. Mixed methods research is a robust way to evaluate and measure the effectiveness of education policies on educational outcomes, as it provides a more comprehensive understanding of the policy at large (Creswell, 2009; Teddlie & Tashakkori, 2009). This helps researchers understand not only the “what”, but also the “how” and “why” of policy effectiveness. By combining different data sources and methods, researchers can triangulate the findings and increase the credibility of their conclusions. In addition, these research methods help enhance policy relevance by generating findings that are more relevant and actionable for policy makers.

Figure 1 represents an overview of our research design using mixed methods. As illustrated in the figure, we focus on 3 main components in the current study: a quantitative approach, interviews with policy makers and a media analysis. Details are provided in the following figure.

Figure 1.1: Overview of research design



We will now outline the quantitative research data and analytical approach. This will be followed by outlining the qualitative data and methods.

1.5.2. Quantitative research design

For the quantitative section of this report, we conducted a quasi-experimental design to evaluate the long-term impacts of *Sure Start* on students' outcomes measured by obtaining at least 1 post 16 level 3 qualification by age 18 (A level qualification, technical/vocational qualification level 3 or equivalences). To that end, we created a variable that contains information on exposure to *Sure Start*, with non-exposure as the comparison group. This variable is based on the distance between where the student lived when they were 5 years old and the nearest location of a local *Sure Start centre*. The main reason we chose this approach is because there is no specific information on who registered to which *Sure Start centres*. This approach was also undertaken by Carneiro, Cattan, Ridpath (2024) in their latest study measuring the short- and mid-term impacts of the *Sure Start* policy.

In the current study, we consider all children living within a specified district (a lower layer super output area, LSOA) as being exposed to *Sure Start* if there was a *Sure Start* centre within 2 km of the student's address (measured by the students LSOAs). As explained by Carneiro, Cattan, and Ridpath (2024), this approach is highly policy relevant because *Sure Start* was an area-based programme open to all local children and their

families. Alternatively, students who lived further away from the 2 km radius belong to the non-*Sure Start* group. Due to data availability, we also assume that students did not change their address from the time they were born until they were 5 years old.

1.5.2.1. Data (quantitative)

The analysis in the current study uses data from three main data sources:

Data on Sure Start programs and Sure Start centres

We use data from the Department for Education to discern the exact location of *Sure Start programmes* (SSLPs) and *Children` centres* (*SSCCs*) from 1999 to 2006. For some *SSLPs* that have the same postcodes as *SSCCs*, we removed the duplicates and assume that the Local programme closed when the children 'centres opened. In total, **1420** *SSLPs* and *SSCCs* from 1999 to 2006 were included in the study.

Data on LSOA where students lived when they 5 years old

The *Millennium Cohort Study* sweep 3 Identifier dataset was used to obtain information on the LSOAs where students lived at age 5 (University of London, Institute of Education, Centre for Longitudinal Studies, 2024). As mentioned previously, there is no data on LSOA where students lived when they were 0-5 years old. Thus, we use the variable LSOA in the MCS sweep 3 Identifier dataset to indicate the LSOA areas where students lived at age 5 and assume that children and their families lived in the addresses when the children were 0-5 years old.

Data on students obtaining post 16 qualifications and equivalences

This study utilises data from the *Millennium Cohort Study* (*MCS*) linked to the *National Pupil Database* (*NPD*) to examine outcomes related to post-16 educational attainment. The *MCS* is a nationally representative longitudinal cohort following approximately 19,000 children born in the UK ***between 2000 and 2001***. It includes deliberate oversampling of children from disadvantaged areas and ethnic minority backgrounds to allow for detailed subgroup analyses. The cohort has been surveyed at multiple points throughout childhood and adolescence, with Wave 7 (age 17) conducted in 2018–19.

The *MCS–NPD* linkage was carried out with parental consent, and matching was conducted using identifiers such as name, date of birth, and postcode across several *MCS* sweeps. The resulting KS5 linkage, completed in 2022/23, achieved a high match rate of 95.4% among cohort members residing in England. The linked *NPD* data includes

detailed educational records covering Key Stages 1 through 5, pupil characteristics (such as eligibility for free school meals, special educational needs status, and ethnicity), school-level variables, and attendance records.

Although the *MCS* linked to *NPD* data contains multiple waves, we used only data from MCS linked to NPD Wave 7 for several reasons. Most importantly, Wave 7 is the only sweep that includes information on Key Stage 5 (KS5) qualifications—namely, ISCED level 3 outcomes such as A-levels and equivalent qualifications. This made it the most relevant and suitable wave for addressing our research question focused on post-16 attainment. Moreover, our current study was designed to answer a specific and straightforward research question without the need to track changes across multiple time points. This was a strategic decision, shaped by both the significant administrative burden of gaining access to longitudinally linked data and the time constraints of the research project.

The linked MCS–NPD dataset wave 7 is uniquely suited for evaluating the outcomes of policies targeting disadvantaged students. In particular, the oversampling of children from low-income areas aligns with the policy goals of *Sure Start*, which aimed to improve outcomes for children in the most deprived communities. This allows us to draw a subsample from the dataset to examine whether students from disadvantaged backgrounds (measured by enrolment in free school meals (FSM)) —those most likely to be affected by *Sure Start*—benefited in terms of post-16 educational attainment. Access to the linked dataset is restricted and requires researchers to undergo a formal accreditation process and use the *UK Data Service Secure Lab*, which enforces strict data security protocols. Given the richness of the education variables and the quality of the linkage, the *MCS–NPD* dataset represents one of the best sources currently available for evaluating long-term educational outcomes in the UK.

1.5.2.2. Sample

The *MCS–NPD* dataset wave 7 contains data on approximately 7000 students. After merging and cleaning the data, we determined 761 disadvantaged students, as measured by enrolment in free school meals (FSM). These 761 students are included in the current study. Of this, 486 students are in the *Sure Start* group (63.9%) and 275 students are in the non-*Sure Start* group (36.1%). Table 1 in the findings section presents the sample with detailed information on gender, English as an additional language, ethnicity, and children with special education needs (SEN) across both the *Sure Start* group and non-*Sure Start* groups.

1.5.2.3. Variables

Outcome

The outcome measured in the current study is a binary variable on obtaining at least one post 16 qualification (either A level qualifications, vocational qualifications at the same level or equivalences) (no=0; yes=1).

Predictor

The main predictor is a binary variable indicating whether the students belong to the *Sure Start* group or not (no=0, yes=1)

Control variables

When testing the hypothesis, three variables (gender, children with special education needs-SEN, and English as a second language) were added into the model as controls. Previous studies found that gender, SEN, and English as a second language are contributing factors that affect students' achievement (Morita et.al, 2016; Workman and Heyder, 2020; Daniel, 2024; Evans et.al., 2016).

1.5.2.4. Data analyses

Creating Sure Start and non-Sure Start groups

A procedure which includes 3 steps was undertaken to create the *Sure Start* and non-*Sure Start* groups in our study. The details are as follows:

Step 1: the dataset on locations of *Sure Start centres* was firstly imported into QGIS software within the UDS secure lab environment. The buffer tool was used to create a circular buffer zone with a radius of 2 km around each *Sure Start centre*. A new variable was derived containing information of which Lower Layer Super Output Aras (LSOAs) fall within these buffer zones. In total, there are 11.218 LSOAs that are within *Sure Start centres/programme* locations. The new dataset was exported in csv format.

Step 2: The *MCS* geographical dataset was merged with *MCS* linked to *NPD* in SPSS, using the *MCS* anonymous IDs as the joint variable to receive the variable on LSOAs where students in the selected sample lived.

Step 3: The dataset exported in step 1 was then merged with the merged *MCS* dataset in step 2 in SPSS, using LSOA as a joint variable. This merge created a new binary

variable, indicating whether the LSOA in which each student lived is within 2 km of the nearest *Sure Start centre* (yes) or further away (no). This variable will be used as the main predictor in our analysis.

Main analysis

A binary logistic analysis was undertaken to measure the effectiveness of the *Sure Start* policy in improving the chances of disadvantaged students obtaining at least 1 post 16 qualification. SPSS was used to perform the analyses.

We will now move on to the qualitative research, where we will first describe the research designs of the proceeding analyses.

1.5.3. Qualitative research design

The qualitative data involves interviews with policy makers and a subsequent thematic analysis, examining the opinions and perspectives of these stakeholders on various aspects of *Sure Start*, including its content and goals, beneficiary involvement, data, evaluations and recommendations for future policies. Following the interviews, the second qualitative component of this report considers the media in determining the effectiveness of *Sure Start* on reducing inequalities in educational outcomes.

1.5.3.1. Interview inquiry with policy makers

To capture diverse perspectives on the policymaking, implementation, and evaluation of *Sure Start*, semi-structured interviews were conducted with policy makers representing significant domains within early childhood policy and practice. Participants in our study include Naomi Eisenstadt, the first Director of *Sure Start*; Dr. Edward Melhuish, Executive Director of the *National Evaluation of Sure Start*; Baroness Margaret Hodge, Minister of State for Children, Education and Skills (2003–2005); and Baroness Beverley Hughes, Minister for Children, Young People and Families (2006–2009). In total, 3 online interviews and 1 face-to-face interview were conducted from February to April 2025.

All interviews were audio-recorded and transcribed verbatim manually following the completion of the data collection process. A thematic analysis was conducted according to an initial interview guide to gage insights into the development, implementation, and evaluation of *Sure Start* perceived by the policy makers.

1.5.3.2. Media analysis

To conduct the media analysis, we began by determining the six most popular newspapers of varying political persuasion within the period of *Sure Start*. Based on our research, we limited media sources to *The Guardian, The Times, The Daily Telegraph, The Sun, the Daily Mirror and the Daily Mail*.

To find articles, we searched through various newspaper archives, filtering our results according to the key words "*Sure Start*," "*Children's Centre*," and "*Sure Start Programme*." *The Times* and *The Guardian* have their own digital archive through Gale and ProQuest respectively. Thus, to limit search outputs, we examined these platforms first. When inputting the terms "*Sure Start*" and "*Children's Centre*" into *The Times* archive and filtering for dates between 1997 and 2015, we found 28 results. After full text screening, we inputted 13 articles into NVivo for further analysis. We followed this procedure for each subsequent archive, altering some key words slightly, dependent on the number of outputs generated. Upon examining *The Times* and *The Guardian's* archives, we used the Press Reader archive to find articles in *The Daily Telegraph, The Sun, the Daily Mirror,* and *the Daily Mail.* When filtering for these sources and our key words between the years 2000 and 2015, as 2000 was the earliest year we could examine, we discovered 322 articles.

After screening all outputs from the three archives, we inputted a total of 109 articles into NVivo for further coding and thematic analysis. Based on our manual screening of key words and the repetition of words associated with finances, impact, and politics, we decided to employ these are our main themes. Given the magnitude of articles collected and their differing foci, we organized articles into subthemes which will be further examined below.

As our research question critically considers the effectiveness of *Sure Start*, we examine the media through a nonbiased approach. Therefore, we searched for articles using non-restrictive keywords and conducted a thematic analysis after a full-text screening of all articles. Our retrospective thematic analysis in the following sections has allowed us to examine and interpret unfiltered patterns of meaning which work to unveil the sentiments of *Sure Start* throughout the policy (Clarke & Braun 2017).

We will now move on to the results, beginning with the quantitative data followed by the qualitative.

1.6. Results

1.6.1. Quantitative results

1.6.1.1. Characteristics of the study students

Table 1.2 below illustrates the characteristics of the students in the quantitative component of this study

Table 1.2: Characteristics of the students in the Sure Start and non-Sure Start groups

Characteristics	***Sure Start* group (n=486)**	**Non-*Sure Start* group (n=275)**	**Total sample (N=761)**
	n (%)	**n (%)**	**N (%)**
Being offered Free School Meals	486 (100)	275(100)	761 (100)
Gender			
Male	229 (47.1)	129 (46.9)	358 (47.0)
Female	257 (52.9)	146 (53.1)	403 (53.0)
English an additional language			
Yes	180 (37.0)	26 (9.5)	206 (27.1)
No	306 (63.0)	249 (90.5)	555 (72.9)
Ethnicity			
White	202 (41.6)	224 (81.5)	426 (56.0)
Non-White	284 (58.4)	51 (18.5)	335 (44.0)
SEN support			
Identified as SEN	79 (16.3)	42 (15.3)	121 (15.9)
Identified as non-SEN	407 (83.7)	233 (84.7)	640 (84.1)

As seen in Table 1.2, the total number of participants is 761, with 486 students in the *Sure Start* group and 275 students in the non-*Sure Start* group. All of these students were recoded as being eligible for Free School Meals (FSM). The number of girls is 403

(53%) and the number of boys is 358, accounting for 47% of the total students. Regarding language background, a majority of students reported English as their primary language. Conversely, 27.1% of the students indicated that English was an additional language spoken in their home. As for ethnicity, the results reveal that over half of the participants (56%) were reported as white and 44% were reported as non-white. Concerning special education needs (SEN), the findings show that 84.1% of the sample were identified as non-SEN and 15.9% were identified as SEN (with or without statement).

1.6.1.2. Effectiveness of the Sure Start policy on improving the chances of disadvantaged students obtaining at least 1 post 16 qualification

To test the hypothesis, a binary logistic regression analysis was conducted to examine the effect of *Sure Start* on the achievement measures of disadvantaged students by the likelihood of obtaining at least 1 A-level (ISCED level 3 or equivalent) qualification. Three models were measured. The first model included the main predictor only. The second model included the main predictor and two control variables (gender and SEN). The third model included the main predictor and three control variables (gender, SEN, and English as a second language).

The standard specification was:

$$\ln\left(\frac{P}{1-P}\right) = \beta_0 + \beta_1 X_{SureStart} + \beta_k X_k$$

Where P is the probability that a student obtains at least one post-16 (ISCED level 3) qualification. β_0 is the intercept. $\beta_1$is the coefficient for living within a *Sure Start* area. $X_{SureStart}$ is the main predictor (dummy variable) indicating whether the student lived within the *Sure Start* areas or further away. $\beta_k X_k$ consists of control variables including Gender (boy=0, girl=1), ***children with special education needs*** (SEN)status (no=0, yes=1), and English as an Additional Language (LANG) (no=0, yes=1) (Models 3 and 4).

Model 1 (only the main predictor was added)

The results are presented in Table 1.3. The findings reveal that the overall model was statistically significant, indicating that the policy had a significant impact on improving

the chances of disadvantaged students obtaining at least 1 post 16 qualification by age 18. More specifically, the results showed that students in the *Sure Start* group had significantly higher odds of obtaining at least 1 post-16 qualification compared to those in the control group, B=0.347, SE=.152, p <.05. In other words, students who received support under the *Sure Start* policy were 1.42 times more likely to obtain at least one A-level or equivalent qualification (95% CI for Exp B: [1.050-1.905])

Table 1.3: Effectiveness of the Sure Start policy in improving chances of disadvantaged students obtaining at least 1 post 16 qualification

Predictors	**B**	**SE**	**p**	**Odds ratio Exp (B)**	**95% CI for Exp B [Lower-upper]**
Main predictor (living within the *Sure Start* areas or living further away)	.347	.152	**.022***	1.415	[1.050- 1.905]
Constant	0.36	.121	.763	1.037	
N=761 *Notes:* Significance: *** 0.001 ** 0.01 * 0.05					

Model 2 (gender, children with special education needs (SEN) were added as control variables)

In model 2, gender and SEN variables were added as control variables (see table 1.4). The results are consistent with model 1, showing the positive impacts of the policy in improving the chances of disadvantaged students obtaining at least 1 post 16 qualification by age 18 while controlling for gender and SEN. Details are presented in the table 3 below

Table 1.4: Effectiveness of the Sure Start policy in improving chances of disadvantaged students obtaining at least 1 post 16 qualification, controlling for gender, SEN

Predictors	**B**	**SE**	**p**	**Odds ratio Exp (B)**	**95% CI for Exp B [Lower-upper]**
Main predictor (living within the *Sure Start* areas or living further away)	.398	.160	**.013***	1.490	[1.089- 2.037]
Gender	.659	.155	<.001***	1.933	[1.428- 2.617]
SEN	1.515	.227	<.001***	4.549	[2.915-7.099]
Constant	-3.794	.500	<.001***	.023	
N=761 Notes: Significance: *** 0.001 ** 0.01 * 0.05					

Model 3 (gender, children with special education needs (SEN), English as a second language were added as controlling variables)

In model 3, gender, SEN, and English as a second language were added as control variables (see table 1.5).

Table 1.5: Effectiveness of the Sure Start policy in improving chances of disadvantaged students obtaining at least 1 post 16 qualification, controlling for gender, SEN, English as a second language

Predictors	**B**	**SE**	**p**	**Odds ratio Exp (B)**	**95% CI for Exp B [Lower-upper]**
Main predictor (living within the Sure Start areas or living further away)	.140	.169	.406	1.150	[.827- 1.601]
Gender	.684	.158	<.001***	1.981	[1.454- 2.698]
SEN	1.462	.231	<.001***	4.314	[2.741- 6.790
LANG	1.007	.196	<.001***	2.737	[1.863-4.021]
Constant	-4.828	.557	<.001***	.008	
N=761 Notes: Significance: *** 0.001 ** 0.01 * 0.05					

The results continue to show positive impacts of the policy in improving the chances of disadvantaged students obtaining at least 1 post 16 qualification by age 18 while controlling for gender, SEN, and English as a second language. To be more specific, students in the *Sure Start* group had higher odds of obtaining at least 1 post 16 qualification compared to those in the control group, B=.140, SE=.169. However, this result has become non-significant (p>.05). The reason could be due to the substantial imbalance between the *Sure-Start* and non-*Sure Start* groups regarding English as a second language. A sample with more balanced composition and larger sizes between *Sure-Start* and non-*Sure Start* groups is needed for future research.

Model fit comparison

Table 1.6 below illustrates model fit measured by the Chi-square statistic from the Omnibus Test of Model Coefficients, the -2 Log Likelihood (-2LL), and Nagelkerke's R^2. The Chi-square test assesses whether each successive model provides a statistically significant improvement in fit compared to the previous one (Field, 2018). The -2 Log Likelihood indicates model deviance, where lower values suggest better fit (Hosmer, Lemeshow, & Sturdivant, 2013). Nagelkerke's R^2 is a pseudo-R^2 measure that adjusts Cox and Snell's R^2 to scale between 0 and 1, offering an interpretable estimate of the variance explained by the model (Nagelkerke, 1991).

Table 1.6: Model Fit Statistics for Binary Logistic Regression evaluating the effectiveness of the *Sure Start* policy in improving chances of disadvantaged students obtaining at least 1 post 16 qualification

Models	Predictors Included	χ^2 (df)	p	–2LL	Nagelkerke R^2
Model 1	Main predictor only	5.21 (1)	.022	1037.36	.009
Model 2	Model 1 + Gender, SEN	80.52 (3)	< .001	962.06	.135
Model 3	Model 2 + Language background (LANG)	108.62 (4)	< .001	933.95	.178

Notes:

- χ^2 values are from the Omnibus Tests of Model Coefficients
- –2LL = –2 Log Likelihood
- Nagelkerke R^2 is a pseudo-R^2 estimate of explained variance.

As seen in the table 1.6, **model 1**, which includes only the main predictor, is statistically significant, $\chi^2(1) = 5.21$, $p = .022$, indicating that the predictor contributed significantly to the model. However, the model accounted for a small proportion of the variance, as indicated by Nagelkerke's $R^2 = .009$, and the -2 Log Likelihood was 1037.36.

Model 2, which added gender and SEN as control variables, showed a significant improvement in model fit, $\chi^2(3) = 80.52$, $p < .001$, with a decrease in -2 Log Likelihood to 962.06 and an increase in explained variance (Nagelkerke $R^2 = .135$).

Model 3, which includes English as a second language, further improved model fit, $\chi^2(4) = 108.62$, $p < .001$, with a final -2 Log Likelihood of 933.95 and a Nagelkerke R^2 of .178, indicating that this model explained approximately 17.8% of the variance in the outcome.

These results suggest that **Model 3** provides the **best fit**, explaining the most variance (17.8%) with the lowest -2LL.

In sum, the main aim of the current study was to measure the long-term impacts of the *Sure Start* policy in reducing inequality in educational outcomes measured by the likelihood of disadvantaged students obtaining at least 1 post 16 qualification by age 18 (either A-level qualification, technical/vocational qualification level 3 or equivalences). The results revealed that the policy has some positive impacts on the probability of disadvantaged students obtaining at least 1 post 16 qualification, but this becomes non-significant in the final model (Model 3). The findings are partly consistent with previous studies which reveal the short and mid-term impacts of the *Sure Start* policy in improving students' achievement in general, in supporting disadvantaged children and reducing inequality in education in particular (Melhuish et al.,2008; Carneiro et al., 2024).

A methodological limitation of this study is its omission of a Difference in Difference approach for measuring the long-term impacts of *Sure Start*. Although we recognise the significance of using a Difference in Difference approach in this research, we were unable to implement it due to the nature of the dataset and time constraints. Further research using a suitable dataset (e.g., *National Pupils Database*) that allows for the use of DiD is recommended.

Upon the completion of the quantitative components of this study, we will now explore the qualitative results.

1.6.2. Qualitative results

To determine the effectiveness of *Sure Start* on mitigating educational inequalities, we have examined it through multiple and varying lenses. While the quantitative data reveals significant insights into *Sure Start's* effectiveness, the interviews provide a deeper context, offering a nuanced understanding of the program's structure, evolution, and impact.

In the first section of this qualitative inquiry, we provide a brief overview of our interview participants and discuss their involvement in *Sure Start*. We then move on to the content and goals of the policy and its implementation, including components like beneficiaries, data, evaluation, and recommendations for future ECE policies. Through this, we will further evaluate the effectiveness of *Sure Start* in mitigating educational inequalities.

Role of the Interviewee

Each of our interview participants represents significant early childhood domains. This section includes responses from Naomi Eisenstadt, the First Director of *Sure Start*, Edward Melhuish, the Executive Director of the *National Evaluation of Sure Start*, Baroness Margaret Hodge, the Minister of State for Children, Education and Skills from 2003 to 2005, and Baroness Beverley Hughes, the Minister for Children, Young People and Families from 2006 to 2009. Due to the range of interview participants, we have attempted to provide insights into the organisational, academic and political factors that encompass effective policymaking.

Content and Goals of Sure Start

Sure Start was informed by evidence-based practices that had proven effective for children facing multiple disadvantages. The United States' *Head Start* policy provided a model for *Sure Start*, but local initiatives were also significant to its foundation (Glass 1999). As leader of the Islington Council, Baroness Margaret Hodge contributed, in part, to the structure of the *Sure Start Programme*, as she and other leaders merged nursery education with the care sector, implementing a novel, cross-sectoral approach to early childhood programs which would later become foundational to *Sure Start* (M. Hodge, Retrieved from interview data). Baroness Hodge also appointed the First Director of *Sure Start*, Naomi Eisenstadt, who was recruited for the role based on her previous involvement in the voluntary sector and front-line work with impoverished children and families. In her interview Eisenstadt states that her earlier work influenced her role in

Sure Start "in huge ways" as she was already familiar with the people, strengths, weaknesses and complexities of the voluntary sector (N. Eisenstadt, retrieved from interview data). The goals of *Sure Start,* as stated by all interview participants, were to narrow the gaps between impoverished children and their more affluent peers, giving them a more equal start to life.

Although the goals of *Sure Start* were shared, its design was more challenging, as its cross-sectoral, multi-organizational and relatively non-uniform approach led to diverging opinions and perspectives. Initially, *Sure Start* was disseminated into 250 local programmes, aiming to reach one third of children living in poverty in England (Eisenstadt, retrieved from interview data). From a political domain, Baroness Hughes reflects on the difficulties of overseeing such a massive programme with few universal factors. She notes that *Sure Start's* locally based model was paramount to beneficiary involvement but also unsustainable and had to move in a centralized direction to increase effectiveness (B. Hughes, Retrieved from interview data). Melhuish shared similar sentiments, expressing the difficulties of evaluating 250 separate *Sure Start* programmes with few centralised features.

Upon the first evaluation of *Sure Start* by Melhuish and his team, it was discovered that *Sure Start Local Programmes* produced mixed effects, with some adverse outcomes for the most disadvantaged children and their families (Melhuish et al., 2010). Given these results, additional research evidence by Melhuish, and concerns regarding its lack of uniformity, *Sure Start Local Programmes* were developed into *Children's Centres*, centralized hubs offering consolidated services to families.

Deliberation with Beneficiaries and Stakeholders

The switch from *Sure Start Local Programmes* to *Children's Centres*, despite being agreed upon, was met with contention. With this switch, some individuals like Baroness Hughes pushed for validated parenting programmes to establish a more concrete structure to *Sure Start* (Hughes, Retrieved from interview data). Others, like Baroness Hodge during her time as Children's Minister, pushed for educational advancements through the implementation of teacher qualifications. Almost all interviewees recalled their concern for the community-centric nature of *Sure Start*, contemplating the effects of *Children's Centres* on community involvement and beneficiary input.

Parental participation was integral from the outset of the policy. Although parental involvement was voluntary and dependent on specific *Sure Start* localities, many *Sure Start* boards included parents, who provided invaluable perspectives on local needs. In

the interview with Eisenstadt, she emphasizes the significance of beneficiary involvement, stating that “the ideal *Sure Start* from the very beginning was run by a local board that included health, education and social care, but also had to include local parents” (Eisenstadt, Retrieved from interview data). Eisenstadt also emphasises the successes of these methods, noting that the inclusion of parents in conversations about *Sure Start* ensured that policymakers and leaders were required to consider diverse perspectives without judgement (Eisenstadt, Retrieved from Interview data). At the time, especially, but also now, this approach to policymaking is infrequent, yet can be remarkably impactful, especially considering local need.

The focus on parental involvement also led to soaring levels of trust amongst family members and *Sure Start programme* leaders, as families saw first-hand the effects of their personal contributions through specific local programmes. All the interviewees’ remark on the positive reception of *Sure Start* by parents and families, recalling conversations with parents who stated that *Sure Start* had changed their lives and positively altered their futures. Eisenstadt attributes the positive sentiments of *Sure Start* to its core values of dignity and respect, noting that many of the parents involved in the program had never been listened to previously, and *Sure Start* was one of the first policies where they were treated as informed humans. Baroness Hodge states that *Sure Start* “was a very empowering program” (Hodge, Retrieved from Interview data). Despite contentions regarding the switch to *Children’s Centres*, these ultimately led to more positive outcomes for children and their families. However, as mandatory quotas for Children’s Centres increased, especially during the 2008 financial crisis and impending recession, many localities began referring to existing programs as *Sure Start Children’s Centres* without altering any content or operations. For this reason, Melhuish urges caution when evaluating the effects of *Sure Start Children Centres*, which remarkably remain positive despite the inclusion of these inefficient non-*Sure Start centres* in actual *Sure Start Centre* data.

Data

Sure Start was structured according to a cross-sectoral model, including components of health, education and social work. Given the array of organizations and individuals involved, almost all interviewees expressed the difficulty of data cultivation. Many interviewees explained that it was particularly difficult to obtain data from the health sector, noting the complexity of the organization in general. As the health sector was often the first point of contact between families and programme leaders, the rigidity of this sector, in terms of data sharing, was detrimental.

Despite the difficulties of data sharing, the interviewees note the cruciality of data regarding outreach methods to the most impoverished families and their children. Upon the first evaluation of *Sure Start*, there was evidence that the most impoverished children and their families were being adversely affected by close proximity to *Sure Start Local Programmes.* Therefore, stakeholders began using data to more effectively target children with the most needs. This method, referred to as assertive outreach, led to the increased involvement of children facing the most disadvantages in *Sure Start programmes* (Eisenstadt, Retrieved from interview data). Eisenstadt mentions that the lack of data sharing from the health sector also made this assertive outreach difficult (Eisenstadt, Retrieved from interview data).

Additionally, data was significant for evaluation procedures. Melhuish explains that the *Millenium Cohort Study* data made the *Sure Start* evaluations possible, as this data allowed for direct comparisons between *Sure Start* and Non-*Sure Start* participants, in an absence of randomised controlled trials (Melhuish, Retrieved from Interview data).

Evaluations

One of the key debates around *Sure Start* was the use, or lack of, randomised controlled trials. Melhuish advocated for RCTs early on, calling them “the most powerful research strategies to convince other people that the programme is working” (Melhuish, Retrieved from interview data). However, RCTs conflicted with *Sure Start’s* localised structure.

Eisenstadt explained, in regard to randomised controlled trials, that “there is no way you could have had parental involvement in deciding what to deliver and also have a randomised controlled trial because... you have to have the same inputs” (N. Eisenstadt, Retrieved from Interview data). In other words, standardisation would have undermined the programme’s adaptability. Additionally, from a political standpoint, randomised controlled trials were difficult, as almost all members of parliament wanted a *Sure Start Centre* for their constituents given the popularity of these programmes (Melhuish, retrieved from interview data). Baroness Hughes notes that, many policymakers “thought it was unethical to conduct randomised controlled trials,” because this would deny children the essential resources that *Sure Start Centres* provided (Hughes, Retrieved from Interview data).

Ultimately, Melhuish and his team adopted a robust methodology using longitudinal data from the *Millennium Cohort Study*. As the interviewees reflected on the decision to use an alternative method to potentially more effective randomized controlled trials,

Melhuish, Eisenstadt, and Baroness Hughes agree that the methodologies implemented were the most adequate for evaluating the *Sure Start* model.

Recommendations for Future Policies

When reflecting on *Sure Start*, the interviewees communicated immense pride. Although evidence of *Sure Start's* effectiveness is varied, it was one of the first major early childhood education programmes with popular support from communities, policymakers and various other sectors. Baroness Hodge noted that *Sure Start* had exceeded her expectations, especially given the evidence of long-term benefits. She states that the reason for *Sure Start's* departure was not in its structure but in the government's refusal of statutory enshrinement, especially through long-term budget commitments for the programme (Hodge, Personal Communication, 2025). In her reflections, Baroness Hughes claims that with its resources, she is unsure of how *Sure Start* could have been done differently and remained as effective as it was (Hughes, Personal Communication, 2025).

Looking ahead, the interviewees recommend preserving *Sure Start's* core elements. Baroness Hughes and Melhuish argued that *children's centres* should remain central to ECE initiatives, urging expert oversight for the most effective development of these policies (Melhuish, Personal Communication, 2025). Eisenstadt emphasized the necessity of early childhood policies that target the youngest children. She suggests enrolling children in interventions as early as birth and following up throughout various stages (Eisenstadt, Personal Communication, 2025). She recognizes, however, that this approach would require extensive data sharing, which she also claims will increase the success of impending policies. Baroness Hughes shares similar sentiments, urging the government to act with clarity when establishing ECE programs, especially after reflecting on the relatively non-uniform *Sure Start* model (Hughes, Personal Communication, 2025). She also emphasizes a fundamental commitment to the integration of core services at the local level, with a focus on closing the increasingly widened gap between disadvantaged children and their peers. Baroness Hodge recommends building from the *Sure Start* model, ensuring that it is enshrined into legislation, so it is not eliminated contingent on fluctuations in funding (M. Hodge, Personal Communication, 2025).

To conclude, the interviews with policy makers reveal the intricacies, complications, and benefits of *Sure Start*. With its evidence and results driven model, *Sure Start* not only produced significant short and long-term behavioural, academic and achievement results, but also led to improvements for children and families facing multiple

disadvantages. Although *Sure Start* faced challenges, all the interviewees noted that there had never been a more popular and well-received intervention for disadvantaged families in England.

We will now move to our final section, the media analysis.

1.6.3. Media analysis

So far, we have evaluated the effectiveness of *Sure Start* on reducing educational inequalities using quantitative approaches and qualitative interviews. Each method has allowed us to understand *Sure Start* from diverse perspectives, with the raw numbers and the program's critical stakeholders working together to provide robust findings. We will now consider a final perspective through our media analysis of newspapers following the implementation and dissemination phases of *Sure Start*.

Regarding public policy, the media plays a significant role as an agenda setting platform and vehicle for mass information (Saraisky 2016). The media is not only rooted in specific political and economic contexts but also builds upon and subsequently informs public opinion (Saraisky 2016). Thus, media can reveal the conversations, discourses and themes which everyday people encounter and contribute to most. Through the inclusion of a media analysis in this case study report, we will consider the final perspectives, of the public, politicians and journalists in determining the effectiveness of *Sure Start* on mitigating educational inequalities.

The analysis results reveal the three most frequent themes including impact, finances and politics. The articles within these themes consider various perspectives, allowing us to analyse *Sure Start* through the eyes of its most fervent supporters and opponents. As these articles include diverse opinions and stories, they are organized according to subsections, which will be outlined in detail below.

Impact

To begin, we examine impact. As indicated in Table 1.7, articles on impact were largely split between discourses on the positive and negative effects of Sure Start.

Table 1.7: Subthemes emerged and most frequent codes within the "impact" theme

Subthemes emerged	Frequent codes/ keywords
Positive Impacts of *Sure Start*	Support (5), help (9), difference (1), benefit (1), successful (1), helped millions (2), positive impact (2)
Negative Impacts of *Sure Start*	Critics/criticism (21), attracted affluent parents (9), more harm than good (4), wasting (3), driving our needy (3), more to do (10), failures (14), failed to improve (4), disappointing (2)
Neutral/ Mixed Impacts of *Sure Start*	access services (9), unchanged (2), no difference (2), still too early (2), ambiguous (1)

Articles expressing positive sentiments were found in *The Times, The Sun, The Guardian,* and *the Daily Mirror*. Thus, positive outcomes were not confined to one news platform. These articles included success stories regarding the improvement of communal relations, parental testimonials and the promotion of diversity and inclusion as best practice. For example, a journalist for *The Guardian* writes about one mother's testimony, stating "Single parent Nancy Silk says Sure Start gave her the confidence to find work and provided the support she needed to get over her depression" (Andalo 2003). There were more stories like this, where families, especially mothers, expressed their admiration for *Sure Start*. Although many benefits of *Sure Start* were discussed, there was no mention of positive academic outcomes for children facing disadvantages or for children more generally, which is significant when considering our research questions.

Alternatively, articles regarding the negative effects of *Sure Start* focused mostly on its failure to reach the most deprived families and to effectively target children facing intersectional disadvantages. Most articles in this subgroup were centred on the middle class's "invasion" of *Sure Start*, as individuals expressed complaints that those of a higher socioeconomic status were stealing *Sure Start's* resources from families who needed them most. Unlike articles centred on the positive effects of *Sure Start*, those on its failures focused on the absence of educational benefits afforded to children from disadvantaged backgrounds compared to their peers. An article in *The Daily Telegraph* states "More than £25 billion spent on early education under Labour has failed to improve children's language and numeracy skills, according to a study published today" (Paton 2010).

Some articles held more neutral sentiments regarding the effects of *Sure Start*. Most of these articles, found in *The Guardian,* offered relatively non-biased examinations of *Sure Start* as it existed throughout various stages and time periods. Almost all of these articles had an interrogative tone but claimed that more time needed to pass before evaluating *Sure Start* on its effectiveness or lack thereof. In an article for *The Guardian* one journalist writes "Geof Rayner, chairman of the UK Public Health Association, says *Sure Start* is refreshing precisely because it favours local initiative over central direction. 'It is always looking to innovate, and it is empowering the people who work in it,' he says. It is too early, however, to tell whether *Sure Start* will have a demonstrable effect on children and families" ("Far from certain" 2003).

In general, articles in this section were largely polarized according to positive and negative sentiments of *Sure Start*. Articles that expressed positive sentiments contained stories of successful communal and parental outcomes, omitting, for the most part, the benefits afforded to the children involved. The articles which expressed negativity focused significantly on educational outcomes for children, as journalists, researchers and politicians claimed that *Sure Start* was failing the children who it intended to target.

Finances

Table 1.8 below summarizes the most referenced terms from the analysed sources, highlighting their relevance across the identified subthemes on finances: ***(i) Scale and nature of the cuts, (ii) Impact on vulnerable children and families in deprived areas, (iii) Political controversy and protest, and (iv) Broader consequences.***

Table 1.8: Subthemes emerged and most frequent codes within the "finances" theme

Subthemes emerged	Frequent codes/ keywords
Scale and nature of the cuts	Services (56), funding cuts (24) budget (18), closed (15), reduced (11), reductions (10), money (7), saving (6), annual (5)
Impact on vulnerable children and families in deprived areas	Children (82), families (63), poor (28), support (23), parents (15), deprived areas (14), vulnerable (12), poverty (9), childcare (8), help (7), need (7),
Political controversy and protest	Council (44), government (37), Cameron PM (25), Labor (23), protest (17), Tory (14), blamed (6), Cabinet (6), Party (6)
Broader consequences	Communities (20), Education (8), Libraries (7)

Regarding the first subtheme, addressing the scale and nature of the financial reductions, media coverage frequently emphasises the widespread closure of *Sure Start centres* nationwide. In an article for *The Daily Telegraph*, a journalist states "in a survey by 4Children and the Daycare Trust, centre managers estimated that 250 [*Sure Start Children's Centres*] will have to close in the next year, 2,000 will provide a reduced service, 3,100 will have a smaller budget, and staff at 1,000 centres have been issued with 'At Risk of Redundancy' notices" (Beckford 2011). This reduction in services often included scaled-back provision of activities, playgroups, clinics, support groups and lessons.

The second subtheme focuses on the direct impacts of *Sure Start* cuts on vulnerable children and families. According to the sources, these cuts are seen as hitting the most vulnerable groups of society hardest. Children and families, especially those who live in deprived areas, rely on *Sure Start* as a "lifeline" and a crucial support network. The cuts are framed as a direct hit on them. Consequently, concerns are raised about the impact on children' chances and the potential increase in child poverty as a result. Furthermore, the cuts are explicitly linked to increased hardship for parents, particularly mothers, to work or afford childcare.

The third subtheme concerns the political controversy and protest surrounding the reduction of *Sure Start* funding. The debates over *Sure Start* cuts are highly politicized. Accordingly, David Cameron is accused of breaking pledges to safeguard or improve *Sure Start*. Ministers have insisted there is enough money for councils to keep centres open. Nevertheless, the cuts have sparked numerous protests by parents and campaign groups, including marches, teddy bear picnics and themed events, highlighting the importance of the centres. Describing some of the protests, a journalist for *The Sun* states "Mums and dads brought paddling pools on to the streets of Newcastle to show their anger over planned 65% cuts to children's centre budgets" (Thompson 2014). Local councils, many Labour-led in hard-hit areas, describe struggling with the required savings and blame central government cuts. Political perspectives on *Sure Start* remain divided, with some commentators questioning its efficacy or arguing that it disproportionately benefits middle-class families.

The fourth subtheme explores the broader consequences of budget reductions. As reflected in the social media articles, the reduction in *Sure Start* services undermines early intervention efforts, which are seen as vital for addressing the root causes of on-going challenges regarding social inequality. *Sure Start* centres were valued as community facilities and social hubs. Their closure is described as ripping the heart out of some communities. In addition, other local services were cut alongside *Sure Start*. An

article in *The Daily Mirror* outlines these cuts, noting "Other measures include axing child benefit for 830,000 middle-income families, a freeze in Working Tax Credits – which will hit 80% of families – and cuts to the *Sure Start programme*" (Beattie 2010).

Politics

Table 1.9 below illustrates the subthemes and most frequent codes for the "politics" theme. Although there are significantly fewer articles encompassing this theme than those regarding impact or finance, politics still encapsulate many conversations about *Sure Start* in the media. As indicated by the prevalence of newspaper articles about *Sure Start*, in general, it was widely revered as a universally popular program. Thus, numerous politicians ensured that they had a say in debates on *Sure Start* and its impending status.

Table 1.9: Subthemes emerged and most frequent codes for the theme "politics"

Subthemes emerged	Frequent codes/ keywords
Campaigning	Minister (19), Policy (17), David Cameron (10), Prime minister (9), party (7), spokesman (6), campaign (4), election (4), Coalition (4)
Debates on early childhood practices	Tories (8), Finding (8), social mobility (7), proposal (5), evaluation (5) Inquiry (4), Strategy (4)
Labour government	Labour (31), Government (22), Tony Blair (3)

Similarly to articles categorised under finance, politicians used newspapers to express their concerns regarding *Sure Start* funding and potential budget cuts. These individuals often used media for their campaign agendas, comparing promises to uphold and save *Sure Start* to their opponent's likelihood of slashing the program. For example, one journalist for *The Sun* discusses a political candidate, writing "Only his party would protect *Sure Start* centres and libraries from cuts, he vowed, as the parties began campaigning ahead of the May 5 polls" ("Clegg's rallying call" 2011). In general, the political campaign articles that centred on *Sure Start* advocated for the expansion of welfare in mitigating the gap between the rich and the poor.

Additionally, *Sure Start* was positively regarded in the political realm as a beacon of the Labour government. When discussing the achievements of Tony Blair's government, *Sure Start* was often included as a success. These sentiments were most often

expressed, however, in articles campaigning for the election of proceeding Members of Parliament, which likely represent biased perspectives of Labour and its programmes.

Apart from campaigning, political leaders also used media to debate early childhood policies more generally. These debates were centred on opinions regarding best practice before and after the recession and major cuts to social services. These debates and concerns for early childhood education indicate its widespread reach and universally accepted importance, as more individuals were not only discussing early childhood but increasingly considering the most effective programs for children.

This media analysis has highlighted the diverse opinions and sentiments surrounding the *Sure Start* initiative, reflecting contrasting views held by journalists, politicians and the wider public. While *Sure Start* received significant praise, it also faced sustained criticism, often rooted in concerns over funding, effectiveness and political motivations. Nonetheless, the continued volume of media coverage and public discourse surrounding *Sure Start*, and early childhood education programs more generally, underscores their growing recognition as vital components of child development and social policy. Despite some contestation, *Sure Start* has undeniably contributed to raising awareness of the importance of early years support and remains a key point of reference in debates about equity and intervention in early childhood.

1. 7. Discussion and Conclusion

This country report has evaluated the long-term impacts of the *Sure Start* policy through a mixed-methods approach, combining quantitative analysis using longitudinal data, qualitative interviews and a media analysis.

The quantitative findings indicate that *Sure Start* had a positive, but very modest, effect on the likelihood of disadvantaged students attaining at least one post-16 qualification (e.g., A-level qualification, technical/vocational qualification level 3 or equivalent). However, this effect becomes statistically non-significant in the final model, which controlled for a broader set of variables. This issue may be due to methodological limitations, such as a relatively small sample size (N = 761) and imbalances in group composition, particularly the underrepresentation of English as an Additional Language (EAL) learners in the non-*Sure Start* group. An alternative explanation could be that the observed decline in statistical significance may reflect a reduced policy effectiveness over time, with impacts less pronounced in the long term compared to the more pronounced short- and medium-term effects found in previous studies (Melhuish,

Belsky, Leyland, Barnes, 2008; Carneiro, Cattan, Ridpath, 2024. Further research with a larger sample size and more balanced group representation is recommended to better capture the sustained effectiveness of the policy.

The qualitative interviews provided valuable insights into the perceived benefits and challenges of the *Sure Start* policy from the perspectives of policymakers. Interviewees highlighted *Sure Start's* evidence-informed, outcomes-driven approach, which they associated with meaningful improvements in children's academic achievement, socio-emotional development and family well-being. Despite some implementation challenges, interview participants expressed that *Sure Start w*as one of the most well-received and impactful interventions for disadvantaged families in the context of early education in England. According to the interviewees, the broad popularity of *Sure Start* was due, in part, to the programme's critical foundation of dignity and respect, which informed beneficiary involvement and community interventions. Although evidence of *Sure Start's* effectiveness indicates mixed results, the interviewees help to reveal that *Sure Start* was more than its nuanced empirical results, as it led to a shift and increasing focus on the significance of early childhood programs in policy education and public realms.

The media analysis further contextualized public and political perceptions of *Sure Start*. Coverage revealed a spectrum of views: while many stakeholders including journalists, advocacy groups and members of the public praised the policy for its ambitious aims and reported successes, others expressed scepticism regarding its sustainability, funding mechanisms and political motivations. Nonetheless, the continued prominence of *Sure Start* in media discourse, and its frequent citation in debates on early years support, reflect its significance as a reference point in discussions about equity social mobility and education reform.

Taken together, these findings suggest that while the long-term measurable impacts of *Sure Start* in reducing inequalities in educational outcomes may be less robust than initially hoped, its broader influence, both practical and symbolic, remains significant. The policy appears to have laid important groundwork for future efforts to address inequality in early childhood education and continues to inform contemporary policy discourse. Future research is needed to overcome the methodological limitations identified in this study by employing larger, more representative samples and longitudinal designs that better capture sustained impacts over time. In addition, further evaluations with other early years initiatives/reforms aimed at reducing inequalities in educational outcomes are also recommended. This helps to deepen understanding of the conditions under which such policies succeed or falter.

2. Poland case study report

2.1 Introduction

Inequality in educational outcomes is understood here as the unequal distribution of access, participation, and achievement in education—particularly early childhood education—across social, geographic, and economic dimensions. In the Polish context, regional disparities are especially significant due to long-standing differences in economic development, quality of life, and access to public services. These inequalities manifest both between voivodships[1] and between urban and rural areas. Place of residence is thus closely linked to socio-economic background, shaping family income, parental education, and occupational status.

The Early Childhood Education and Care (ECEC) reforms we examine comprise a series of policy initiatives introduced between 2008 and 2016 aimed at improving access to preschool education. These measures focused on expanding the number of institutions and available places, as well as enhancing affordability by partially eliminating fees. International and national evidence suggests that early childhood education positively impacts long-term cognitive and social outcomes. Therefore, expanded access may contribute to reducing educational disparities over time.

This report addresses the following research questions:

(1) To what extent have the implemented reforms improved access to ECEC in Poland?

(2) How has improved access affected educational outcomes?

(3) To what degree are regional inequalities in access and outcomes connected to place of residence?

Educational outcomes at ISCED level 2 (lower secondary education) are measured using the results of the eighth-grade (E8) exam, introduced in 2019, which marks the completion of this level and assesses students in Polish language, mathematics, and a foreign language. These results are essential for admission to upper secondary schools.

[1] A voivodeship is the highest-level administrative division in Poland, equivalent to a province.

The analysis draws on publicly available data from the *Central Statistical Office / Statistics Poland*, the *Central Examination Commission (CEC)*[2], and regional examination boards. The dataset covers the years 2019–2024 and includes aggregated exam results at the voivodship (województwo) and county (powiat) levels. Additional regional data on education infrastructure, such as preschool enrolment rates per 1,000 children and the number of children per preschool place, are also used.

The structure of the report is as follows: First, we present the Polish context to explain why regional inequality is a critical concern and introduce the educational reforms under study. We then review relevant literature and outline the methodology and research questions. This is followed by quantitative analyses consisting of two parts: an examination of regional changes in preschool access from 2003 to 2023, and an analysis of how preschool availability relates to E8 exam performance. The following section presents qualitative findings based on expert interviews and media discourse analysis. This section offers both a general, nationwide overview of reform outcomes and a focused case study of Podkarpackie voivodeship in southeastern Poland and Lubelskie voivodeship (eastern Poland). The report concludes with a synthesis of findings, highlighting key patterns and implications for educational policy aimed at reducing territorial inequalities.

2.2. National Context

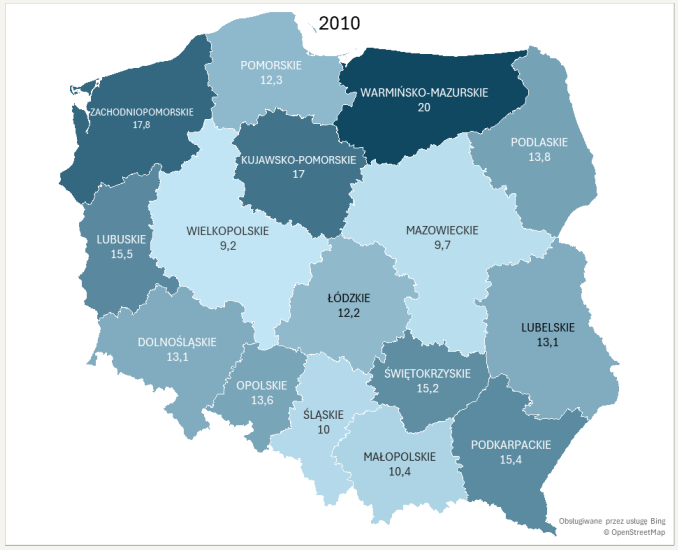
Following the 1989 socio-political transformation, Poland's education system underwent profound restructuring. A significant reform decentralised preschool education, transferring responsibility from the central state to local governments. This shift, combined with economic restructuring and fiscal constraints at the municipal level, precipitated a substantial decline in the number of preschools, particularly in rural areas. Consequently, access to early childhood education was severely restricted, exacerbating existing social inequalities. During the communist era, centrally planned policies ensured widespread availability of preschools and nurseries. The post-socialist transition, however, entailed a withdrawal of the state from its social obligations, compelling financially constrained municipalities to prioritise compulsory primary

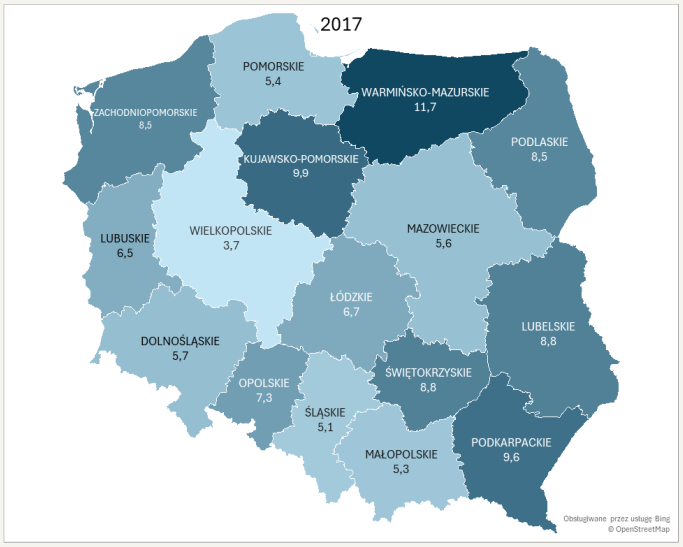
[2] CEC - the national body in Poland responsible for preparing, administering, and supervising external state examinations.

education over early childhood provision. This period was characterised by a significant reduction in institutional childcare availability; however, non-governmental organisations and civil society partially compensated for this withdrawal. The emergence of non-public preschools mitigated some access issues but also contributed to socio-economic stratification, as private institutions often catered to families seeking enhanced educational opportunities and improved school readiness. Statistically, ECEC provision declined sharply: the number of preschool institutions decreased from approximately 24,000 in 1989 to 14,000 in the 1990s, while the number of crèches fell from around 8,000 in 1990 to 400 by 2005.

Moreover, these shortages displayed a clear regional pattern, stemming from historical conditions and the uneven development of different parts of the country during the communist era and the early years of the post-1989 systemic transformation. Using regional unemployment rates and extreme poverty thresholds as examples, we can observe that although the overall situation improved significantly across the country over the years (particularly since joining the European Union in 2004, when high unemployment levels were primarily a result of the prolonged economic transition), regional disparities persist. The northern, north-eastern, and eastern parts of Poland have remained less urbanised, with predominantly rural areas. Only some counties and coastal zones that benefit from specific tourism-related advantages (e.g. in the Warmińsko-Mazurskie voivodeship) have seen notable improvements. Overall, however, these areas continue to lag behind other regions in terms of employment opportunities and poverty combating (see Figs. 2.1 and 2.2).

Fig. 2.1 Unemployment rates in 2004, 2010, 2017 and 2023 by voivodeship





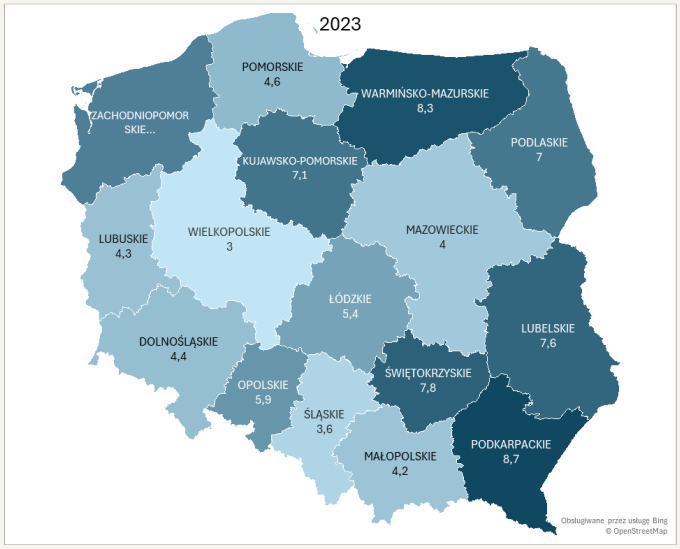
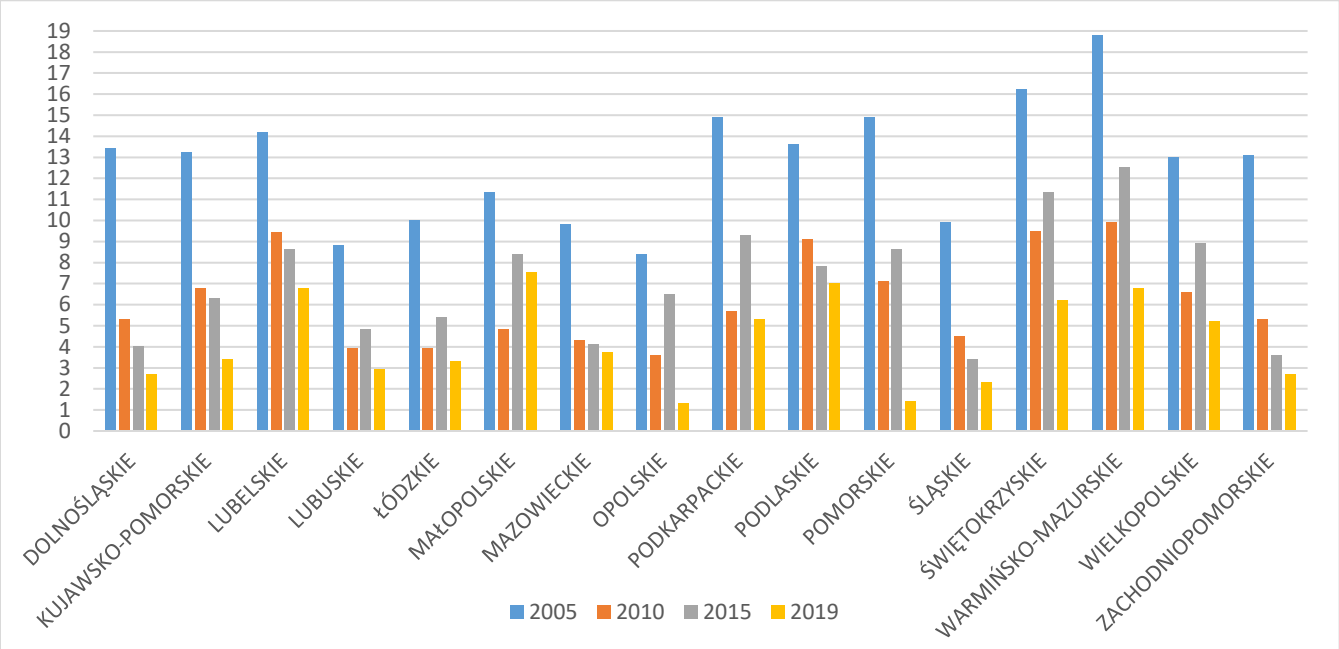


Fig. 2.2: Extreme poverty[3] threshold in 2005, 2010, 2015 and 2019 by voivodeship



Since 2010, efforts to expand early childhood education, aligned with European Union standards and aimed at reducing social disparities, have reversed this trend. The introduction of mandatory preschool preparation for six-year-olds has ensured at least one year of early education prior to primary school. Additionally, EU funding has facilitated the expansion of preschool facilities, especially in underserved rural areas. By 2023, the number of preschool establishments exceeded 22,500, approaching pre-transition levels, with public and private kindergartens prevalent in urban areas and increased preschool branches within rural schools. In the 2023/2024 school year, 98.5% of children aged 3–6 in Poland were enrolled in preschool education. Participation rates by age group, however, varied: 87% for 3-year-olds, 94% for 4-year-olds, 96% for 5-year-olds, and 98% for 6-year-olds. The net enrolment rate for children aged 3–6 was 96.1%. In urban areas, it exceeded 115%, indicating enrolment from surrounding rural regions, while in rural areas it stood at 72.5% (GUS 2023).

[3] Extreme poverty – defined as a percentage of households whose expenditures (including the value of goods received free and self-consumption) fall below the subsistence minimum, i.e., the level of needs satisfaction below which biological survival and psychophysical development are at risk. The threshold is based on the subsistence minimum calculated by the Institute of Labour and Social Studies and adjusted for household size using the OECD equivalence scale (GUS, 2024).

The political interventions analysed in this report constitute a rolling series of policy changes aimed at expanding access to early childhood education in Poland, implemented incrementally between approximately 2008 and 2017. This multifaceted reform introduced several key measures. It should, however, be noted that this sequence did not constitute a planned, coherent programme of reforms but rather unfolded amid shifting political landscapes. Although each governing party had professed concern for ECEC (*Early Childhood Education and Care*) and a commitment to reducing inequalities, some measures were mutually contradictory, and the 2016 reform, which increased the compulsory school age, rescinded part of the earlier decisions.

In 2008, legislative changes laid the foundation for a diversified system of preschool provision, allowing for the emergence of organisational models beyond traditional kindergartens. Then the financing structure was significantly reformed through the introduction of partial national subsidisation, which included a mandate for five hours of free preschool education per day in public institutions. Subsequent legislative reforms from 2015 aimed to expand universal access, resulting in a statutory guarantee of preschool places for all six-year-olds and, upon request, for four- and five-year-olds. In September 2017, this entitlement was extended to all three-year-olds. Parallel to these structural and access-oriented reforms, the preschool curriculum was revised to enhance educational quality and promote consistency across diverse types of providers. Detailed information on these interventions is provided in Table 2.1.

Table 2.1: Key Reforms in Preschool Education in Poland (2008–2017)

Year	Reform Action
2008	Legislative changes enabled the diversification of preschool provision, allowing for the development of alternative organisational forms beyond traditional kindergartens.
2008 (effective 2009)	Reform of the preschool core curriculum in Poland, aimed at improving quality and ensuring consistency across different types of providers. Key goals included aligning public and non-public preschool programs, enhancing school readiness, emphasising practical and social skills, and implementing a more child-centred approach. The reform was part of broader changes initiated by the Ministry of National Education to align with the EU standards and international assessments (e.g., PISA, PIRLS). The curriculum was later updated in 2017 and again in 2023 to reflect evolving pedagogical approaches and societal needs.

2013	Introduction of partial national-level subsidisation of preschool education. Public kindergartens were required to offer five hours of free provision per day. Local authorities covered the cost of additional hours within nationally regulated limits (1 PLN), easing the financial burden on families.
2015	Legislative reforms were initiated to promote universal access to early childhood education and care (ECEC).
2016	Statutory guarantee of preschool placement for all six-year-old children and for four- and five-year-olds upon parental request.
2017	Entitlement extended to include all three-year-olds, marking a significant expansion in the target age group for preschool provision.

It is noteworthy that all ECEC interventions, including those lowering the school-entry age (introduced in 2014 and subsequently reversed in 2016), assumed that ECEC has equalising and/or compensatory effects (as is also grounded in research, e.g. McGinnity et al. 2017; Kluczniok et al. 2017; Cebolla-Boado et al. 2017; Jopkiewicz et al. 2020) and that guaranteeing access to places would simultaneously reduce inequalities in children's achievements. The expectation was that accessible and early education would help reduce disparities resulting from limited access to other forms of education and support (urban–rural divide) and differences in parental support (socio-economic background; Dobosz-Leszczyńska 2024). Children would be better prepared for school and achieve higher outcomes. However, due to the strong public support for preschool education in Poland, this was not the main argument for the reform. More attention was given to the potential to make it easier for women to return to the labour market if childcare were available — a point evident in expert narratives and discussed further in the qualitative part of the report. Moreover, due to significant accessibility deficits over an extended period, the situation was primarily analysed in terms of the availability and accessibility of ECEC across different social groups (Fedorowicz and Sitek 2011). Nonetheless, the substantial involvement of the private sector prevented the establishment of a truly universal ECEC system; nationwide, the share of private preschools increased from 5.5% in 2003 to 27.5% in 2023. Non-public providers enjoyed the latitude to design highly varied programmes – extending well beyond the national core curriculum framework – thereby engendering a degree of elitisation in preschool services. In principle, every child could gain access in terms of place accessibility and financial costs, but in practice, significant disparities persisted across institutions by type.

2.3. Literature review

During the transition period and the first decade of the 21st century, due to the insufficient supply of institutional childcare services for preschool-aged children (Ciepielewska-Kowalik 2020; Levitas and Herczyński 2002; Sadura 2016) and the prevailing belief about the mainly care function of the preschool, a familial model of care predominated in Poland (e.g. Kotowska et al. 2007; Szelewa and Polakowski 2008). Moreover, the significantly lower rate of preschool education enrolment in Poland compared to other EU countries, as well as the pronounced regional and local disparities in access to preschool services, contributed to both inter-country and intra-national deepening of developmental inequalities among children. This was particularly problematic for children from families of lower socio-economic, cultural, and educational status, as well as those living in socially and economically disadvantaged areas. It should be noted that, after 1989, the family's low social, economic, and cultural status more strongly limited children's educational opportunities than in previous decades. This was because during the period of systemic transformation, education became the primary determinant of individuals' socio-economic position and economic success (Górniak 2007; Jarosz 2011). In such a context, equal opportunity, of which a universal preschool education system was a key component, offered the potential for children's social advancement. At the same time, however, as noted in the previous section, these opportunities were significantly limited during the post-transformation period (Heinen and Wator 2006). Findings from Polish studies (e.g., Giza 2010; Putkiewicz 2000) confirmed international research, demonstrating that preschool programs had a clearly positive impact on children's academic achievement, particularly for those from socio-economically disadvantaged backgrounds, socially excluded communities, and children with special educational needs. This was particularly significant in the context of the 'juvenilisation'[4] of poverty in Poland (Tarkowska 2005). The fundamental challenge of the reforms thus became increasing the availability of preschool institutions—not only in terms of the number of places, but also in terms of financial accessibility and, ultimately, a shift in public awareness[3].

The initial series of reforms introducing the possibility of diversifying preschool education and obtaining financial support from EU programs led to an increase in the

[4] The term refers to the process by which children become the social group most exposed to poverty, with its scale and persistence increasing over time, leading to long-term physical, psychological, and social consequences.

share of non-public institutions, thereby building a system of shared responsibility. In 2005, foundations, associations, and other social organisations operated 5.6% of preschools, serving 3.7% of children enrolled in preschool education. By 2013, they accounted for 8% of preschools, attended by 4.9% of children enrolled in the preschool education system. The growing diversity of preschool service providers is particularly evident in the unprecedented development of alternative forms of preschool education between 2008 and 2013. In 2013, the public sector was the governing body for just over one-third (32.2%) of these alternative preschool forms, while nearly two-thirds were operated by the private sector – commercial entities (42.5%) and social organisations (25.3%). At the same time, NGOs were often excluded from discussions about the methods and directions of reforms in preschool care and education policy (e.g., regarding the organisation and financing of preschools), and their role was not prominently highlighted in reporting on progress in efforts to increase access to preschool education. Admittedly, preschool education after 1989 serves as an example of public policy in which the role of citizens in planning, programming, and shaping services was declaratively intended to increase; however, at the state level, their role was understood exclusively in a consultative and advisory capacity (Ciepielewska-Kowalik 2014). The insufficient recognition of social organisations stemmed from an excessive focus on the economic dimension of social sector reforms – the input side of the welfare state. Financial calculations (such as the ratio of institutions to children or per capita costs) became central. At the same time, issues related to the implementation of public policies – the output side of the welfare state – were largely overlooked. In this area, the core concerns encompassed the quality of services and teachers' training (Pestoff 2009; Leś 2011). Similarly, the economic dimension and infrastructural challenges dominated the discourse during the subsequent reforms, whilst a second focal point was the debate over reversing the lowered school-entry age to six and the obligation of a preparatory year for five-year-olds (the mandate remained but applied to six-year-olds again). The curricular changes introduced alongside the guarantee of places for younger children were discussed primarily through the lens of ideological discourse and the conservative-right government's vision of education (Klus-Stańska 2017; Kaźmierczyk 2017).

2.4. Research questions

Our research questions are as follows:

(1) To what extent have the implemented reforms improved access to ECEC in Poland?
(2) How has improved access affected educational outcomes?

(3) To what degree are regional inequalities in access and outcomes connected to place of residence?

2.5. Methodology

We adopted a mixed-methods research design consisting of:

1. Quantitative analysis of the impact of ECEC reform on expanding access to preschool education, improving educational outcomes and reducing regional disparities

2. Qualitative analysis of the multidimensional influences on, barriers to and broadly understood effectiveness of ECEC reform in Poland, through media analysis and interviews with the key stakeholders.

2.5.1. Research design

Quantitative methods

It needs to be highlighted that after reviewing potential data sources, it became evident that longitudinal studies covering the scope of our research are lacking in the Polish context. Moreover, existing data tend to focus primarily on school performance at various educational stages and are either not representative or overly individualised (e.g., diagnoses of individual students available to teachers as part of school-based research). Consequently, there is also a scarcity of research examining the direct impact of ECEC on later educational outcomes. Given this limitation, we utilised data from the Polish *Central Statistical Office / Statistics Poland* to analyse the expansion of access to ECEC and the effects of reforms on reducing regional disparities and fostering socio-economic development and to estimate the impact of preschool availability on educational outcomes. We subsequently related these data to the results of the E8 exam to assess whether improvements in ECEC provision at the regional level correspond with enhanced exam outcomes. The eighth-grade exam results are significant for students' future educational trajectories, accounting for 50% of the points

used for admission to secondary schools of choice. Whilst they are a requirement for completing primary education, a student cannot fail the exam; mere attendance is enough for it to be recorded as completed. However, due to its selective significance, the results achieved are highly important and are widely discussed in the public sphere every year. In the following sections of the report, we will divide the data into thresholds for this reason.

Qualitative methods

The qualitative component of the research design, in turn, consisting of interviews with the key stakeholders and media content analysis, aims to broaden our understanding of the ECEC reform in Poland, especially in relation to the process of reform's design, implementation and evaluation, core influences and challenges faced and the degree of its effectiveness (defined broadly).

Media analysis

Data sources selected for media analysis included three national newspapers from across the political spectrum: *Gazeta Wyborcza* (left), *Rzeczpospolita* (centre), and *Nasz Dziennik* (right/catholic/conservative), and two tabloids, *Fakt* and *Super Express*. One hundred fifty-five news articles relating to various aspects of the ECEC reform between 2007 and 2021, with a particular focus on the years 2011 and 2018, were identified by searching newspaper archives (combined with Google and/or Bing searches), and 40 articles were chosen for subsequent thematic analysis.

Interviews

We conducted four in-depth, semi-structured interviews with key stakeholders involved in the design, implementation and/or evaluation of ECEC in Poland:

1. A director of the NGO actively involved in promoting and rolling out initiatives in increasing access to pre-school education in rural areas/disadvantaged regions in Poland (2004-2020s; Interviewee 1)
2. ECEC teacher and a local activist for 20 years, involved in activities aiming at increasing access to preschool education in one of the most disadvantaged/marginalised regions in Poland (Podkarpackie voivodeship; Interviewee 2)
3. Head of a small rural local authority in another disadvantaged region involved for 15 plus years in increasing access to pre-school education (local authority/voivodeship

perspective – Lubelskie voivodeship – one of the poorest regions in Poland, Interviewee 3)

4. Researcher in educational policy/ECEC policy and education governance; a long-term collaborator with the coalitions of NGOs involved in increasing access and quality of ECEC; conducted extensive research on the preschool reform, including small-scale evaluations (Interviewee 4).

The four interviewees were selected purposively based on their long-standing and diverse involvement in ECEC policy and practice in Poland. Each represented a different perspective: an NGO director with extensive experience in national and local initiatives, a local activist and teacher from one of the most disadvantaged regions, a head of a rural local authority in a low-income voivodeship, and a researcher specialising in ECEC policy and governance with a history of collaboration with NGOs and public institutions. This selection ensured access to contextually grounded insights from actors directly engaged in shaping and implementing ECEC reforms. While the sample does not aim for statistical representativeness, it was designed to capture a range of viewpoints across sectors and regions.

2.5.2. Data analysis

Quantitative analysis

Non-longitudinal data from the *Central Examination Commission* and the regional examination boards that conduct the six-grade and now, eighth-grade exams are nationwide and publicly available at the county and voivodeship levels. The data is for the years 2002-2016 (6-grade exam) and 2019-2024 (8-grade exam), consecutive years (13- and 15-year-olds, respectively). We combined the above data with administrative data on education by region – number of pre-schools, number of children enrolled/ 1000 children of a given age, and data for control variables: economic situation by region, unemployment level, and poverty level.

Qualitative analysis

Media analysis

The content of the news articles was first coded in MaxQda; approximately 30 codes were generated inductively from the collected content. The codes were then organised

into broader themes and patterns of meaning across the dataset in relation to our research question (Braun and Clarke 2013). Theme identification was informed by a critical perspective, drawing on Coffey and Atkinson's (1996) notion of theorising as a means to interrogate underlying power relations and ideological assumptions embedded in media discourses. This approach enabled us to develop broader socio-political interpretations and explanations of media coverage of ECEC and its effectiveness in the Polish context between 2008 and 2021.

Interviews

The interviews sought to elicit knowledge, experience, and opinions from experts in the field of creating, designing, implementing, and/or evaluating ECEC reform in Poland during the post-transformation period. Questions revolved around interviewees' involvement and perceptions of the process of increasing access to ECEC education and reducing educational inequalities due to place of residence or social origin, any positive changes observed (broadly understood), barriers/challenges faced (over the last 20 years), and recommendations for the future. Interviews lasted between 2 and 3 hours and provided significant insights into the ECEC reform, especially by offering more local perspectives and highlighting the role of key non-state actors in the process. A thematic analysis was adopted to analyse interview data and cross-reference themes with those identified during media analysis. An overall analysis of media content, combined with interviews with key stakeholders, desk research, and ECEC policy analysis, enabled authors to develop a multilevel model of interdependent influences on and barriers/challenges to ECEC reforms in Poland.

2.6. Results

2.6.1. Quantitative results

In line with the research questions, quantitative analysis is divided into two parts. The first part is based on data from *Statistics Poland* (*Central Statistical Office*) for the years 2002/2003–2023 and concerns the availability of preschool facilities, which was the primary objective of the reforms discussed in our report. The second part of the analysis focuses on the results of the final examination administered at the end of primary education: the eighth-grade exam, introduced in 2019 following a structural reform of the Polish education system. This reform extended primary education to eight

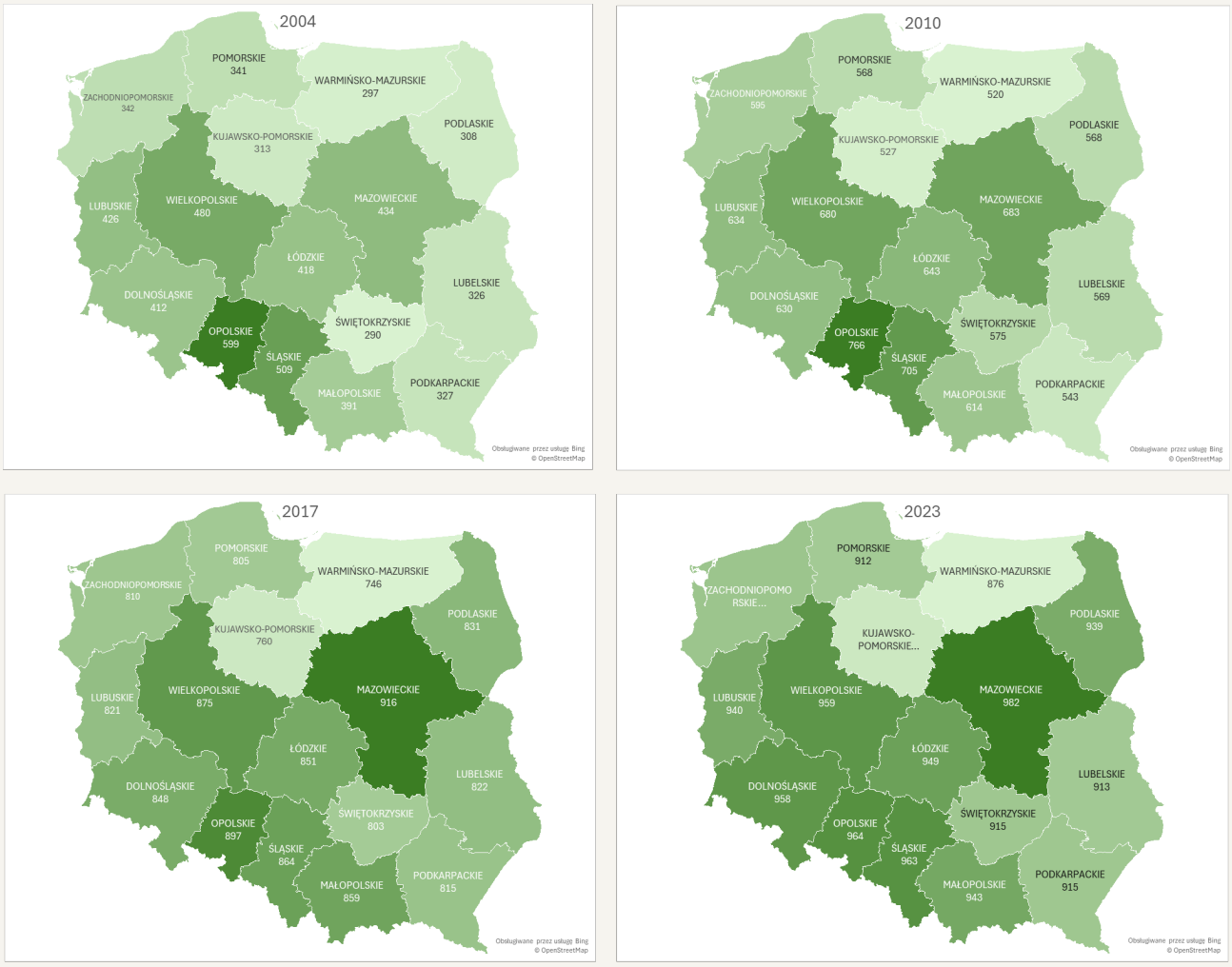
years, abolished the lower secondary level (*gimnazjum*), and reinstated the four-year upper secondary school (five years for technical upper secondary schools).

As mentioned in previous sections, at the turn of the 21st century, Poland faced a significant shortage of places in public preschools. This deficit could only be partially compensated for by non-public institutions. In the first stage of reforms, the state subsidy for ECEC was introduced, and the preschool education framework was made more flexible. Combined with financial support from European funds, this led to an increase in the number of newly established preschool institutions, both public and non-public, which consequently expanded the availability of preschool places and reduced the number of children per place. The latter included facilities run by NGOs, churches and religious organisations, as well as private individuals. The increase in the number of preschool institutions occurred across all regions, though unevenly. It is also important to note that while in regions where such facilities were previously scarce, this growth represents a substantial improvement, reaching what can be considered a basic level of provision (from no access to at least some access). In turn, in regions already in a more favourable position, it has brought additional benefits. These include a greater degree of choice for parents and the possibility of establishing specialised institutions, such as those better suited to the needs of children with special educational needs. Similarly, the number of children enrolled in preschool institutions increased steadily alongside the growth in facilities.

The next step in the reform process was to ensure financial accessibility by significantly reducing costs, primarily through the provision of five hours of free preschool education and a very low, centrally regulated fee for any additional hours. Some municipalities also subsidised meals to reduce this expense or permitted institutions that did not provide meals to allow children to bring food from home. Then, priority criteria were introduced in the enrolment process for children from large families, single-parent households, families at risk of social exclusion, and children with disabilities. The third step was to guarantee access to preschool places for all children whose parents wished to enrol them. This was implemented gradually, beginning with five-year-olds and extending down to three-year-olds, while maintaining the compulsory nature of the final year of preschool education for six-year-olds.

When we examine these data in terms of the number of children enrolled in preschools per 1,000 children of the relevant age group, we observe a clear and substantial improvement. Preschool availability increased significantly, from fewer than 300–500 children per 1,000 (depending on the region) in 2002 to nearly full coverage by 2023 (see Fig. 2.3).

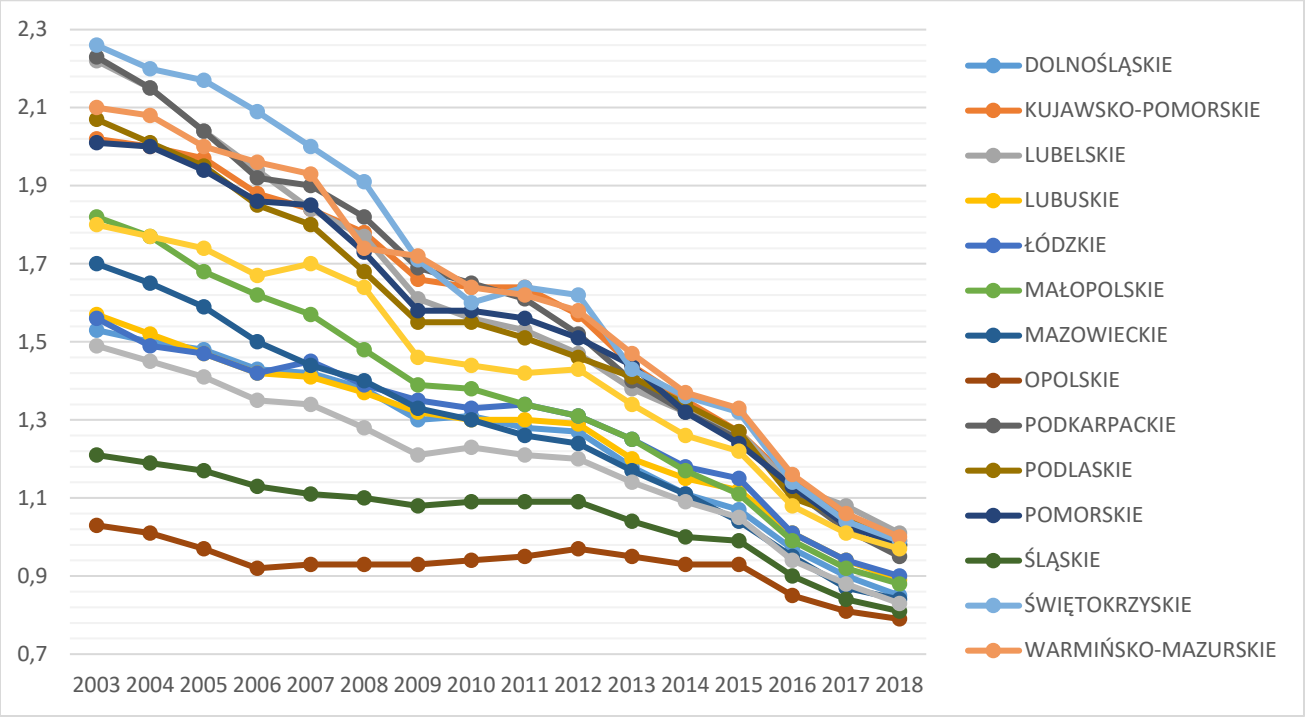
Fig. 2.3:Number of children enrolled in preschools per 1,000 children (in the years 2004, 2010, 2017, and 2023)



Source: Own calculations based on data from Statistics Poland.

An analysis of the number of children per available preschool place reveals a gradual improvement over the years (see Fig. 2.4). By around 2018 – in line with the objectives of the final stage of the reforms analysed in this report – the situation had reached a point where it became possible to find a place for every child across the country. However, it is important to note that this does not necessarily mean placement in a preferred or nearby institution; in some cases, it involves the inconvenience of transporting children to more distant facilities.

Fig. 2.4: Number of children per preschool place 2003-2018



At the same time, clear regional disparities in preschool access remain visible. To highlight the persistent inequalities despite overall improvements, the voivodeships were categorised into accessibility clusters (3). The classification was based on two indicators describing access to kindergartens: the number of children attending kindergartens per 1,000 children aged 3–5, and the number of children per available place in a kindergarten. The k-means clustering method was applied to identify clusters, allowing grouping of voivodeships based on the similarity of these indicators.

The following thresholds were established:

- High accessibility: more than 950 children per 1,000 children and fewer than 1.10 children per place,
- Medium accessibility: 900 to 950 children per 1,000 children and 1.10 to 1.25 children per place,
- Low accessibility**:** fewer than 900 children per 1,000 children and more than 1.25 children per place.

Statistical test results for the number of children attending kindergartens per 1,000 children aged 3–5 indicated that the mean in the high-accessibility cluster was approximately 967, while in the low-accessibility cluster it was about 922. The Student's t-test yielded $t \approx 4.21$ with $p < 0.001$, indicating significant differences between these clusters. Regarding the number of children per kindergarten place, the mean was approximately 0.98 in the high-accessibility cluster and around 1.29 in the low-accessibility cluster. The Student's t-test gave $t \approx -5.02$ with $p < 0.001$, further confirming statistically significant differences. Analysis of variance (ANOVA), considering all three clusters, confirmed the significance of differences for both indicators: for children per 1,000 children $F \approx 16.8$, $p < 0.0001$, and for children per place $F \approx 14.5$, $p < 0.0001$.

Table. 2.2: Voivodeships by accessibility clusters in 2019 and 2023

	2019			2023		
Voivodeship	**Children per 1000**	**Children per place**	**Accessibility cluster**	**Children per 1000**	**Children per place**	**Accessibility cluster**
Dolnośląskie	892	0.85	Medium	958	1.07	High
Mazowieckie	935	0.84	Medium	982	1.04	High
Śląskie	901	0.81	Medium	963	0.84	High
Małopolskie	897	0.88	Medium	943	1.11	Medium
Wielkopolskie	903	0.83	Medium	959	1.05	Medium
Pomorskie	849	0.98	Medium	912	1.24	Medium
Lubelskie	854	1.01	Low	913	1.27	Low
Podlaskie	879	0.98	Low	939	1.27	Low
Świętokrzyskie	852	0.99	Low	915	1.32	Low
Kujawsko-Pomorskie	820	0.99	Low	885	0.99	Low
Lubuskie	874	0.89	Medium	940	0.89	Medium
Łódzkie	884	0.90	Medium	949	0.90	Medium
Opolskie	916	0.79	High	964	0.79	High
Podkarpackie	862	0.95	Medium	915	0.95	Medium
Warmińsko-Mazurskie	811	1.00	Low	876	1.00	Low
Zachodniopomorski	859	0.97	Medium	917	0.97	Medium

Source: Own calculations based on data from Statistics Poland[5]

[5] Kujawsko-Pomorskie presents an atypical profile in terms of preschool accessibility. While its participation rate (885 children per 1,000 aged 3–5) falls below the threshold for medium accessibility, the load indicator

The analysis of changes over the years 2019–2023 confirmed a general improvement in accessibility and shifts toward higher clusters[6]. Between 2019 and 2023, preschool accessibility in Poland improved significantly, yet the pace of change varied across regions. Voivodeships such as Mazowieckie and Śląskie recorded the most notable progress, moving from medium to high-accessibility clusters. This shift reflects substantial gains in both the number of children enrolled per 1,000 and the ratio of children per available place, bringing these regions close to universal coverage. Małopolskie voivodeship also improved, but its position remained within the medium cluster, indicating a slower rate of change compared to the leading regions. Similarly, Pomorskie continued to occupy the medium cluster. Despite some progress, its indicator of children per place remains close to the threshold for low accessibility, suggesting persistent structural challenges. In contrast, Lubelskie and Warmińsko-Mazurskie voivodeships remained in the low-accessibility cluster, with only minor improvements over the period. These voivodeships illustrate enduring barriers, particularly in rural areas, where demographic and infrastructural constraints limit the effectiveness of reforms. Overall, the analysis confirms that nationwide inequalities in access to early childhood education have narrowed. However, significant gaps remain between highly urbanised and predominantly rural regions, pointing to the need for targeted interventions to ensure equitable access across all areas.

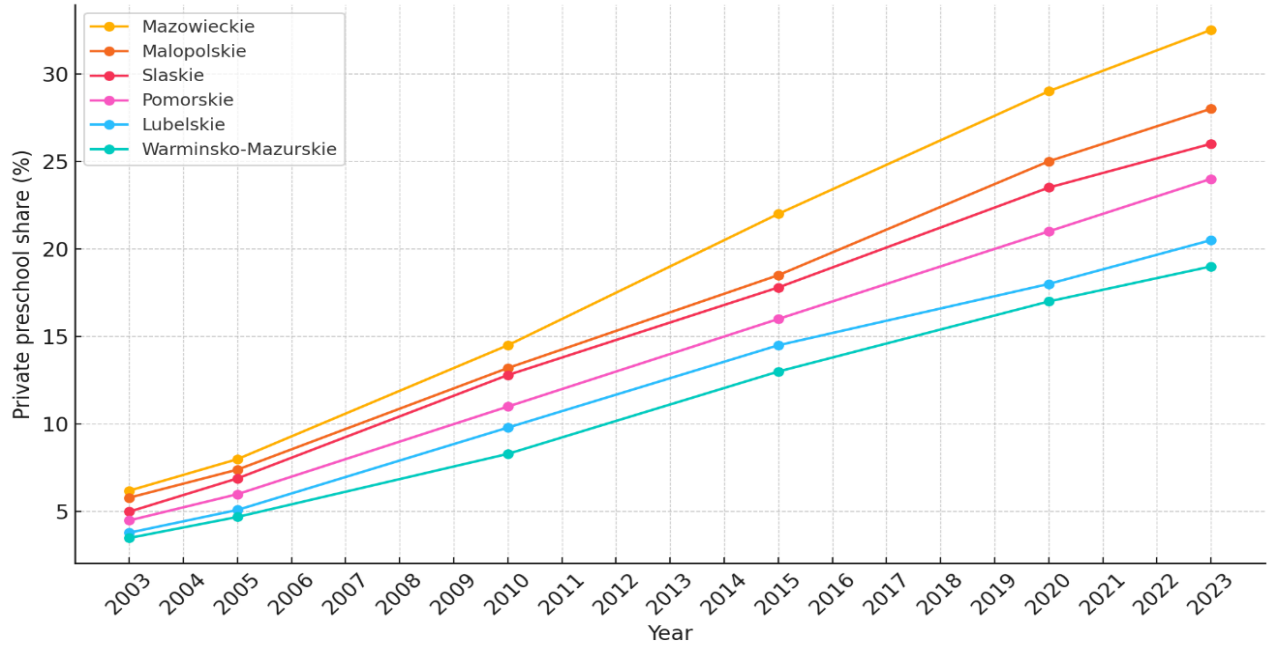
Moreover, it is essential to consider the heterogeneity of preschool institutions themselves: factors such as distance from home, the availability of parental choice, and the quality of education and care provided. Below we present a chart showing the share of private kindergartens in the total number of facilities in selected, diverse voivodeships (Fig. 2.5). The selection includes two voivodeships from each accessibility cluster – high, medium, and low – to illustrate differences across the spectrum of preschool availability. It is worth noting that the regions with the highest and lowest shares also correspond to the availability mentioned above. The highest share of private kindergartens is in the Mazowieckie voivodeship (which includes Warsaw) – 32.5% in 2023 – and the lowest is in the Warmińsko-Mazurskie voivodeship – 19.0%. In the

(0.99 children per place) is characteristic of higher accessibility. This suggests that the region's challenge is not a shortage of infrastructure but rather lower enrollment rates, likely influenced by social or cultural factors.

[6] Cluster analysis (k-means) makes it possible to simultaneously account for two key indicators of accessibility. Clustering enables the identification of groups of regions with similar accessibility profiles, which is more useful for public policy – it helps to pinpoint areas requiring similar interventions and to monitor shifts between categories over time.

second part of this section, we point out that this also translates into differences in eighth-grade exam results.

Fig. 2.5: Share of private kindergartens in the total number of facilities in selected voivodeships (2003–2023)



Source: Own calculations based on data from Statistics Poland.

Impact of the preschool accessibility on educational outcomes

Equally important is the question of the long-term impact of ECEC on children's later educational outcomes. Below, we analyse the results of the eighth-grade exams (E8), which have been administered since 2019. This means that the students taking the exam in 2019, 2020, and 2021 had already benefited, at least partially, and in some cases fully, from the increased availability of preschool education, both in terms of access to places and financial affordability. Unfortunately, it is not possible to compare these results with earlier cohorts because the previously administered sixth-grade exam (E6) took place earlier and was based on different assumptions. The existence of two different types of exams during the analysed period, their political dimension (as exam results are often interpreted in public discourse as evidence supporting or questioning

the effectiveness of government education policies), and the various changes introduced in curricula, implementation conditions, and exam tasks all contribute to the complexity of interpreting these outcomes. For instance, in the two years following the COVID-19 pandemic, exam requirements were somewhat simplified in response to the extended school closures and shift to online learning. Additionally, the *Central Examination Commission* publishes sample tests, which may influence student preparation and performance. Interpretation is further complicated by the fact that many factors beyond preschool attendance affect exam results, ranging from a family's cultural capital to differences in the quality of education offered by individual schools, as well as participation in extracurricular activities. Notably, the consistently higher scores in foreign language exams, most commonly English, are often attributed to the widespread popularity of private, paid language courses outside the regular school system.

Nevertheless, regardless of whether national average results fluctuate slightly up or down each year, regional disparities remain evident. The eighth-grade exam is not a formal requirement for completing primary school; therefore, it cannot be failed in the conventional sense. However, it serves as an important selection mechanism for further stages of education, accounting for 50% of the total points in the recruitment process to secondary schools. For the purposes of this analysis, voivodeships and counties were categorised into clusters based on average eighth-grade exam results from the years 2019–2024. The thresholds for each cluster are summarised in the table below:

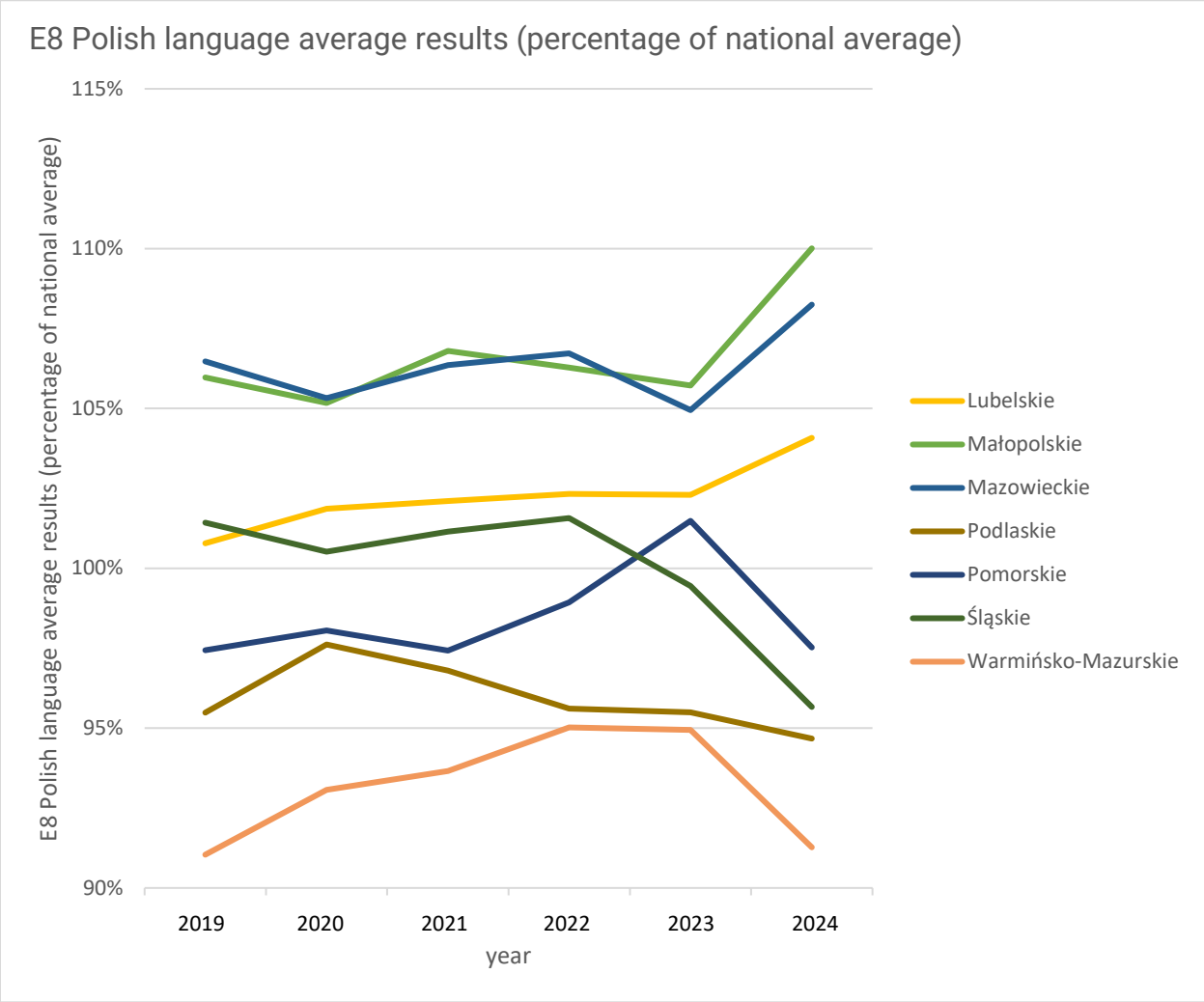
Cluster	**Threshold (%)**
High-OA	> 65%
Medium-OA	55% – 65%
Low-OA	< 55%

To enhance the clarity of the analysis, we introduced a clustering approach that integrates both disparities in access to preschool education (A) and eighth-grade exam outcomes (O). This allowed us to generate combined categories that classify voivodeships and counties into High-OA, Medium-OA, or Low-OA levels for both educational outcomes and access. The resulting categories are as follows:

- High-OA level:
    - voivodeships: Mazowieckie, Małopolskie
    - counties: bielski (Śląskie), grodziski (Mazowieckie)
- Medium-OA level:
    - voivodeships: Śląskie, Pomorskie
    - counties: Cracow (Małopolskie), Poznań (Wielkopolskie)
- Low-OA level:
    - voivodeships: Lubelskie, Podlaskie, Warmińsko-Mazurskie
    - counties: lubelski (Lubelskie), suwalski (Podlaskie)

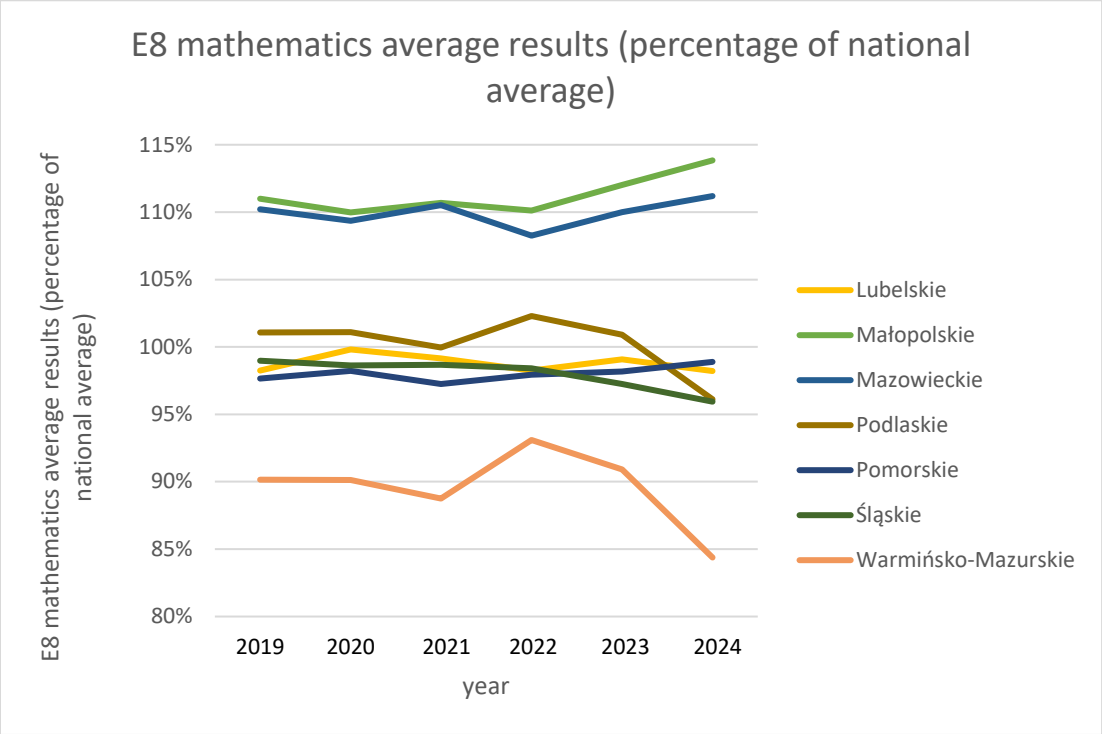
To provide a broader perspective, we present below the exam results for these voivodeships vs. national average across the three exam subjects: Polish language, mathematics, and a foreign language (Fig. 2.6, 2.7. 2.8). While results for some voivodeships fluctuate over time, we observe a consistent presence of both high and low performers. This indicates that significant regional disparities persist. Notably, the year 2022 marks a visible shift in the trend, which may be linked to the prolonged school closures during the Covid-19 pandemic. These closures disrupted regular learning processes, limited access to in-person instruction, and amplified existing inequalities related to digital resources and home learning environments, all of which could have negatively impacted student performance.

Fig 2.6: E8 Polish language average results (percentage of national average)



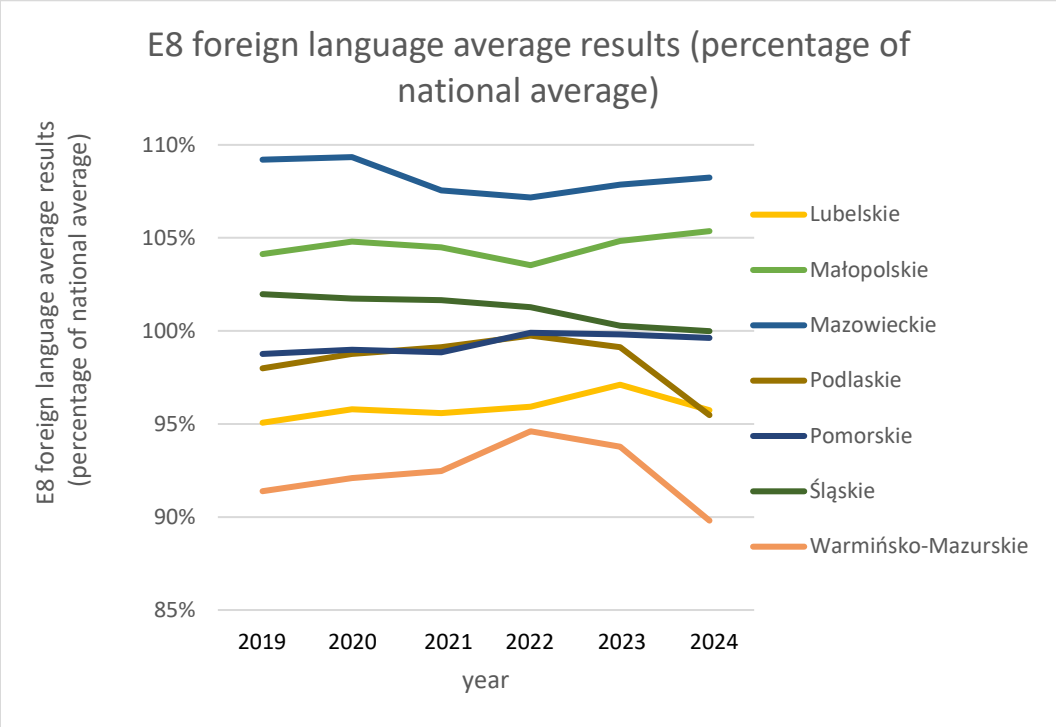
Source: Own calculations based on data from the *Central Examination Commission*.

Fig 2.7: E8 mathematics average results (percentage of national average)



Source: Own calculations based on data from the *Central Examination Commission*.

Fig 2.8: E8 foreign language average results (percentage of national average)



Source: Own calculations based on data from the *Central Examination Commission*.

Students from the Mazowieckie voivodeship (which includes Warsaw, the capital) and the Małopolskie voivodeship (with Cracow as another major urban centre) continue to perform significantly better than their peers in other regions. At the opposite end of the spectrum are the voivodeships that, in some cases, had weaker initial conditions in terms of ECEC availability, though this is not a universal rule. In the case of Polish language exam results, the lowest-performing regions include the Warmińsko-Mazurskie and Podlaskie voivodeships. For mathematics, the lowest scores are observed in the Warmińsko-Mazurskie and Śląskie voivodeships. In the foreign language component (mostly English), the Warmińsko-Mazurskie, Lubelskie and Podlaskie voivodeships consistently record the weakest results. The Warmińsko-Mazurskie voivodeship serves as an example of persistently lower academic performance. This trend corresponds with earlier findings regarding ECEC participation, as these regions, although they have made notable progress, appear to have improved the least in terms of preschool enrolment compared to others.

On county level, to determine whether a statistically significant relationship exists between preschool availability and eighth-grade examination (E8) results, a correlation analysis was conducted. Specifically, Pearson's correlation coefficients were calculated between indicators of preschool availability and E8 outcomes for each county.

Pearson correlation coefficients:

1. Number of children in preschools per 1,000 children aged 3–5 vs. examination scores
    i. English: $r = 0.85$
    ii. Polish: $r = 0.78$
    iii. Mathematics: $r = 0.72$
2. Number of children per preschool place vs. examination scores
    i. English: $r = -0.82$
    ii. Polish: $r = -0.75$
    iii. Mathematics: $r = -0.68$

Based on the above correlation coefficients, there is evidence of a statistically significant (at $p < 0.001$) relationship between preschool availability and E8 examination results across counties. The Pearson correlation coefficients were calculated using the complete dataset of 314 counties, ensuring statistical validity. A higher number of children enrolled in preschools per 1,000 children aged 3–5, as well as a lower number of children per available preschool place, are both associated with better exam performance.

The regression analysis was conducted at the county level (n = 314), using aggregated indicators of preschool accessibility and average E8 exam results. Separate models for urban and rural counties indicate that urbanity moderates the strength of the association: the relationship is stronger in urban areas ($R^2 = 0.65$, $p < 0.05$) than in rural areas ($R^2 = 0.45$, $p < 0.05$). The relatively high R^2 values reflect the use of aggregated data and the strong predictive power of preschool accessibility in this context, although other factors (e.g., socioeconomic status, school quality) also contribute to exam performance.

2.6.2. Media analysis results

Based on the thematic media content analysis of 40 articles from *Super Express*, *Fakt*, *Nasz Dziennik*, *Rzeczpospolita*, and *Gazeta Wyborcza*, various issues concerning the preschool education reform in Poland have been identified. They are discussed

thematically, with an emphasis put on broader interpretations and explanations, including how the ECEC reform was reported, which policies were highlighted in relation to it, how effective it was in reducing inequalities and which factors generated societal and political divisions and disputes, ultimately limiting the reform's effectiveness.

1. Ongoing challenges in access to preschools

Difficulties in access to preschools were consistently raised across all analysed media outlets. It was particularly problematic for 3-year-olds, who, until 2017, were not legally guaranteed a place in public preschool education and were thus often last in line. Nonetheless, the shortage of preschool places was reported throughout the reform's implementation period. Even in 2021, many local authorities were reported to be struggling to provide sufficient spaces.

> *In the smallest towns, there is still no access to preschool care. In large cities, on the other hand, the infrastructure is sometimes poorly suited to the population's age structure. New housing developments often lack facilities, but just a few bus stops away, there may be several preschools located in areas inhabited mostly by seniors, admits Marek Wójcik, the legal representative of the Association of Polish Cities* (*Rzeczpospolita*, 12.04.2021, "Challenging Enrolment to preschools")

Notably, the policy reversing the compulsory school age from 6 back to 7 (in 2016) was widely discussed as leading to an overlap of two age cohorts in preschools and significantly reducing availability of places, especially for the youngest children.

> *During the election campaign, PiS announced that it would reinstate compulsory schooling for 7-year-olds. This means that 6-year-olds will be able to remain in preschool classes. And this could lead to a problem – there may not be enough places in educational institutions for 3-year-olds.* (*Super Express*, 01.02.2016, "7-year-olds to start school. Expert warns: 3-year-olds may be left out in the cold")

Municipalities reported struggling to expand preschool availability and infrastructure due to significant ongoing financial constraints, even after the introduction of ECEC state subsidies in 2013 (see also Point 3 for more details).

> *"Although the amount of the state budget subsidy in both 2013 and 2014 will be higher than the revenue loss resulting from the reduction of preschool fees and will compensate for the 'losses', the amended law has presented us with new cost-generating challenges," says Włodzimierz Paszyński, Deputy Mayor of*

> *Warsaw. "This is related to the creation of new preschool places or the financing of spots in non-public preschools. When discussing the state budget subsidy, we must also consider the significant costs associated with creating and maintaining new preschool places. Warsaw will have to finance most of this task from its own funds," explains the Deputy Mayor* (*Gazeta Wyborcza*, 13.07.2012, "The Effects of the Preschool Revolution")

2. Controversies around admission criteria

Much of the media discourse, reflecting broader accessibility problems in ECEC, has also been centred on preschool admission rules. Some coverage, which could be considered as stigmatising, highlighted that the point-based system favoured low-income families, which allegedly led to discrimination against hard-working, tax-paying parents. Media, particularly those leaning centre-right, framed the prioritisation of poor families on benefits as a form of "strange social justice:"

> *Local governments point out that people who are active in the labour market should not be discriminated against, as preschools primarily exist to support them. [...] It is also simply unfair. Why should priority in preschool admissions be given to those who contribute less to the common budget, more often rely on public assistance, do not try to improve their situation on their own, and are less active? (Rzeczpospolita*, 06.11.2013, "Government: Preschools Not for Working Parents")

Local authorities also faced difficulties in establishing additional criteria that were both fair and legally sound in the context of limited public preschool provision:

> *It is difficult for local authorities to create admission criteria that do not give parents grounds to appeal decisions denying their child admission to a chosen facility.* (*Rzeczpospolita*, 12.04.2021, "Difficult Admission Process to Preschools")

Numerous examples of contested criteria and conflicting administrative court rulings were cited. Parental frustration was often reported, perhaps amplifying ongoing societal tensions and the sense of injustice between employed families and those perceived as not self-reliant.

> *Anna and her husband work hard all day to provide their daughter with a normal childhood. Their little girl just turned three, so the parents registered her in the electronic preschool enrolment system and eagerly awaited the results. When*

> *they were announced, they rubbed their eyes in disbelief. Their name was not on the list. None of the preschools wanted to accept their daughter! "I pay taxes, I work alongside my husband, and now I'll have to send my child to a private preschool, which will consume more than half of my salary. It would be better if I came from a dysfunctional family, didn't work, and depended on social welfare. Then my child would have a guaranteed place. This is insane!" Anna says angrily.* (*Fakt*, 16.04.2011, "Working honestly? You won't get a preschool place")

However, media outputs grounded in court rulings have also appeared, highlighting the importance of supporting single parents to access ECEC:

> *The Supreme Administrative Court ruled that when establishing admission criteria for public preschools, the municipal council should recognise that parents — or a single parent raising a child — must balance professional responsibilities and family obligations.* (*Rzeczpospolita*, 24.02.2016, "A Child of a Single Parent Must Not Be Treated Worse")

Nevertheless, the dominant media rhetoric emphasised that the criteria were insufficiently supporting working families, weakening the intended pro-family policy and negatively impacting reproductive decisions, thereby also reflecting broader views on gender roles and the importance of productivity in the media discourse. For example, Eurostat data was cited as evidence that working women give birth to twice as many children as those who are not economically active.

> *What could happen on the labour market? Motivation to take up employment will decrease, as additional income would force parents to resort to more expensive private preschool facilities. Motivation to have more children would also drop. According to Eurostat data, working Polish women give birth to twice as many children as those who are not employed. It is primarily economic factors and a lack of security that lead to depopulation.* (*Rzeczpospolita*, 06.11.2013, "Government: Preschools Not for Working Parents")

3. Ongoing underfunding and disputes between the national and local governments over ECEC financing

Alongside the debate over access to ECEC, financial issues emerged as a central theme in the media. Local authorities were frequently reported as struggling to maintain existing provision, let alone provide additional infrastructure. Before legislative changes that introduced state funding of preschools, the government was criticised for failing to support local governments, leaving them overburdened with responsibility for providing

ECEC. However, even when state subsidies were introduced, municipalities continued to report that governmental funding was insufficient, especially in poorer local authorities, where resources were inadequate not only for maintaining existing provision but also for creating new preschool places.

> *Starting in September, preschool fees are expected to decrease. Each paid hour at preschools is to cost parents only one złoty, with the state providing subsidies to local governments. Cities have already done the math and are sounding the alarm: the funding won't be enough. […] The state budget subsidy is too small for local governments to initiate the construction of new facilities. "There is no chance that the subsidy funds could be used by us for new investments".* (*Gazeta Wyborcza*, 12.07.2013, "The Effects of the Preschool Revolution")

This was portrayed as a political issue, reflecting a model of governance in which central authorities make decisions without consulting local authorities, relegating them to a limited role of (underfunded yet accountable) executors of state policy. This tension in ECEC governance in Poland was seen as a key obstacle to equitable and good-quality provision:

> *Preschools are, of course, a very important goal — I would even say a priority. They increase a child's chances of educational and professional success. And this is something we should have been thinking about 15 years ago, when we were wasting energy and money on middle schools. We talked about equalising opportunities, but instead of building preschools, we started building lower secondary schools (gimnazja). As a result, we are facing a crisis today and are practising the art of shifting responsibility and costs onto local authorities by the government*. (*Gazeta Wyborcza*, 15.04.2013, "A Slow Start for Preschools")

4. Regional and socio-economic inequalities in access to ECEC

Media coverage often emphasised that preschool availability remains unequal. In rural areas, small towns, and city outskirts, the problem was especially pronounced due to a lack of financial resources for further investment, stemming from the state's continuous underfunding of ECEC (see previous point). While pro-family and labour activation policies were declared priorities in political rhetoric, the media coverage highlighted that they were not adequately reflected in governmental action.

> *The government is preparing a real nightmare for working parents. Contrary to its slogans about pro-family policies and supporting labour market participation, it*

> *plans to strip them of the right to enrol their children in public preschools*. (*Rzeczpospolita*, 30.09.2013, "A country without preschools")

However, only left-leaning outlets emphasised the shortcomings of reform in relation to policies aimed at equalising opportunities for children from disadvantaged socio-economic backgrounds.

> *The PiS government fails to understand that preschools are where children's educational opportunities are levelled out, especially for those from low socio-economic backgrounds. That's why it's so important for them to start attending as early as possible*. (*Gazeta Wyborcza*, 29.11.2015, "Six-Year-Olds to Preschools, Three-Year-Olds Stay Home")

This stems from the initial agenda, which focused on women's employment activation rather than removing barriers for children. Nevertheless, the overall reform's effectiveness in reducing regional and socio-economic inequalities in access to ECEC was extensively criticised by the media, even though different aspects of this problem were reported depending on their political affiliation.

5. Politicisation of education and the lack of a coherent, long-term education policy based on consultations with key stakeholders

Educational reforms, including changes to e.g. the compulsory school age and the abolishment of lower secondary schools (*gimnazjum*), were portrayed in the media as rushed and politically motivated. For example, many governmental decisions regarding education were perceived as being introduced as part of election campaigns, cross-party political rivalry, or efforts to gain public support. They were further presented as lacking long-term strategic planning, stability, and education policy coherence across different stages of education and implemented without consultation with key stakeholders or infrastructure preparedness (see also Jakubowski 2021; Wiśniewski and Zahorska 2020 for similar conclusions), leading to many of the issues discussed above.

> *Time to launch the pre-election offensive! Although the official campaign has not yet begun, Hanna Gronkiewicz-Waltz decided that it's never too early for good news. She announced plans to build 50 new preschools in the capital. However, 20 of them won't be completed until after... 2017*. (*Super Express*, 29.01.2014, "New Preschools for the Election! 50 Facilities to Be Built")

> *Preschool education has become a popular topic among politicians.* (*Rzeczpospolita*, 21.01.2010, "The Democratic Left Alliance (SLD) also wants to build preschools").

> *The Ministry of Education is messing things up again. It turns out the Prime Minister has taken his leftward shift to heart. Or perhaps, after Jarosław Gowin's departure from Civic Platform, he now intends to focus solely on courting the centre-left electorate. Regardless of the motivation, the government's plan [regarding new preschool recruitment criteria] is harmful.* (*Rzeczpospolita*, 30.09.2013, "A Country without preschools")

The reversal of the school-age policy, for instance, was widely criticised as poorly implemented, leaving schools unprepared in terms of facilities and curricula. This reform was also seen as disconnected from the needs of parents and children, sparking strong opposition, particularly among urban families. Parental protests, such as the *Save the Little Ones* movement organised by the Elbanowski family, demonstrated the social discontent caused by top-down political decision-making.

> *The Parents' Rights Ombudsman's hotline has hardly stopped ringing since the beginning of September. Desperate parents of six-year-olds who started first grade this year are calling in. […] Experienced educators have no doubt that the slogan "Save the Little Ones" is entirely appropriate in diagnosing the current situation in Polish schools. The Parents' Rights Ombudsman Association, which initiated the petition campaign for a bill that would give parents the right to choose when their child starts school, is not giving up. It also continues its efforts to raise parents' awareness of the importance of fighting for a good school environment for their children*. (*Nasz Dziennik*, 22.09.2014, "Stolen Childhood")

Only *Gazeta Wyborcza* (left-wing) provided a critique of the Elbanowski movement, arguing that it neglected the needs of disadvantaged children and the importance of equal opportunity policies in rural/disadvantaged areas.

> *Włodzimierz Paszyński (vice-president of Warsaw): I'm convinced of one thing: PiS will abolish compulsory schooling for six-year-olds, because this is a change that can be implemented quickly, without funding, without a plan, since the ruling party won't concern itself with having a plan. Nor will they care that reversing the reform under pressure from the Elbanowski family will harm children. As a society, we'll be taking a step back by several decades, at a time when it finally seemed like we were catching up with Europe*. (*Gazeta Wyborcza*, 29.11.2015, "Six-Year-Olds to Preschools, Three-Year-Olds Stay Home")

Overall, however, many aspects of ECEC reform were often viewed as instrumental rather than integral to a long-term educational strategy, undermining its goals of increasing ECEC indicators and reducing urban-rural and regional disparities in Poland.

In summary, the preschool education reform in Poland, as presented in media discourse, has been depicted as underpinned by multifaceted problems, including state underfunding and overburdening of local authorities, especially those already disadvantaged, politicisation of education and top-down education policy making, characterising with lack of long-term planning, coherence and stability, and consultations with the key stakeholders These, in turn, have contributed to limiting access to ECEC and its overall effectiveness, allowing inequalities to persist. However, it is crucial to note that the way issues relating to ECEC reform were presented in the media was closely tied to their political affiliation and intended audiences. Centre-right media and tabloids often emphasised ECEC as linked to pro-family and labour market activation policies (with the exception of conservative/catholic voices contesting the need for ECEC), while left-leaning media focused more on equalising opportunities (however understood broadly and rarely referred to inequalities in educational outcomes explicitly). Moreover, the portrayal of low-income families by right-wing media was often stigmatising, depicting them as a burden on society and taxpayers and positioning them against capable, hard-working families. Simultaneously, coverage of the school-age policy reversal and the strong visibility of urban parents highlighted enduring territorial divisions – urban versus rural – and social stratification between families with high and low access to capital and resources. At the same time, however, apart from the extreme position of *Nasz Dziennik* (right/conservative/catholic), there was a broad political and media consensus on the value of developing ECEC and its importance (implicitly that it is beneficial for children), and actions for better access had strong public support (even if the details of the reform were disagreed on).

2.6.3. Interview analysis results

As we highlighted in the literature review, the ECEC reform in Poland has been a series of incremental policy changes aimed at expanding access to early childhood education and reducing inequalities, implemented between approximately 2008 and 2017. Interviews with key stakeholders allowed us to capture additional dimensions of the ECEC reforms, such as:

- Framing reforms in Poland as a multilevel, long-term, challenging and highly complex learning process between key actors in the field of design, implementation and evaluation;
- Gradual changes in overall political and public understanding of the importance of ECEC and their support for the reform;
- Multiple levels of influences: European Union, state, third sector, local authorities, communities and activists;
- Bottom-up grassroots influences and actions, which constituted a replacement for the withdrawing welfare state, and which remained mostly invisible in national media and political discourse.

Based on insights from interviews, combined with media analysis, and the existing literature and policy analysis, the authors built a multidimensional model of ECEC reform in Poland between 2000 and 2024. The model conceptualises ECEC reform as a long-term process shaped by interdependent influences and structural barriers across three interconnected levels: the European level, state level, the third sector and the local level. These levels have been interacting over a long period, similar to the relationship between top-down state ECEC policymaking and bottom-up grassroots activism and action in promoting and implementing ECEC, especially in disadvantaged and rural areas. In our model, we focus on demonstrating how these interlinked influences led to increased access to preschool education, especially in rural and disadvantaged areas, whilst also emphasising the persistent challenges encountered during the process. We argue that insights from Poland's reform can provide a valuable framework for future developments in ECEC (see Figure 2.13 and the subsequent analysis).

Fig. 2.13: Multilevel model of interdependent influences on and barriers/challenges to ECEC reforms in Poland

Level	Interdependent influences	Barriers/challenges
European and State	1. EU policy/standards: • Lisbon Strategy • 'ECEC benchmark' under the ET2020 strategic framework EU funding: • European Social Fund • Regional Development Fund 2. Low preschool access indicators (In 2008/2009, amongst the lowest in the EU)	1. High levels of bureaucracy; short-term funding; delays in funding; changes in funding/eligibility criteria; uncertainty of future funding; detailed and challenging reporting to the funding bodies, (financial) risk for the funding's beneficiaries 2. High levels of bureaucracy and legislative challenges: educational

	3. Invisible preschool age children/no public discourse/European and international influences 4. The countryside becomes an important beneficiary of the EU	regulations, tax regulations, sanitary regulations, health and safety regulations, institutional inspections and controls 3. Differences in ECEC projects' evaluation and granting subsidies at the state level
Long-term bottom-up learning process and collaboration between key stakeholders in ECEC and top-down education policy making		
State	1. Political will 2. Legislative changes: - introducing other forms of preschool education into the law (2008) - introducing a pre-school subsidy (state subsidy) and five free hours of preschool education (each additional hour for 1 PLN) in 2013; stable as of 2024 it stands at 1.44 PLN) right to pre-school education for 5-, 4- and 3-year-olds (2011, 2015, 2017)	1. Government – Local Authority model of governance in public policy making 2. No long-term planning/highly political issue/lack of coherence/ lack of holistic thinking about educational stages - Political conflicts regarding various aspects of ECEC (e.g. lowering/raising the school age (2011; 2016) - Teachers' strike (2019) - Disputes over financing preschool education or non-public preschools 3. Lack of consultations/co-production with the key stakeholders 4. Lack of evaluations of the policy/changes introduced at the state level
Third sector	The enormous role and efforts of the third sector in increasing access to ECEC in rural/disadvantaged regions in Poland (replacement of the welfare state): 1. Promoting/increasing awareness of the importance of ECEC amongst key stakeholders and local communities in rural areas - Preschools as educational facilities	The EU and state levels described above.

		- First EU-funded programs highlighting the invisibility of preschool children - Child-centred and progressive approaches to working with small children - Engaging families and local communities, including local policymakers 2. Building the necessary preschool infrastructure with the help of the EU funding 3. Small-scale evaluations of the pilot programs 4. Influencing legislative changes	
Local	Local activism	The enormous involvement of local persons; will and efforts	Efforts significantly exceeding available resources (human and economic); individual/community level rather than systemic solutions
	Local authorities/ policymakers	ECEC gradually recognised as important on the local authority's agenda Vital issue in local elections 'These kindergartens cannot be closed' – continuation of the EU-funded, third sector-led preschools by the Local authorities	Financing preschool education, declining birth rates, and potential preschool closures Financing preschools, quality of preschool education, teacher training, shortages and low salaries
	Families and local communities	Preschools as a centre of life in rural local communities, bringing communities and generations together New employment opportunities, especially for women Promoting local ECEC achievements by local media	Interdependence of education system elements, partnerships with parents, teachers, schools and local authorities, recognising educational needs (access to professional support), multidimensional inclusiveness (children with special needs, migrant children), Inequalities between urban and rural areas, lack of places in big cities, expensive elite preschools, declining birth rates

1. European Level: Strategic Frameworks and Funding

At the European level, the key changes to the provision of ECEC have been driven by EU policy and standards, such as the Lisbon Strategy (aimed at increasing labour market participation) and the ET2020 benchmark on early childhood education and care (ECEC) introduced in 2009 ('with a view to increasing participation in high quality early childhood education as a foundation for later educational success, especially in the case of those from disadvantaged backgrounds'; OJ of the EU 2009, cited in Flisi and Blasko 2019, p.3). These frameworks established targets for ECEC access and quality, significantly influencing national agendas. At the same time, EU financial instruments, particularly the European Social Fund and Regional Development Fund, provided key financial resources for infrastructure development and service provision in ECEC.

> *A program was created to promote equal access to preschool education and alternative forms of early childhood education within the European Union. This happened around the time we joined the EU, when the European Social Fund was available and a specific funding was launched. That's when we received a large grant*. (Interviewee 1)

> *In December 2006, the Ministry made some announcements. The office responsible for implementing the European Social Fund within the Ministry of National Education announced a new call for proposals, along with a promise of more grants. These grants were designed to support and co-finance the expansion of preschool education in rural areas and the development of initiatives that support early childhood education*. (Interviewee 2)

2. State Level: Political will and top-down policymaking

At the state level, low preschool access indicators were identified in Poland. In 2008/2009, participation was among the lowest in the EU, while the EU's strategic frameworks and funding, alongside the third sector's willingness to act, significantly shaped the state's support and political will in increasing access to ECEC.

> *It was around that time that we started working on a project aimed at equalising opportunities, because research — Eurostat data, I believe — showed that Poland was at the very bottom, or the very beginning, depending on how you look at it, of the European Union rankings. Of course, that was when we were just joining the EU, so let's be honest — it was the very beginning for us.* (Interviewee 1).

> *The civil servants were open to it [supporting activities aimed at increasing access to ECEC] because the policymakers simply allowed them to be — there was a genuine willingness to implement this change. At the same time, a new perspective opened — the possibility of securing further funding. […] but you know, that political will was there because, in light of the well-known gap in access to preschool education, third sector organisations stepped in. They secured funding, established preschool centers, and those centers turned out to be a great success in terms of improving access to early childhood education services. And now, with these small preschools already up and running, there was a need to ensure stable, long-term funding for them.* (Interviewee 4)

Multiple reforms (discussed in the literature review) were introduced over time. Yet, these were hampered by the high politicisation of ECEC and top-down education policy-making, a lack of long-term planning and coherence across various stages of education, chronic underfunding of ECEC by the state, and a lack of consultations with key stakeholders (parents, teachers, and local authorities), as also highlighted in the media analysis. Moreover, the reform process also lacked state-level evaluations, especially in relation to changes introduced and subsequently revoked, such as raising and lowering compulsory school age.

3a. The Third Sector: Key role in promoting and implementing ECEC

The third sector played an enormous role in driving and expanding access to preschool education, especially in rural and disadvantaged regions. Since the early 2000s, the third sector has worked tirelessly to increase awareness of the importance and positive impact of ECEC on child development and future opportunities amongst key state and local stakeholders. It established and ran the first EU-funded programs increasing access to ECEC in rural/disadvantaged regions, promoting child-centred and progressive pedagogical approaches to working with small children, training preschool teachers and engaging families and local communities, including local policymakers in ECEC provided locally.

> *Then, a first program was created, which we called 'When There Is No Kindergarten. ' And then its second edition was called 'Invisible Children'. I think that were very meaningful names.* (Interviewee 1)

Third-sector organisations also significantly contributed to the construction of preschool infrastructure, funded through EU mechanisms, and often conducted small-

scale evaluations of the ECEC pilot programs (in the absence of state evaluations) that subsequently informed teaching practice and policy. For example, third-sector lobbying led directly to the legalisation of diverse forms of preschool education in 2008. Such a change, in turn, allowed for further development of the ECEC infrastructure in rural communities, where traditional, more legally and infrastructurally demanding preschool forms had no chance of being implemented. As interviewee 4 further explained:

> *This [change in legislation] became a driving force for the development of rural preschool education. Including these [diverse forms of] preschools in the legislation meant they now had formal funding and a legal framework. Toward the end of the first EU programming period, third-sector organisations strongly lobbied to institutionalise these preschool centres, as EU funding was uncertain.*

Consequently, through the above initiatives and activities, it was the third sector that replaced the welfare state, providing not only service delivery but also advocacy, innovative practices, and community mobilisation. Moreover, as highlighted by our interviewees, the third sector's rolling ECEC has had a profound impact on children's development, well-being, and future opportunities.

> *We had surveys directed to parents, and professional ones done by the Foundation. 'The classes in the kindergarten club gave my child a lot; there is no problem when he is in a new group, he is not ashamed, and he has the courage to talk to others about some topics from kindergarten. It is one mother, then the other one – 'the child develops every day, wants to know more, has a lot of questions related to learning about the world around them and from what they have heard in the kindergarten club'. That's from interviews with parents. 'They acclimate to school faster, they are bolder, more active, they can cooperate with others, and they take the initiative. They are very active in play', that's what the teacher said. 'They are more creative in transforming the materials they have, they operate them more boldly. Children have better mastered the movements of their hands and fingers, which is important for writing. They have greater knowledge of the world and learn more easily and faster. They are more analytical'.* (Interviewee 3)

> *Children who were very difficult and I would say, well, weak, because they entered this stage of education very late, for example, as four- or five-year-olds. They are doing great today. One told me, 'I'm going abroad, I have a car, I live nicely, so. Some of them also started families and have children. As I observe, and sometimes I say, 'Listen, how are you doing? Do you remember me from*

> *kindergarten?' And they say that when 'we were so little, we played with paints. And you know, I paint now, because that's how it was then, that these paints were so accessible [in kindergartens], and at home, my mum never let us get dirty. Well, I remember those were good times'.* (Interviewee 2)

The third sector work was simultaneously embedded within and affected by the broader European and state-level barriers. Bureaucratic complexity, uncertainty of and short-term and frequent changes to EU funding, detailed and challenging reporting to the funding bodies, (financial) risk for the funding's beneficiaries, and a lack of systemic support often constrained third sector organisations' capacity to fully benefit from EU financial provision. Additional barriers were derived from complex state-level legislation concerning educational regulations, tax regulations, sanitary regulations, health and safety regulations, institutional inspections and controls. Despite these limitations, however, the third sector initiated and facilitated a long-term, bottom-up learning process, laying the foundations for collaborative practices between national policymakers and local actors and communities. This gradual yet steady increase in access to ECEC in rural and disadvantaged regions was a notable outcome.

> *It's an immense source of satisfaction — both from the work itself and from the relationships and collaboration behind it. We were truly united by one common goal. And that goal was being pursued, in different ways, of course, and it wasn't always easy. Obstacles kept coming up, but we kept looking for ways to overcome them. […] We had excellent cooperation within the voivodeship. They were learning about us, and once they understood how we worked, they began asking us about our experiences and opinions. And we kept coming back with new proposals [how to solve various issues/challenges], maybe this way, maybe that way. All of it was then passed up to the higher levels*. (Interviewee 2)

3b. Local Level: grassroots mobilisation, local authorities' involvement and sustainability of ECEC

At the local level, local activists, local authorities/policymakers, and families and communities played crucial roles in increasing the effectiveness of the ECEC reform, often bridging the gap between top-down designed reforms and local implementation.

Our research uncovered enormous involvement of local persons in initiating and sustaining access to ECEC, and these efforts significantly exceeded available human and economic resources. Such personal engagement, driven by a commitment to local communities and to promoting early childhood education, seemed to be a driving force

behind changes in ECEC access in rural communities. Provided in collaboration with the third sector, grassroots mobilisation acted as a replacement for a poor, if not non-existent, state provision, especially in the first stages of the reform. If not for such efforts, the success of the ECEC reform would likely be much lower, or it would not be sustained.

> *I had a really good team of people — I have to admit that. Both in securing the funding and in carrying out the projects, which is absolutely key. No mayor can do it alone unless they find people who are willing to follow through and make it happen*. (Interviewee 3)

Thanks to the third-sector efforts described earlier, ECEC gradually gained recognition also amongst local policymakers as a priority, increasingly viewed as a vital issue in local community lives and elections. In many cases, municipalities decided to continue EU-funded, third-sector-led preschools using their own budgets and state subsidies. This was often framed in local discourse as "*these kindergartens cannot be closed*" (Interviewee 2), signalling both political commitment to providing ECEC and community expectation. Such engagement of local authorities became an important step toward the sustainability of preschool education in rural areas.

> *Parents and local government officials were meeting regularly, and that lasted for many years. In my opinion, breaking down such barriers requires some passionate people. Certainly, building a group around you, because one person cannot do it all […]. We started in 2000, when there were rigid regulations, of which there were no exceptions, but there were ways out […] There were local authorities that did it [open preschools] at some schools, yes, well, it was done in various ways, there were ways out as to how to do it, provided that you wanted to.* (Interviewee 3)

> *And it was not yet at the stage, in 2007, for ECEC to be so important here (in local authorities). Today, it is completely different; today, preschool education is a priority; these are conscious decisions of mayors; today, the education of young children is a priority.* (Interviewee 2)

The influence of families and local communities also contributed to the gradual expansion of the ECEC. In rural areas, over time, awareness about the benefits of preschool education on children's development and opportunities became prevalent, whilst preschools became centres of community life, fostering intergenerational engagement and creating new employment and professional development opportunities, particularly for women. Local media also promoted local ECEC achievements, contributing to public awareness and support. Families' involvement in

ECEC provision fostered ties with teachers, local authorities, and schools, thereby strengthening cohesion and revitalising rural communities, especially those marginalised.

> *We [third-sector] also talked to the parents about whether they see any changes and progress in their children's development. From the moment they came to the preschool. And that's when the discussions started. And the positive changes started. And the conversations started about the children. Suddenly, the parents were discussing, it wasn't gossip, what the heck, who saw whom, where and so on, because up until now these were the types of points of interest. Suddenly, it turns out that our children were the centre, right? The methods of work [with children]; the parents appreciated very much throughout the project. […]. [W] We worked using the research project method, and the teachers always informed the parents since we were talking about pasta, so one mother brought pasta, so we would cook it. […] another one came up with the idea that we can go, because there is a bakery nearby. Or a bank, where we talked about money or to the garden, where one of the grandparents planted beautiful trees a long time ago. It turns out that, well, everyone asked us about these children and for sure, what kind of group is this? And so it turned out that everyone knew that the EU kindergartens function, children go to the EU kindergartens.* (Interviewee 2)

> *We recruited teachers locally from each county, from every municipality. It was important to us that the teachers working in a given area were actually from that specific municipality. That turned out to be an incredible source of motivation — and also a strong incentive for the local mayors. […] We trained the teachers. These were unemployed teachers — women registered at job centers, waiting for work. Sometimes they were the sole breadwinners for their families. These women were suddenly given a small piece of the world they could call their own, a space where they could shine and show their best selves — and they were paid for it. So they were incredibly motivated to work. (Interviewee 2)*

2.7. Discussion and conclusion

The objectives set out in these various reforms and policy initiatives can be considered partly achieved. Access to early childhood education has improved both in terms of the number of institutions and available places, as well as through the gradual introduction of legal guarantees ensuring a place for every child whose parents seek it. This has been accompanied by the recognition of the need to prioritise admissions for children from potentially disadvantaged backgrounds or those at risk of social exclusion. It can be assumed that, at present, there are no significant barriers to obtaining a place in preschool, which is particularly beneficial considering the increased number of children with a migrant background. At the same time, it should be emphasised that these developments took place under specific conditions, with strong involvement from the local governments, local communities and third sector. On the other hand, a particularly notable phenomenon in Poland's preschool landscape is the emergence of elite preschools, catering primarily to affluent families. These institutions offer premium educational programs, such as multilingual curricula, advanced technology integration, and exclusive extracurricular activities. The cost of tuition in such facilities can range from 5,000 to 10,000 PLN per month, making them inaccessible to most families. Consequently, these preschools also reinforce socioeconomic divisions, as children from different backgrounds have unequal access to high-quality early childhood education.

As our multilevel model of ECEC reform in Poland further demonstrates, the expansion of preschool access in the last two decades has been a non-linear, interdependent, and complex process, shaped by multiple layers of influence and barriers. Further longitudinal research is needed to assess the effects of the reforms within the Polish context. The EU benchmarks and funding were crucial for influencing the national agenda and providing resources for the implementation. However, their effectiveness has been undermined by various bureaucratic and legislative challenges. The third sector played a central role in the whole process, promoting awareness of and innovative approaches to ECEC amongst key stakeholders and driving its implementation in rural areas, even though it remained constrained by funding and institutional limitations at both the EU and state levels. Nevertheless, in the case of ECEC reform, the third sector managed to initiate and maintain a long-term process of learning and collaboration between key stakeholders at local and national levels, based on knowledge exchange and sharing good practice. Engaging local communities in the process, in turn, led to strong support for ECEC at the local level, resulting in its

subsequent sustainability as local authorities took over responsibility for ECEC provision. Whilst the new challenges have emerged, it cannot be denied that access to ECEC has increased significantly over the years, from fewer than 300–500 children per 1,000 (depending on the region) in 2002 to nearly full coverage by 2023. What is more, whilst we lack state-level evaluations of ECEC's equalising role, small-scale evaluations by the third sector provide strong support for its positive long-term and multidimensional effects on both children in rural areas, such as their socio-emotional and cognitive development, preparedness for school, better educational outcomes and social and professional functioning in adulthood and whole communities. Nevertheless, regional and rural inequalities persist. Preschool provision remains more limited in eastern and less affluent voivodeships, and enrolment is still lower in rural areas. Thus, while the number of disadvantaged children has likely decreased, the reduction is uneven and incomplete.

The nature of the available quantitative data, such as changes in exam formats and varying contextual conditions, combined with the fact that participation in early childhood education is only one of many interrelated factors influencing educational outcomes, prevent us from drawing strong causal conclusions regarding the impact of increased ECEC accessibility on academic performance. We can observe an association between participation in early childhood education and later student outcomes; however, this relationship is strongly influenced by the socio-economic circumstances of children and their families. Moreover, the observed results are additionally shaped by the effects of the prolonged lockdown during the Covid-19 pandemic. However, qualitative interview data and evaluations of locally implemented initiatives suggest that such a relationship does exist, particularly in contexts where reforms significantly transformed local educational environments. The establishment of new institutions and the dissemination of knowledge about the importance of ECEC for educational opportunities have contributed to improving the situation of children from disadvantaged backgrounds and less developed regions.

3. Hungary Case study Report

3.1 Introduction

In the present report, we evaluate the effectiveness of ***Hároméves kortól kötelező óvoda [mandatory kindergarten from the age of 3]*, an ISCED-0 level reform introduced in Hungary in 2015**. In line with this reform, it has been obligatory for families to enrol their children in kindergarten (preschool) in the academic year starting after the 3rd birthday of the child. The policy had the **explicit goal of reducing educational inequalities**, however, neither the original text, nor the supporting documents, the political discourse around the policy, or by the policymakers defined clearly what kind of inequalities are addressed (even in retrospect, in the qualitative interviews). Our qualitative enquiry suggested that policymakers believed the reform to have the ability to reduce inequalities in educational attainment, school performance and social skills between children from different socioeconomic backgrounds. For our own quantitative analysis of the impact of the policy, educational outcomes were defined as reading and mathematics test scores at the National Assessment of Basic Competencies in 8th grade (age 14-15) and obtaining a high school diploma (by the age of 20-21).

After introducing the national context of the policy (including the ECE system, policies addressing educational inequalities in recent years, and some trends of ECE), we provide an overview of earlier studies published on Hungarian ECE, including reforms. This is followed by the methodology section discussing the design and analysis of quantitative and qualitative data for the study. Then we present quantitative and qualitative results and finish with a short conclusion.

3.2. National Context

In Hungary, kindergartens (for children of age 3–6, ISCED 0) are part of the school system, while nurseries and Sure Start Houses (for children under the age of 3) constitute a part of the children's welfare sector. Nursery places are limited, available for a fee, and in state-funded (thus cheaper) institutions reserved for children whose parents are employed. Sure Start Houses (funded by the central budget since 2014) are targeting disadvantaged, especially Roma children and parents.

Kindergarten attendance from the age of 5 has been mandatory since 1996 (as regulated by an amendment to the Act LXXIX of 1993 on Public Education). Between 2009 and 2015, a financial incentive, kindergarten allowance was paid to disadvantaged families who enrolled their 3- or 4-year-olds (Kertesi and Kézdi, 2014). For the present analysis, the reform that introduced **mandatory kindergarten from the age of 3** was selected. The regulation was **codified by the *2011. évi CXC. törvény a nemzeti köznevelésről [Act CXC of 2011 on National Public Upbringing]*** (accepted on 19 December, announced on 29 December 2011). The original text of the Act set the target of 1 September 2014 for the reform to come into force. However, due to delayed infrastructural preparations, it was finally **launched on 1 September 2015**. The policy provides the possibility of requesting an exemption until the age of 4, in cases of special consideration, as long as the child's interests and the conditions of the family justify it. Currently this decision is made by the district-level government office, while earlier (before 2020) it was the settlement clerk (representative of the maintainer municipality) who had to evaluate the exemption requests.

Mandatory kindergarten from the age of 3 was introduced **in line with the goal set by the Hungarian National Social Inclusion Strategy** (HNSIS, first issued in 2011) **of increasing pre-school attendance among disadvantaged children**. As a basis of this goal, the HNSIS (2014, p. 80) referred to the above-mentioned 2011 Act on National Public Upbringing, which set out that "a priority objective of public education [is] to prevent the widening of the social gap". The HNSIS also stated that pre-school needed to be improved, with extra attention paid to the integrated education of disadvantaged, especially Roma children. In order to achieve this, apart from increased enrolment, the HNSIS proposed compensation for the costs for families in need, the expansion of kindergarten places (especially in disadvantaged regions), the improvement of material, professional and human resources – such as the methodological and social knowledge of teachers – and parental skills development. Kindergarten attendance is entailed by the provision of free lunches, which not only increases the potential of kindergartens to fulfil their role in the children's welfare system, but is also an attractive feature for disadvantaged parents (Kende, 2021).

In order to increase the positive impact of mandatory kindergarten on disadvantaged children, within the framework of the HNSIS some specific projects implemented (DG JUST, 2019). Small, regional working groups of professionals were formed, who assessed their situation and came up with action plans together. While the evaluation of the HNSIS was positive on the professional value of these projects, because they enhanced cooperation and were based on voluntary participation of teaching staff

(Nagy *et al.*, 2020), their effect on children has not been measured. On top of methodological challenges, the kindergarten sector – just like the entire education system – has been struggling with massive, geographically unequal teacher shortage (Lannert, 2021; Varga, 2023). As a response, new regulations introduced in the past years have allowed kindergartens to operate with a decreased number of qualified staff, and to employ teachers with lower than tertiary degrees (European Commission, 2024).

The majority of kindergartens are maintained by local municipalities, however, between 2010 and 2022, the ratio of children attending church-run and private kindergartens has increased from 3.7 to 10.2 and from 2.7 to 4.2%, respectively (Lőrincz and Antal-Fekete, 2022, p. 214; KSH, 2023, p. 65). This trend is in line with the widespread privatisation process in the education system and contributes to the segregation of children with higher and lower SES. Moreover, church-run kindergartens tend to be less affected by supply issues of teachers, speech therapists or special educators and the consequent overwork of professionals. Municipalities, especially in small, secluded villages and disadvantaged regions, are often unable to provide benefits on top of the state budget (Keller and Szőke, 2022). There are geographical inequalities even in basic access to ECE across the country (Lannert, 2015): in some counties, 10-15% of the age group concerned live in settlements without a kindergarten (Hajdu *et al.*, 2024, p. 151).

3.3. Country based literature review

There are no quantitative studies specifically on the effect of the 2015 kindergarten reform in Hungary. However, in this section we provide an overview of scientific publications that either a) used quantitative data on the impact of kindergarten attendance or b) looked into the impact of the 2015 reform.

The study of Szabó-Morvai *et al.* (2023) estimated the impact of kindergarten attendance on student academic achievement in Hungary. The study used administrative data from the National Assessment of Basic Competencies and used exogenous differences in time spent in preschool created by age-eligibility cut-offs in preschools. At the beginning of each school year kindergartens enrolled children who turned 3 until the end of the year, while children born after 1st of January started kindergarten one year later. This cut-off date creates variation in preschool starting age between children which is independent from the preferences and motivations of the parents. The study found that spending more time in kindergarten had a significant positive effect on mathematics and reading test scores in 6th grade (age 12). A one-year

increase in kindergarten attendance increased mathematics test scores by 9% of a standard deviation, while the effect was weaker but still statistically significant in 10th grade (age 16). In 6th grade, the study found stronger positive impact of kindergarten on children of mothers with low level of education, but the differences by maternal education disappeared by 10th grade. The study also highlighted the importance of taking into account that earlier enrolment in kindergarten could also lead to earlier school enrolment, which might have a negative effect on student achievement.

Hódi and Tóth (2016) researched basic skills and reading skills of students from different socioeconomic backgrounds in relation to the number of years they had spent in kindergarten. The authors used data from the School Longitudinal Program of Szeged, which started in 2003 with 5138 students. For the analysis, they used a representative sample of 3328 students. Basic skills were measured by the so-called DIFER test of basic skills, conducted at the point of primary school entry, while reading skills results were collected from measures at the end of the 2nd, 4th, 6th and 8th grade of the researched cohort. Findings indicate that children who spend 3-4 years in kindergarten have better school results than those who receive only 1-2 years of kindergarten education, irrespective of their socioeconomic background. However, the impact of the time spent in kindergarten decreases further down the educational trajectory, meaning that difference in reading scores according to kindergarten attendance diminishes in tests conducted towards the end of lower secondary school. Furthermore, among low-SES children, the effect of extra time in kindergarten is not shown by test scores, which may be explained by the test-oriented, intensive development they receive in the last year before school (even if they did not attend kindergarten for a substantial period of time). Finding that SES-based differences remain despite longer kindergarten education, the authors argue that kindergarten can contribute to diminishing differences in study outcomes, however, in itself it is not a sufficient mode of intervention of compensating for low SES.Török (2015) conducted a representative, questionnaire-based survey on the impact of pre-primary public education reforms on the operation of institutions. In every sampled kindergarten, a questionnaire-based interview was conducted with the principal, four teachers and ten parents. The final sample includes 432 principals, 1451 teachers and 3668 parents. The research found that lowering the age of mandatory kindergarten from 5 to 3 in 2015 was “unequivocally supported in all three respondent groups” (Török, 2015, p. 163). On another note, the study found that the majority of teachers considered kindergarten a successful way of early intervention; however, only 20% thought that their opportunities to aid disadvantaged children specifically had developed in years prior to the research.

3.4. Research questions/ hypotheses

In our quantitative analysis we cannot analyse specifically the effect of the 2015 reform on the compulsory age of kindergarten enrolment due to the lack of data. Administrative data for the first cohort affected by the reform will be available only in the upcoming years and existing survey data do not include the necessary information to conduct such analysis. Therefore, our quantitative analysis uses data from the period before the 2015 reform and asks the following research questions:

Did time spent in kindergarten contribute to improved educational outcomes for students during the period before the 2015 reform?

Did time spent in kindergarten had a stronger positive effect on children from more disadvantaged families mitigating educational inequalities during this period?

Research questions of the qualitative component were primarily developed at the STRIDE WP5 level for all participating countries. The main question was:

"To what extent have the media and the stakeholders identified mandatory kindergarten as being effective at reducing inequalities in educational outcomes?".

Also, we proposed further research questions to map the context and the history of the policymaking process:

How, when, with what explicit and implicit goals, and by whom was the policy developed and implemented?

How was the policy received, and perceived in retrospect, by teaching professionals and the wider public?

Were there any unintended consequences entailing the policy (if yes: what)?

3.5. Methods

In this section, we present the methodological background of the study, including research design, samples, and analytical methods. For the quantitative part, we carried out secondary analysis of data from the Hungarian Life Course Survey, which is a longitudinal survey fielded between 2006 and 2012. For the qualitative part, we conducted expert interviews with eight people (who were involved in the policymaking process or are active field practitioners) and a media analysis of more than 150 articles that discussed the reform in question to a greater or lesser degree.

3.5.1. Research design

Quantitative research design

The research question of our quantitative analysis investigates the effect of time spent in kindergarten on educational outcomes. According to the literature participation in preschool can have an effect on child outcomes through different mechanisms (see e.g. Felfe and Huber, 2017). In preschool centres children spend time in interaction with preschool teachers and their peers in an environment that provides conditions for developmental activities (e.g. toys, books, playground). In addition to these direct effects, preschool might also have indirect effects, for instance through an effect on parenting styles (if parents in contact with preschool teachers adjust their parenting style) or an effect on household incomes (if parents increase hours worked when child is in preschool).

The literature argues that children from low SES families might benefit more from universal preschool as this provides better opportunities for learning compared to the counterfactual care arrangement (care at home by family members). On the other hand, in high-income families, parental investment is higher, therefore the advantage of preschool over family care is not obvious and the reduction of time spent with the mother may have a negative effect on the development of socio-emotional skills (Schmutz, 2024). Reviews of the literature on the effect of universal preschool on educational outcomes conclude that the overall evidence is mixed (Dietrichson, Kristiansen and Nielsen, 2018; Van Huizen and Plantenga, 2018). Reviews also conclude that children from low-SES families tend to benefit more from universal preschool, therefore such programs have the potential to equalize educational opportunities (Van Huizen and Plantenga, 2018; Schmutz, 2024). Therefore, we do not have a clear hypothesis regarding the overall effect of time spent in kindergarten on later educational outcomes, but our expectation is that kindergarten attendance will have a more beneficial effect for children from disadvantaged families.

The main data source for the study is the Hungarian Life Course Survey (HLCS), a longitudinal survey of the cohort in 8th grade in May 2006, with yearly waves between 2007 and 2012. The sample frame of the study consists of those who completed the competency test in the National Assessment of Basic Competencies and have also responded to the household questionnaire. Initial sample size was 10.023 (n=2250 for each third of the competency score distribution, oversample of lowest competency

score group n=2250 and children with special education needs n=1000). Sample size in wave 6 was 7092, thus attrition is almost 29% of the initial sample, but sample composition is only little affected.

As the outcome variables of the study we use reading test score, mathematics test score in 8th grade (age 14-15) and obtaining a high school diploma by the age 20-21. The 8th grade reading test score and mathematics test score were merged to our database from the National Assessment of Basic Competencies. These test scores measure students' abilities to apply their reading and mathematical literacy skills to solve everyday problems. These variables are standardized test scores with zero mean and a standard deviation of one. As a third educational outcome we investigate whether the student has obtained a high school diploma by wave 6 of the study, when students are between 20 and 21 years of age. The main independent variable is the number of years of kindergarten attendance, which is recorded in wave 1 of the Hungarian Life Course Survey.

The choice of control variables is motivated by the literature on the child development production function (Felfe and Huber, 2017), therefore we control for characteristics of the child, measures of parental background and measures describing the neighbourhood and the municipality of the family. Among the characteristics of the child, we take into account year of birth, gender, low birth weight, special educational needs, maternal age at birth, number of siblings and participation in ECE before age 3. As a measure of parental background, we use the highest completed education level of the parents (four categories: primary, vocational, upper secondary, tertiary) and a measure of deprivation of the family when the child was in preschool age. This variable of deprivation during child's preschool years is based on three items: inability to buy enough food, inability to cover rent or utility bills and the inability to heat housing adequately due to lack of money. Our variable identifies as deprived those families where at least one of these deprivations prevailed during the child's preschool years. We also control for Roma ethnicity of the parents, by identifying those students where at least one of the parents identified himself/herself as Roma. In addition, as an indicator related to parenting behaviour, we include the frequency with which parents read bedtime stories to the child during the preschool years (categories: every day, several times a week, less often). We also control for level of urbanization and characteristics of the municipalities where the families live, such as number of social assistance recipients (per 1000 inhabitants) households electricity consumption (per 1000 inhabitants) and number of general practitioners (per 1000 inhabitants).

In the quantitative analysis we need to take into account that kindergarten attendance before compulsory enrolment age is not random but is based on voluntary decision of the parents. Families choose to enrol their children to kindergarten before compulsory age based on their needs (e.g. presence of siblings), preferences and means (understanding that even free public childcare incurs costs). Families and children might differ in terms of characteristics that influence both the decision to attend kindergarten and child outcomes. Some of these attributes are observable (e.g. number of siblings or parental education) and can be taken into account in the statistical analysis, but some others might remain unobservable to the analyst leading to an endogeneity problem and biased estimates when measuring the effect of kindergarten attendance.

As an attempt to correct for this bias **we use information on municipal-level data on supply of kindergarten places**. The idea is that the supply of kindergarten places (relative to the number of children in the relevant age group) in a municipality reflects municipalities resources, past investments and changes in cohort size, which are factors beyond the control of parents. To measure supply of kindergarten slots we merge settlement level information on number of kindergarten places and the number of children in the 3-5 year age range from the municipality-level database (TSTAR) of the Hungarian Central Statistical Office (HCSO). For 2/3 of the sample, we exactly know the municipality where the family of the student lived when the child was 3 years old. For the other cases we use the municipality where they first enrolled in primary school at the age of 6.

Qualitative research design

Following the guidance of STRIDE consortium partners, the qualitative part of our research consisted of expert interviews, which aimed to uncover the motivations of policymakers and the perceived impact of the reform, and the analysis of the representation of the reform in various media outlets. Both sources of qualitative data combined provide a rich picture of the intentions/goals of the policy, its implementation, and its reception among the public and professionals.

Media analysis

For the media analysis, we chose six major online newspapers according to the guidelines of Roehampton University. *24.hu*, *Bors*, *Index*, *Magyar Nemzet*, *Origo*, *Telex* were chosen to represent different points in the political spectrum, different profiles (broadsheet/tabloid) and some of the most widely read papers of the country. We

entered the search term "*mandatory kindergarten*" on the websites of the respective newspapers, which helped us identify and the analyse 155 articles. Table 3.1 depicts basic information on the media outlets and analysed articles.

Table 3.1: media outlets and analysed articles

Name of newspaper	Profile	Orientation	Time period analysed	Number of articles
24.hu	broadsheet	independent	2010-2024	35
Bors	tabloid	independent	2010-2024	4
Index	boadsheet	independent	2010-2020	69
Telex	broadsheet	independent	2020-2024	4
Origo	broadsheet/tabloid	independent/pro-government	2010-2024	19
Magyar Nemzet	broadsheet	pro-government	2010-2024	24

Notes. 1) Index was an independent broadsheet newspaper until 2020, from then on it became increasingly pro-government. Many of its former journalists founded a new independent newspaper, Telex, which is one of the most-read online newspapers in Hungary today. Therefore, in order to cover the whole period of analysis, we looked at articles from Index until September 2020, and articles from Telex from October 2020. 2) Origo was an independent broadsheet newspaper until 2016, from then on it became increasingly pro-government with an increasing amount of tabloid content.

Interviews

For the expert interviews, we used purposive and snowball sampling to find stakeholders who could provide information on different aspects of the policymaking process. We conducted 8 interviews with the following officials (active currently or in the early 2010s): 2 interviewees from the government level, 1 from the legislation (parliament), 2 from background institutions of the government, and 3 active kindergarten teachers (2 of whom were also representatives of a teachers' union). For all interviews, we used the guide prepared by the NKUA team. Table 3.2 presents codes and basic data of the interviewees.

Table 3.2: codes and basic data of the interviewees.

Code	Expertise	Activity	Gender
EI1	Legislation (MP, parliamentary committee for education)	Past*	M
EI2	Government	Past	M
EI3	Background institution	Past and present day	M
EI4	Background institution	Past and present day	F
EI5	Government	Present day	F
EI6	Kindergarten teacher, head	Past and present day	F
EI7	Kindergarten teacher, union**	Past	F
EI8	Kindergarten teacher, union**	Present day	F

Notes. *'Past' indicates that the interviewee was active in the period when the policy was prepared and first implemented, approx. 2010–2015. **EI7 was, and EI8 is, the representative of the kindergarten teachers' section of one of the major teachers' unions.

3.5.2. Data analysis

Quantitative analysis

In our quantitative analysis, after describing the main variables used in the analysis, we study the effect of kindergarten attendance with two sets of statistical models. In a first set of analyses we use ordinary least squares regression models where differences in educational outcomes (reading test score, mathematics test score and obtaining high school diploma) are explained by the number of years in kindergarten and the control variables including child attributes, parental background variables and municipality-level variables. In order to correct for the potential endogeneity problem described above, instead of using the individual level kindergarten attendance variable we use the supply of kindergarten places at the municipality level as the main explanatory variable. The regression coefficient of the variable measures to what extent increasing the supply of kindergarten places in the municipality affects student outcomes. Such estimates are called intent-to-treat (ITT) estimates in the literature (Felfe and Lalive, 2010). These

estimates do not measure the effect of kindergarten among those actually attending kindergarten but take into account that some of the families choose not to attend.

In the second set of estimates, we apply an instrumental variable approach using municipal level of kindergarten places as an instrument for number of years in kindergarten. The argument behind is that the local supply of kindergarten places reflects differences that are independent of the preferences and choices of the parents, such as municipalities resources, past investments or changes in cohort size. To implement the instrumental variable approach a two-stage least squares regression model was applied. In the first stage regression the dependent variable is the number of years in kindergarten and the model includes the instrumental variable – supply of kindergarten places in the municipality – and all control variables as independent variables. In the second stage we explain student outcomes by kindergarten attendance predicted from the first-stage regression, which therefore includes only the exogenous part of the variation in kindergarten attendance (and the controls). By this method we can estimate the so called "Local Average Treatment Effect" (LATE), which shows the effect for those individuals who are induced to enter treatment by the instrument.

In models where we study differences between disadvantaged families and more well-off families, we include the interaction between our deprivation variable and kindergarten attendance.

Media analysis

When coding the 155 articles identified at the six chosen online newspapers for the media analysis, we did not have a predefined list of codes, instead, we took an inductive approach. Thus, we identified 133 codes, which we then grouped into 12 main categories. Table 3.3 shows all codes, along with the broad category they belong to.

Table 3.3

General	from 3 years of age from 4 years of age from 5 years of age public education act public education reform reduction in pre-school attendance increase in kindergarten attendance	**Implementation challenges**	data provision school capacity kindergarten capacity capacity expansion lack of capacity school maturity teacher shortage

Political context / issues	internal political tension demonstration violation of legal certainty public education act = the government	**Education / childcare / child protection institutions**	Sure Start Houses nursery family kindergarten private kindergarten
Policymaking process	revision introduction delaying introduction background calculation government plan critique environmental study proposal for amendment parliamentary resolution parliamentary vote professional preparation social consultation amendment of act draft law debate document	**Actors (persons), i.e. members of the government and the governing party Fidesz (involved in policy making or debates), oppositional parties, teachers' unions and other organizations**	Zoltán Balog Judit Czunyiné Bertalan Katalin Fábián Zoltán Gloviczki István Hiller Rózsa Hoffmann Péter Horváth Katalin Novák Viktor Orbán László Palkovics Zoltán Pokorni MPs parents
Equalising goals	discrimination equal access inequality reduction equality of opportunity public catering (decreasing hunger) ethnic differences (multiply) disadvantaged children success at school reducing drop-out rates early intervention Hungarian National Social Inclusion Strategy labour market opportunities	**Organisations, institutions**	Constitutional Court NGOs opposition parties EU Fidesz Jobbik KDNP Hungarian Association for Kindergarten Education Association of Hungarian Cities with County Rights Prime Minister's Office Ministry for Human Resources Ministry for National Economy

	Roma poverty segregation socialization social integration catching up regional disadvantages parental skills development		Secretariat for Education Parliamentary Council for Education Office of Education Education Working Group ombudsman municipal maintenance teachers' organizations Secretariat for Social Inclusion Széchenyi Plan
Other goals	family policy effect child welfare economic role work-based economy employment opportunities national middle class	**Finances**	wage support financing kindergarten allowance lack of money teacher wage increase
Kindergarten conditions	increase in kindergarten group size catering admission criteria sending children home container kindergarten local kindergarten kindergarten closures building kindergartens violence in kindergartens kindergarten teachers – tensions kindergarten teachers professional difficulties applications exceeding quota waitlist	**Policy implementation**	punishment family allowance suspension of family allowance school/kindergarten exemption guardianship authorities unexcused absence rigidity / flexibility kindergarten maturity incentives geographical characteristics

Interviews

After transcribing the interviews, we applied a deductive coding strategy, based on a) the research questions and b) the themes identified by the media analysis (with the purpose of comparability). Such propositions “can be used as a guide to identify pertinent data points, to bound the inquiry, and to offer points of comparison for what is happening in the study” (Bingham, 2023, p. 2). In the case of the interviews, we chose not to continue the inductive coding process of the media analysis stage because rather than one set of qualitative data (to be coded in a uniform manner throughout), we considered the articles and the interview transcripts as two different and comparable, contrastable sets of data. This decision was made considering their alternate sources (publicly available, processed information, provided by journalists in the articles in the past decade vs. opinions and knowledge provided by experts in one-on-one interview situations in the present day). We also chose to treat them independently because they answer different aspects of the research questions, built upon each other. All in all, we conducted thematic analysis of the interviews and the media content combined, however, the themes were primarily developed from the inductively coded media analysis, completed by further details gained from the interviews. Rather than treating these different sources as equal, we compared and contrasted findings from the two sources, which led to rich, complex themes.

3.6. Results

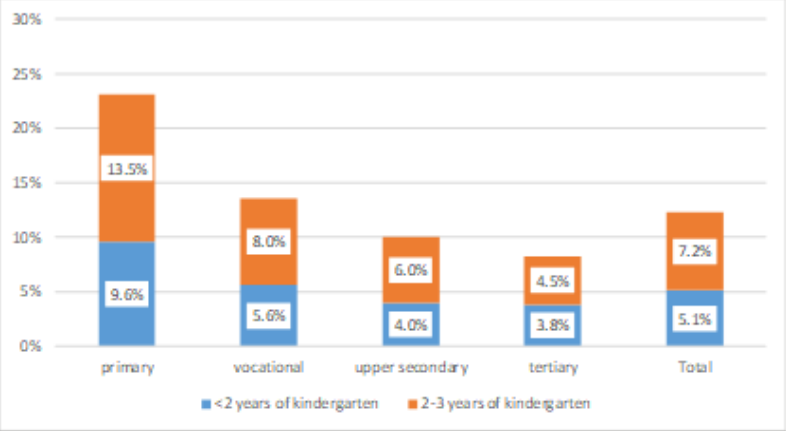
3.6.1. Quantitative results

Based on responses of the parents a majority of children (88%) participated in kindergarten for 3 or more years, while 7% of children attended kindergarten for a period between 2 and 3 years and 5% of children attended for less than 2 years. Kindergarten enrolment shows association with parental schooling. Among children of parents with primary education the percentage of those attending kindergarten for less than 3 years is 23%, while in case of children of parents with tertiary education it is only 8% (see Figure 1). Children of parents with vocational education and high school diploma are in between these two groups.

According to Havas (2004) one of the reasons for relatively low kindergarten attendance among children from disadvantaged families was that many of them lived in settlements without a kindergarten or characterized by scarcity of kindergarten places.

In addition, in municipalities facing a shortage of kindergarten places children of working parents were prioritized over children of unemployed and disadvantaged parents. Havas (2004) also mentions that the significant cultural distance between the world of kindergartens and disadvantaged families also contributed to lower attendance among these families. Many parents believed that kindergarten teachers did not consider them partners and had a low level of trust in the institution.

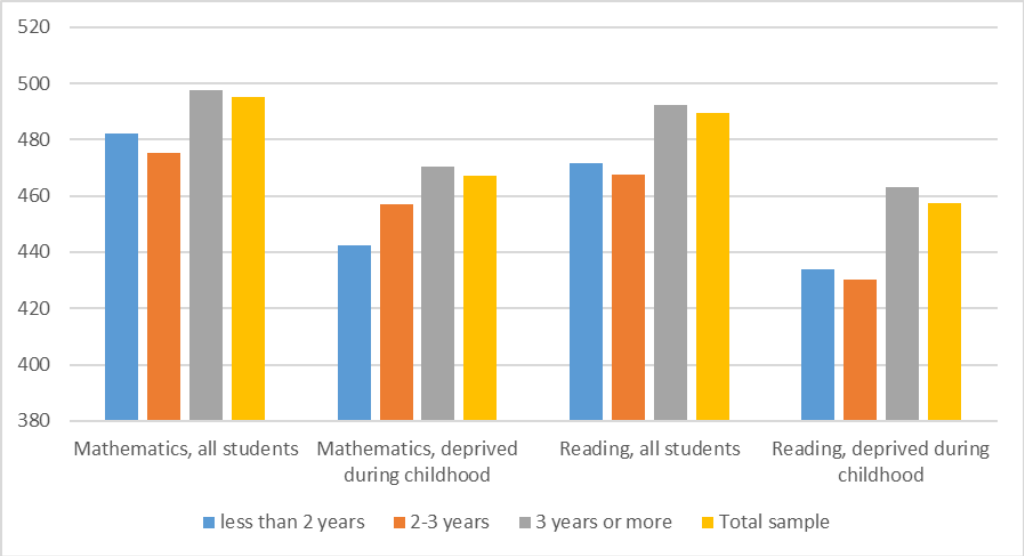
Figure 3.1: Percentage of respondents attending kindergarten for less than 3 years by level of parental education



Source: Own calculation based on Hungarian Life Course Survey (HLCS).

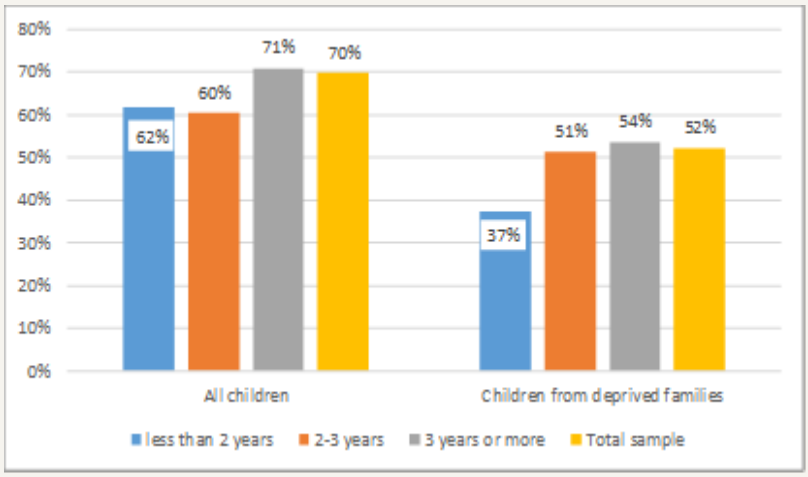
The bivariate relationships between number of years in kindergarten and our outcome variables is shown in Figures 3.2 and 3.3. Average test scores in both reading and mathematics are higher among those who attended kindergarten for 3 years compared to those who attended for a shorter period. This pattern is visible for all children and also in case of children from deprived families. Among all children, the percentage of those obtaining a high school diploma by wave 6 is 71% among those who attended for 3 years and only 62% among those who attended for less than 2 years. Among the children from deprived families the corresponding figures are 54% for those with 3 years or more of kindergarten attendance and 37% for those with less than 2 years of kindergarten attendance.

Figure 3.2: Average (unstandardised) test scores (Grade 8), by number of years in kindergarten



Source: Own calculation based on Hungarian Life Course Survey (HLCS).

Figure 3.3: Percentage of those obtaining a high school diploma by wave 6 by number of years in kindergarten



Source: Own calculation based on Hungarian Life Course Survey (HLCS).

In the following we present results of our multivariate analysis of the effect of kindergarten attendance on student outcomes. To motivate the use of the municipality level supply of kindergarten places as an instrumental variable in the analysis one

needs to demonstrate that the instrument is strongly correlated to the endogenous variable (relevance of the instrumental variable) and that it is related to the outcome variable only through the endogenous independent variable (validity of the instrument).

To demonstrate the relevance of the instrumental variables we show results from the first stage regression, where the number of years spent in kindergarten is regressed on the instrumental variable (municipal supply of kindergarten places) and the full set of control variables (see Table A2 in the Appendix). The estimated coefficient of municipal supply of kindergarten places is positive and highly significant, and the F statistic of the regression is 22.08, which exceeds the level that is conventionally regarded as satisfactory (10).

The most important threat to the validity of the instrumental variable is the possibility of self-selection to municipalities with better offer of kindergarten places. Although it is plausible that the supply of kindergarten places is beyond the control of parents in a given municipality, families might choose their location of residence based on the availability of preschools offered by the municipalities. To understand typical motivations of migration decisions in Hungary one has to take into account that the period between 1990 and 1996 – when the students of our sample were born and reached preschool age – was characterized by severe economic recession that accompanied Hungary's transition from socialist economy to capitalism. Gross domestic product (GDP) declined by 18% during the first years of the decade and employment decreased dramatically (from 4.9 million to 3.7 million) between 1990 and 1997. Rising unemployment and inactivity led to rising poverty rates, which were exacerbated also by an austerity package in 1995, which cut social expenditure.

During this period internal migration in Hungary was limited, approximately 2% of the population participated in permanent migration between municipalities (Bálint, 2012). From the mid-nineties the dominant pattern of internal migration was a suburbanization tendency from Budapest and the bigger cities to neighbouring small settlements (Pénzes, 2024). Therefore, rural to urban migration, which could be motivated by the better accessibility of social services (including preschool) has been of smaller importance during this period. Rural to urban migration was also constrained by very high rates of owner occupancy in the Hungarian housing sector, which, coupled with huge differences in house prices between rural and urban areas, made migration to urban areas very costly (Hegedüs, 2001). Literature on internal migration in this period has shown the importance of economic incentives, highlighting that economic activity and settlement income level had a positive effect, while unemployment had a negative effect on migration to a given settlement (Cseres-Gergely, 2003). Overall, we conclude

that during this period of economic recession accessibility of preschool was not an important motivation for migration between municipalities in Hungary. Therefore, we argue that – conditionally on the set of control variables – municipal supply of kindergarten places can be regarded as an exogenous variable.

Table 3.4: Overall effect of attendance in kindergarten on student outcomes (regression coefficients)

	Reading test score, Grade 8	**Mathematics test score, Grade 8**	**Having high school diploma in wave 6**
OLS estimates (ITT)	(1)	(2)	(3)
Supply of kindergarten places	0.055	0.024	-0.006
	(0.087)	(0.506)	(0.690)
Control variables	Yes	Yes	Yes
N	9853	9027	6978
R^2	0.328	0.278	0.345
IV estimates	(4)	(5)	(6)
Kindergarten attendance (years)	0.299	0.118	-0.033
	(0.076)	(0.503)	(0.695)
Control variables	Yes	Yes	Yes
N	9804	8990	6952
R^2	0.308	0.276	0.344

Notes: Results controlling for child age, gender, low birth weight, special education needs, number of siblings, maternal age at birth, ECE attendance before age 3, highest completed education level of the parents, deprivation, Roma ethnicity, frequency of parents reading bedtime stories, level of urbanization, neighbourhood poverty, number of social assistance recipients in the municipality (per 1000 inhabitants), households electricity consumption in the municipality (per 1000 inhabitants) and number of general practitioners in the municipality (per 1000 inhabitants) . P-values in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Source: Own calculation based on Hungarian Life Course Survey (HLCS).

Results of our regression analysis regarding the overall effect of kindergarten attendance on educational outcomes is summarised in Table 3.4 (For full results of the

models, see Table A3 and A4 in the Appendix). The OLS regression estimates (ITT effects) show a weak positive effect of municipal supply of kindergarten places on reading test scores, but the estimated coefficient is not statistically significant. In case of mathematics test score and obtaining high school diploma there is no overall effect of kindergarten attendance. The instrumental variables estimates are similar in the sense that a positive coefficient of years spent in kindergarten is estimated but it is not statistically significant. In case of the other educational outcomes no overall effect of kindergarten attendance has been found.

Table3. 5 The effect of attendance in kindergarten on student outcomes by deprivation groups (regression coefficients)

	Reading test score, Grade 8	**Mathematics test score, Grade 8**	**Having high school diploma in wave 6**
OLS estimates (ITT)	(1)	(2)	(3)
Supply of kindergarten places	0.044	0.002	-0.004
- among the non-deprived	(0.169)	(0.953)	(0.802)
Supply of kindergarten places	0.204*	0.339***	-0.037
- among the deprived	(0.028)	(0.001)	(0.484)
Control variables	Yes	Yes	Yes
N	9853	9027	6978
R^2	0.328	0.279	0.345
IV estimates	(4)	(5)	(6)
Kindergarten attendance (years)	0.255	0.007	-0.023
- among the non-deprived	(0.152)	(0.970)	(0.800)
Kindergarten attendance (years)	0.605*	0.732**	-0.117
- among the deprived	(0.042)	(0.002)	(0.476)
Control variables	Yes	Yes	Yes
N	9804	8990	6952
R^2	0.303	0.262	0.343

Notes: Results controlling for child age, gender, low birth weight, special education needs, number of siblings, maternal age at birth, ECE attendance before age 3, highest completed education level of the parents, deprivation, Roma ethnicity, frequency of

parents reading bedtime stories, level of urbanization, neighbourhood poverty, number of social assistance recipients in the municipality (per 1000 inhabitants), households electricity consumption in the municipality (per 1000 inhabitants) and number of general practitioners in the municipality (per 1000 inhabitants) . P-values in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Source: Own calculation based on Hungarian Life Course Survey (HLCS).

Table 3.5 shows the estimates of the effect of kindergarten attendance separately for students from deprived families and those families who haven't experienced deprivation during preschool years of the child. In case of reading test scores and mathematics test scores both sets of estimates show a similar pattern: the impact of kindergarten attendance is statistically significant and positive among students whose family struggled with deprivation during the child's preschool years, while for other families no significant effect has been found. In case of having obtained a high school diploma by wave 6 no significant effect of kindergarten has been found in any of the models estimated.

3.6.2. Results from interviews and media analysis

Goals and target groups of the policy

When interviewees were asked to identify the **target group** of the researched policy (mandatory kindergarten from the age of 3), those who participated in the policymaking named disadvantaged families and children, and those living in rural areas, especially the Roma. These interviewees represented different levels of the responsible authorities, up to the highest levels of the Ministry for National Resources.

> *"It was obvious for everyone that [the policy] basically wants to pull the children of disadvantaged families into the kindergarten early, but it could not manage to do that out of political correctness, timidity, or legal inertia. So, it was extended to everyone, while practically opening an escape route*[7] *for the middle-class."* (EI1)

[7] The interviewee is referring to the exemption that families can get up to the age of 4 of children.

The examined articles also mentioned disadvantaged children in general as the main target group, naming the Roma less frequently during the initial debate of the policy proposal, before implementation, as compared to when discussing the effects of the policy in later years. However, an article made it clear that the HNSIS, the first national Roma inclusion strategy (which was accepted in 2011 and was the first of a series of social inclusion strategies implemented since) named this specific policy as an instrument to improve social inclusion of the Roma.

Concerning what the set **goal** of – or idea behind – the reform was, the majority of respondents also referred to disadvantaged groups in various ways. As a low-threshold expectation, one interviewee said he had hoped that *"the problem would become visible"* (EI1) if more disadvantaged children appeared in the institutions. Others remembered more concrete goals: inequality reduction, the successful preparation of disadvantaged/Roma children for school and thus better school performances. Furthermore, adaptation to wider policy frameworks were mentioned (increasing the number of kindergarteners was an EU-level and national goal set by strategies), as well as EU development funds targeting disadvantaged regions.

EI4 pointed out that the spread of more modern pedagogical methods and the development of relations between institutions and families were also attached to the policy implementation as additional targets.

> *"[It was necessary] to spread new, up-to-date pedagogical methods. […] It was visible that this methodological background needed more emphasis, modern methods needed to be introduced and disseminated, and as part of that, individual development and relations with families, dialogues between institutions and families needed to be strengthened. […] These developments took place as early as the 2007–2013 period already, and then they were continued."* (EI4)

However, practising kindergarten teachers (EI6 and EI8) as well as a current government official (EI5) emphasized that the initial training of kindergarten teachers is far from up-to-date, especially considering alternative methods, adaptation to different developmental paths of children, providing equal opportunities, and teachers' learning skills and openness to change.

Among policy areas not strictly connected to educational inequalities, the most widely mentioned one was labour market expansion (especially the employment of women). The idea that women should *"take [their] children to kindergarten, or even nursery, and go, produce GDP"*, as EI1 stated in a perceptively ironic way, was mentioned multiple times.

EI3 pointed out that this was not only connected to the goal of the government to keep as many people active as possible, but also to the system of family policy, because a large sum of support was allocated to families with working parents in the form of tax reductions. Another policy area mentioned was that of children's welfare, and the potential of kindergartens to keep children *"under the supervision of professionals"* (EI3) in areas where they might be otherwise neglected. The idea was that kindergarten attendance can also help them socialize, learn about hygiene and communal cooperation, and provide meals for potentially malnourished children (EI4, EI7). EI2 also explained that between 2010–2013 the approaches, methods and structures of the social, healthcare, and educational spheres were unified.

There were several equalizing goals mentioned in the media, as well. The most commonly emphasised one was that of reducing attrition in schools later on in the educational career, by providing a solid institutional socialization setting in early childhood education meant to alleviate disadvantages stemming from the family background. The concepts of early intervention, social inclusion, equal access to kindergarten, equality of opportunity and school success were also mentioned very often, in the same context.

Aims not directly related to inequality reduction were mostly connected to the government's broader family and labour market policy. As also the interviewees mentioned, by ensuring that kindergarten attendance was universal, the goal was to expand the possibilities for women with small children to (re-)enter the labour market. The economic aspects of this measure were also stressed, while linking it to the Fidesz governments' notion (Köllő, 2020) of establishing a 'work-based society' (with very high employment and low benefit levels), as well. In the long run, by contributing to these efforts, the policy (along with other measures introduced in the same law) was also framed to advance the formation of a 'national middle class'.

Preparation, public debates, policymaking process

Policymakers (EI1–4) were asked about any background studies and **preexisting knowledge** that had contributed to the policy development. Many of them referred to international trends that supported the expansion of kindergarten attendance. As a government-level expert put it,

> *"the direct connection between [decreasing school selectivity] and kindergarten attendance […] is hard to measure; it's more like a hypothesis. […] [But we received] very positive feedback from the EU that this would be an acknowledged*

> *and important endeavour. At every negotiation and professional consultation we had with the EU, it was confirmed that they thought this was the right direction."* (EI2)

Others also referred to Eurostat, OECD and Eurydice data and recommendations as proof of an *"international trend"* (EI3) that supports the expansion of institutionalized ECEC. Furthermore, Hungarian publications from the late 2000s were cited that recommended kindergarten attendance as a potential response to educational inequalities. The interviewees made it clear that there was a *"professional consensus"* (EI2) or at least *"a perception, an assumption"* (EI1) that kindergarten attendance is useful:

> *"This is a fully positive thing, and one of the positives is that it can save a lot of children from selection, so it undoubtedly has an effect of creating opportunities. This is not a question for me."* (EI3)

However, there was no hard data available on "the situation" in disadvantaged regions / communities regarding kindergarten attendance, and no new analysis or background study was produced as part of the preparation for the policy change. It became clear from the interviews that policymakers were certain that expanding kindergarten attendance through stricter regulation would have a positive impact on inequalities, and the supportive environment in the EU also encouraged them to proceed without further ado.

The same interviews (EI1–4) provided information on steps of the **policymaking process** from the decisionmakers' perspective. According to EI3, the political decision on the new act on public upbringing of 2011 (which included the kindergarten reform in question) was made by the prime minister and the state secretary for education. Preparations for the new act started even before the government took power in the spring of 2010 and continued in an intensified manner from the fall of 2010. The political decision was put into action by a small team of experts, who worked on phrasing the legislative text and providing background studies (EI2).

As EI2 put it, *"in the spring of 2011, social consultations took place – something that existed back then"*, and during the 2011 EU presidency of Hungary, *"the ECEC concept of the new act received much positive feedback from experts of other EU countries"*. In the fall of 2011, parliamentary **consultations and debates** took place, followed by the acceptance of the act in December 2011. These parliamentary as well as other public debates in the proposal phase received significant attention in the media, across all

platforms. The working group for education formed within the Fidesz fraction spoke out against several aspects of the bill, and the mandatory kindergarten policy in particular. The president of the Commission for Education, who was a Fidesz MP, also gave his opinion in media interviews: while agreeing with the policy in general, his stance was that kindergarten attendance should only be mandatory from the age of 4 years. The articles also reported on the fact that there was a disagreement between the Ministry for National Economy and the Ministry of Human Resources (which the Secretary of Education was a part of), however, that concerned other parts of the proposal. The conflict was also framed to be taking place between the two coalition parties Fidesz and KDNP (as Rózsa Hoffmann, the secretary of education was a member of the KDNP party). Most probably due to these conflicts/critiques, Orbán also rejected the first few versions of the policy proposal. However, when resistance to the proposal within the party continued, reportedly, his message to Fidesz politicians was that those who attack the proposal, attack him personally, and he regards it as a breach of their agreement to cooperate.

> *"Multiple, more than 300 proposals were submitted to change the bill [the new act on public upbringing], some from the opposition, but unusually many, 174 came from Fidesz MPs. This shows that some of them have not made peace with the bill of Rózsa Hoffmann […]. However, Viktor Orbán told off those unhappy in a decisive manner. The Prime Minister repeatedly instructed the indignant Fidesz members that anyone who does not support the government's plan will attack him personally and behave like someone spitting on the ground in public."* (Index.hu, 23 November 2011[2])

Another point of conflict was when after the law passed, the ombudsman wrote to the Constitutional Court that mandatory kindergarten went against the right of parents to choose how to raise their child and was therefore unconstitutional. However, the court rejected this petition. Resistance from the public's side took form in a few small-scale demonstrations of student/teacher/other educational organizations against the new law, and in public statements from NGOs/professional organizations.

Our interviewees also mentioned intense arguments around certain aspects of the act even within the governing party (such as whether age 3 or 4 should be the threshold), however, they emphasized the political and professional consensus behind mandatory kindergarten. (EI3 reported that informally even oppositional politicians supported this element of the new act.)

On the other hand, expected difficulties of the implementation received much emphasis in political and especially social and professional debates. The Ministry for National Resources (responsible for education) relied on the Ministry for National Economy for information *"whether we can promise or plan something like this, and then what we need to get it done and how long it'll take"* (EI2). The main question, both according to the interviewees and the media articles, was the matter of available places, the distribution of which across the country was not and has not been equal. Moreover, several interviewees mentioned unions, teachers' fellowships, churches, municipalities, the ombudsman, and multiple other partners that received the plan of the act and were asked for their opinion. Our interviewees from the union, while they were generally dissatisfied with the level of consultations about policy changes, did not emphasize the lack of consultations around mandatory kindergarten. This may be due to the fact that the reform has been generally accepted following questions and critiques of the introductory period.

Considering the **reception of the policy**, EI6 (a practising kindergarten teacher, head of a Budapest kindergarten) pointed out that while kindergarten teachers fully supported the reform, the strongest resistance came from parents who had been "overworrying" about their children. In her opinion, these parents generally came from either top or bottom social strata, – for various reasons – did not have regular jobs, and therefore preferred to keep their children at home. Similarly, EI7 contrasted "resistance" in Budapest with a more open attitude in the countryside, where most mothers go back to work and thus need kindergarten services anyway. Such resistance – the traces of which have been found in the media analysis as well – is most directly linked to a liberal understanding of the role of state and an emphasis on parents' freedom of choice when it comes to raising their children. However, as mentioned, it was articulated by a small minority only, generally higher-SES families in which caring for children at home was a feasible option.

Implementation challenges

The topic implementation challenges connected to the policy was not as central to expert interviews as in the media analysis. Presumably, this may be explained by the 10 years that have passed since the policy was first implemented: articles reflected on the issues of the early days of the policy, while in retrospect these do not seem so significant. Nonetheless, some of the challenges were named by interviewees, too.

First of all, the question of available places was mentioned, especially concerning towns in the metropolitan area of Budapest, where the number of families with young children

has increased significantly. On the other hand, in depopulating areas of the country kindergarten places could not be filled. As EI2 pointed out, at the time available places seemed to be the focal question, while today the nationwide teacher shortage has proven to be a more burning issue. EI4 emphasized that before the reform came into action, not only infrastructural but also methodological developments had taken place, financed largely from EU funds. EI6 remembered challenges around convincing reluctant parents to enrol their children in kindergarten and having to develop new ways of communication to reach them. The question of exemption from mandatory kindergarten was scarcely mentioned by interviewees, probably because very few families have applied for this option.

The issue of the number of available kindergarten places was by far the most important one in the media – not only when it came to implementation challenges, but regarding the policy in general. 74, that is, almost half of the analysed articles mentioned it in some way. This was due to the fact that it was the main point of critique from experts, educational organizations and NGOs. They emphasized that before such a policy can be implemented, the necessary infrastructure has to be available, which they argued was not the case due to places being unequally distributed and not adapted to local demands. Therefore, the system was not suitable to accommodate an increase in children attending kindergarten. Another commonly raised issue was the unintended consequence of introducing mandatory schooling from age 6 to make space for 3-year-olds starting kindergarten (described in more detail in the next sub-section): it led to space problems in elementary schools, as well.

> *"According to an earlier calculation, the introduction of mandatory kindergarten from the age of three will increase the number of disadvantaged children in institutions by 25,000, which is two and a half times more than the number of places built in the last few years. While 370,000 places were available in the 2010–2011 school year, there were only ten thousand more in 2014–2015: 380,000. The government originally wanted to make early kindergarten compulsory from September 2014, but postponed it by a year due to the lack of infrastructure. But it seems that not all places were ready by the extended deadline."* (Magyar Nemzet Online, 6 November 2015[3])

The government was also aware of these problems: during the years after introducing the policy, many articles mentioned governmental programmes aimed at building/expanding kindergartens. One further measure which gained a lot of attention in 2013 was when there was a government initiative to not keep "family daycares" (small, private institutions) as an alternative to public kindergartens. However,

resistance from professional organizations and the opposition party LMP was so strong, claiming that this goes against a possible alleviation of space shortages, that the plan was initially abandoned. It was nonetheless introduced as part of another reform 2 years later.

Finally, the media also contained some articles on how mandatory kindergarten attendance was enforced among families who denied sending their children to kindergarten. The punitive nature of these measures was often emphasized and criticised, as it included the suspension of the family allowance (a universal benefit) which due to its small amount, affected low-income families the most.

Effects of the policy

As set out above, in the interviews, those participating in different stages of the policymaking process spoke of the significant equalising potential and goals of the reform. There was a consensus among them as well as practising teachers that the policy had a positive reception and impact. The lack of arguments and complaints among professionals, the wider public, and the EU, was interpreted as a sign of success:

> *"I believe this is a great thing that nobody has debated this policy initiative since then. The only debated aspect was the lack of infrastructural conditions, or rather, there was a scaremongering in society that it would not work anyway. As far as I'm following the political and professional literature and reactions since the introduction, there has not been any serious debate about this policy."* (EI2)

On the other hand, none of the interviewees knew of any impact measurement or evaluation that had been conducted in the past decade. As EI1 pointed out, *"as the starting point was not measured, the effectiveness of the policy would be hard to measure as well"*. EI3, who works in a governmental background institution responsible for education issues, explained the lack of studies produced by them with the small number of analysist working in the institution, and referred to the numerous scientific hubs of the country that would have the chance to study the impact of the policy. EI2 also mentioned that the connection between kindergarten attendance and educational achievement *"has remained a hypothesis even in the massive dataset of OECD"* because of the complexity of the question. Among the practising teachers, EI8 said that in her environment, the number of children attending kindergarten did not grow, but EI6 noticed a change:

> *"In our close community, it had an effect for sure. When I think of those mothers who had a hard time with separation, we saw things like mothers bringing each other to the kindergarten and reassuring each other that things would be fine. […] But for that we also had to speak to them first about the positives."*

One of the most widely discussed – possibly unintended – consequence of the policy was another reform, introduced in two steps, which involved the mandatory schooling of children turning 6 years old until August 31 immediately before the start of a school year (which starts in early September). First it was introduced from 2014, and then in an even more strict manner from 2020. The decision on allowing exemptions was first the responsibility of the kindergarten (as opposed to the parents', which was the case before 2014), and then it was handed over to the state from 2020. In the media analysis, this policy was widely connected to mandatory kindergarten from age 3, and some articles argued that it was introduced in order to provide more available places for 3-year-olds entering kindergarten. Interviewees also brought up the topic, some in a harshly critical manner (EI1, a policymaker, and EI7, a kindergarten teacher). EI6 argued that it was a logical assumption that children starting kindergarten earlier would become ready for school by the age of 6, however, due to the rapid changes in their environment and extremely varied developmental patterns, mandatory schooling from 6 years of age is far from realistic.

In the media, there was also no mention of a national impact measurement. There were some articles on EU education reports which contained evaluations of the Hungarian education system. These reports from 2016, 2017 and 2018, respectively, praised the fact that kindergarten attendance in Hungary was above the EU average. One article mentioned that a source from the European Commission stated that higher attendance rates will also have long-term effects, e.g. will improve national PISA-results. There were also some statements from Fidesz politicians over the years following the implementation which dealt with the education policy of the Fidesz governments in general, and which also mentioned the mandatory kindergarten policy as a successful tool, often emphasizing its role in improving equality of opportunities for disadvantaged children. However, no concrete statistical evidence on the policy's effect on inequality was presented.

Other important themes / Evaluation

While interviewees were initially asked about their opinion on equalizing education policy in the country, the last question of the interview addressed their take on the strongest and weakest aspects of the mandatory reform. Moreover, they were asked to

make some suggestions for further policy directions in the field of educational equity. The last theme presented here is based entirely on the interview questions (rather than codes developed through the media analysis). The narratives of the interviewees on these issues have significant added value as they enhance our understanding of usually hidden thought-processes of decisionmakers.

Among strengths, some aspects were mentioned by several respondents, while others were emphasised by interviewees assumably due to their positions and professional viewpoints. For instance, EI3, representing a governmental background institution concerned with public education, pointed out the reform's universal, mandatory nature, as well as its ability to strengthen the institutional system of public education in Hungary. In a parallel manner, interviewees with field experience (EI6, a practising kindergarten head, and EI5, currently representing the governmental level) also underlined that in our day and time, every child needs the professional development that is available in kindergartens. From a more political perspective, EI3, as well as EI2 (who participated in the policymaking at the governmental level) pointed out that mandatory kindergarten from age 3 was "the least attacked aspect of the new act on public education" (EI3), indeed,

> *"[it was] one of the very few interventions of the past several decades that seems to be generally accepted" (EI2).*

Infrastructural and methodological developments attached to the reform were mentioned by both interviewees from the governmental background institution (EI3 and EI4). However, the central goal of the policy – creating opportunities for the disadvantaged, protecting children from early school leaving – and its additional value of socialization and child protection was mentioned only once (by one of the kindergarten teachers).

The greatest weakness of the policy, according to multiple interviewees involved in the policymaking process, has been its uniqueness in the Hungarian education system: the fact that no other supporting measures and reforms have been introduced tackling educational inequalities.

> *"The intermediate elements are missing. The same differentiated approach, this kind of individual attention could have been implemented in primary and lower secondary school, too, in order to avoid the current situation towards the end [of the educational trajectory]. I don't remember such things. Maybe there were some, but I think at that level [from ISCED 1 upwards] they, I mean the [state secretary*

for education and her team], followed the logic of institutional separation more, as far as I remember." (EI1)

"This emphasis on ECEC is somewhat of a supplementary action. Instead of providing a solution to problems in school, it suggests an external solution. […] Apart from this preventive action, it would be necessary to treat the original problems too." (EI2)

Furthermore, issues such as the initial lack of infrastructural conditions (EI3), the negligence of factors, such as difficulties of access, which may prevent children from attending kindergarten regularly (EI4), the impossibility of proper impact measurement (EI2), and the lack of proper preparation among parents (EI6) were mentioned.

When asked about further policy recommendations, the majority of interviewees – irrespective of their professional background – argued that the most significant issue is the lack of political will and commitment to the cause of equity and equality in education.

3.7. Conclusion

The present analysis is the combination of a quantitative and a qualitative analysis connected to the Hungarian reform that made kindergarten attendance mandatory from the age of 3 from 2015 onwards. The policy came into effect on 1 September 2015 and was introduced in line with the goal set by the Hungarian National Social Inclusion Strategy (2011) of increasing pre-school attendance among disadvantaged children. Due to the lack of data, it was impossible to analyse specifically the effect of the 2015 reform on the compulsory age of kindergarten enrolment. Therefore, our analysis looked at the effect of kindergarten attendance on educational outcomes in general using longitudinal data from the Hungarian Life Course Survey. We attempted to correct for the endogeneity of kindergarten attendance by using differences between municipalities in the accessibility of kindergarten places as a source of exogenous variation. Using this method, **we found no overall effect of years spent in kindergarten in any of the educational outcomes but found significant and positive effect of kindergarten attendance on mathematics and reading test scores among children from families which have experienced material hardship during the preschool years of the child**. On the other hand, i**n case of obtaining a high school diploma no effect of kindergarten attendance among those from deprived families has been found**, which

suggests that the positive effects of kindergarten attendance do not necessarily persist to later stages of the educational career. Overall, the pattern of results is broadly consistent with our expectations and results of similar studies found in the literature, which show mixed results regarding the effect of kindergarten attendance and often find stronger positive impact among low-SES social groups. **Our results thus suggest that the policy that made kindergarten attendance compulsory from the age of 3 could have an inequality reducing effect** as the effect of kindergarten attendance is stronger among the deprived and as a result of the policy kindergarten attendance increased more strongly among the deprived because they had lower attendance rates at the outset.

While the quantitative analysis allows one to draw conclusions on the potential impact of the researched reform, our qualitative analysis uncovered its reception and interpretation by the public, as well as its retrospective evaluation by policymakers and practitioners. Our main aim, in line with the overarching research question of WP5, was to look at the extent of the media and stakeholders identifying mandatory kindergarten as effective at reducing inequalities in educational outcomes. We had three additional subquestions: a) how, with what goals, and by whom was the policy developed and implemented; b) how was the policy received at the time and in retrospect; and c) were there any unintended consequences of the policy.

Analysis of the interviews and media articles showed that **disadvantaged families and children, and those living in rural areas, especially the Roma were considered the main target group**. Among the goals of the policy, **inequality reduction/social inclusion** was named as being the primary consideration, via the successful preparation of disadvantaged/Roma children for school and thus better school performances. Aims not directly related to inequality reduction were mostly connected to the government's broader, activation-oriented family and labour market policy.

The interviewees made it clear that in the preparation phase, there was a professional consensus, or at least an assumption that kindergarten attendance is useful. However, there was no hard data available on the situation in disadvantaged regions / communities regarding kindergarten attendance, and no new analysis or background study was produced as part of the preparation. Parliamentary as well as other public debates in the proposal phase received attention in the media, across all platforms. Both the media and interviewees reported significant tensions around certain aspects of the act within the governing party Fidesz. Moreover, expected difficulties of the implementation received much emphasis in political and especially social and

professional debates. However, **the reform has generally been accepted** following questions and critiques of the introductory period.

When it comes to the implementation phase, the issue of the number of available kindergarten places was by far the most important one in the media, due to the fact that it was the main point of critique from experts, educational organizations and NGOs. In the interviews, those participating in different stages of the policymaking process spoke of the significant equalizing potential and goals of the reform. On the other hand, none of the interviewees knew of any impact measurement or evaluation that had been conducted in the past decade. In the media, there was also no mention of a systematic national impact measurement, only some general statements from Fidesz politicians regarding the positive outcome, and EU education reports commending the high kindergarten attendance rate. Regarding the strengths and weaknesses of the policy, **its greatest deficiency, according to interviewees, has been the fact that no other supporting measures and reforms have been introduced which tackle educational inequalities.**

Appendix

Table A1a. Descriptive statistics of variables used in the analysis

	Mean	Std. Dev.	Min	Max	N
Reading test score, Grade 8	-0.106	1.034	-3.819	2.900	10022
Mathematics test score, Grade 8	-0.048	1.043	-3.160	3.078	9176
Obtained high school diploma	0.697	0.460	0	1	7086
Year attended kindergarten	2.826	0.522	0	3	9970
Supply of kindergarten	1.025	0.431	0	12.5	9987
Child female	0.485	0.500	0	1	10022
Age in 2006	14.862	0.638	13	19	10022
Special education needs	0.057	0.231	0	1	10020
No. of siblings	1.655	1.265	0	12	10022
Deprivation in childhood	0.081	0.273	0	1	10022
Roma ehtnicity	0.066	0.248	0	1	10022
Attended ECEC (0-2y)	0.207	0.405	0	1	10012
Poor neighborhood	0.151	0.358	0	1	9927
Social assistance recip. in municipality	0.039	0.033	0	0.286	9989
Electricity consumption in municipality	0.937	0.268	0.079	3.276	9989
No. GP per inhabitant in municipality	5.965	3.175	0	33.501	9989

Table A1b. Descriptive statistics of variables used in the analysis (categorical variables)

	% in total sample
Mother age at birth <20 years	14.52
Mother age at birth 20-25 years	37.30
Mother age at birth 25 y	44.38
Missing	3.79
Total	99.99
Parental education: Primary school	12.62
Parent education: Vocational education	29.15
Parent education: High school	34.54
Parent education: Tertiary	23.69

Total	100.00
Reading stories: Never	27.48
Reading stories: sometimes	21.93
Reading stories: everyday	45.76
Reading stories: missing	4.83
Total	100.00
Budapest	13.03
City	16.65
Town	35.11
Village	35.21
Total	100.00

Table A2. Results of first stage regression

	Dependent variable: No. of years attended kindergarten	**p- values**
No. of preschool slots in municipality	**0.187**	(0.000)
Child female	0.016	(0.123)
Age in 2006	0.004	(0.736)
Low birth weight	-0.011	(0.559)
Special education needs	-0.038	(0.094)
No. of siblings	**-0.025**	(0.000)
Mother age at birth <20y	0.000	(.)
Mother age at birth 20-25y	0.024	(0.152)
Mother age at birth 25+y	0.016	(0.392)
Attended ECEC (0-2y)	**0.140**	(0.000)
Parent: Primary school	0.000	(.)
Parent: Vocational education	**0.109**	(0.000)
Parent: High school	**0.120**	(0.000)
Parent: Tertiary	**0.110**	(0.000)
Deprivation in childhood	**-0.073**	(0.002)
Roma	-0.068	(0.064)
Reading stories: Never	0.000	(.)
Reading stories: sometimes	**0.033**	(0.038)

Reading stories: everyday	0.012	(0.439)
Reading stories: missing	**0.060**	(0.033)
Poor neighbourhood	-0.049	(0.012)
Budapest	0.000	(.)
City	0.057	(0.065)
Town	0.051	(0.124)
Village	0.054	(0.106)
Social assistance recipients in municipality	0.000	(0.460)
Electricity consumption in municipality	0.001	(0.982)
No. GP per inhabitant in municipality	**-0.007**	(0.017)
Constant	2.466	(0.000)
N	9804	
F(26, 1021)	22.08	
R^2	0.059	

Note: coefficients significant at the 5% level are printed bold.

Table A3: IV estimation of kindergarten effects (Two-stage least squares, second stage)

	Reading test score, Grade8 (Standardized)		**Mathematics test score, Grade 8 (Standardized)**		**Having high school diploma in wave 6**	
Years in kindergarten	0.299	(0.076)	0.118	(0.503)	-0.033	(0.695)
Child female	0.393***	(0.000)	-0.113***	(0.000)	0.122***	(0.000)
Age in 2006	-0.168***	(0.000)	-0.177***	(0.000)	-0.073***	(0.000)
Low birth weight	-0.157***	(0.000)	-0.215***	(0.000)	-0.071***	(0.000)
Special education needs	-0.417***	(0.000)	-0.547***	(0.000)	-0.230***	(0.000)
No. of siblings	-0.028***	(0.001)	-0.031**	(0.001)	-0.033***	(0.000)
Mother age at birth <20y	0.000	(.)	0.000	(.)	0.000	(.)
Mother age at birth 20-25y	0.018	(0.474)	0.032	(0.215)	0.045**	(0.005)
Mother age at birth 25+y	0.041	(0.099)	0.044	(0.071)	0.045**	(0.005)
Attended ECEC (0-2y)	0.001	(0.984)	0.010	(0.828)	0.013	(0.343)
Parent: Primary school	0.000	(.)	0.000	(.)	0.000	(.)
Parent: Vocational educ.	0.149***	(0.000)	0.168***	(0.000)	0.127***	(0.000)
Parent: High school	0.488***	(0.000)	0.529***	(0.000)	0.346***	(0.000)
Parent: Tertiary	0.963***	(0.000)	1.025***	(0.000)	0.461***	(0.000)
Deprivation in childhood	-0.001	(0.962)	-0.038	(0.249)	-0.030	(0.130)
Roma	-0.209***	(0.000)	-0.304***	(0.000)	-0.126***	(0.000)

Reading stories: Never	0.000	(.)	0.000	(.)	0.000	(.)
Reading stories: sometimes	0.062*	(0.028)	0.027	(0.299)	0.054***	(0.000)
Reading stories: everyday	0.215***	(0.000)	0.165***	(0.000)	0.090***	(0.000)
Poor neighbourhood	-0.078**	(0.005)	-0.086**	(0.002)	-0.064***	(0.000)
Budapest	0.000	(.)	0.000	(.)	0.000	(.)
City	0.008	(0.849)	0.018	(0.741)	-0.011	(0.781)
Town	-0.145**	(0.001)	-0.159**	(0.002)	-0.003	(0.940)
Village	-0.180***	(0.000)	-0.185***	(0.000)	-0.034	(0.403)
Social assistance recipients	0.000	(0.103)	0.000	(0.472)	0.000	(0.123)
Electricity consumption	0.150***	(0.000)	0.111*	(0.028)	-0.011	(0.593)
No. GP per inhabitant	0.003	(0.581)	0.001	(0.893)	0.003	(0.219)
Constant	0.652	(0.181)	1.668***	(0.001)	1.508***	(0.000)
N	9804		8990		6952	
R^2	0.308		0.276		0.344	

Note: p-values in parentheses * p < 0.05, ** p < 0.01, *** p < 0.001.

Table A4: ITT estimation of kindergarten effects

	Reading test score, Grade 8 (Standardized)		**Mathematics test score, Grade 8 (Standardized)**		**Having high school diploma in wave 6**	
Years in kindergarten	0.055	(0.087)	0.024	(0.506)	-0.006	(0.690)
Child female	0.395***	(0.000)	-0.113***	(0.000)	0.123***	(0.000)
Age in 2006	-0.169***	(0.000)	-0.176***	(0.000)	-0.072***	(0.000)
Low birth weight	-0.161***	(0.000)	-0.217***	(0.000)	-0.070***	(0.000)
Special education needs	-0.429***	(0.000)	-0.547***	(0.000)	-0.229***	(0.000)
No. of siblings	-0.035***	(0.000)	-0.035***	(0.000)	-0.033***	(0.000)
Mother age at birth <20y	0.000	(.)	0.000	(.)	0.000	(.)
Mother age at birth 20-25y	0.029	(0.239)	0.036	(0.163)	0.043**	(0.006)
Mother age at birth 25+y	0.049	(0.052)	0.047	(0.053)	0.043**	(0.006)
Attended ECEC (0-2y)	0.044	(0.109)	0.026	(0.480)	0.010	(0.339)
Parent: Primary school	0.000	(.)	0.000	(.)	0.000	(.)
Parent: Vocational educ.	0.178***	(0.000)	0.180***	(0.000)	0.124***	(0.000)
Parent: High school	0.521***	(0.000)	0.544***	(0.000)	0.343***	(0.000)
Parent: Tertiary	0.990***	(0.000)	1.037***	(0.000)	0.458***	(0.000)
Deprivation in childhood	-0.022	(0.417)	-0.047	(0.132)	-0.028	(0.136)
Roma	-0.232***	(0.000)	-0.310***	(0.000)	-0.121***	(0.000)
Reading stories: Never	0.000	(.)	0.000	(.)	0.000	(.)
Reading stories: sometimes	0.071**	(0.007)	0.030	(0.252)	0.053***	(0.000)
Reading stories: everyday	0.217***	(0.000)	0.165***	(0.000)	0.089***	(0.000)

Poor neighbourhood	-0.092***	(0.000)	-0.090***	(0.001)	-0.062***	(0.000)
Budapest	0.000	(.)	0.000	(.)	0.000	(.)
City	0.027	(0.528)	0.024	(0.644)	-0.012	(0.763)
Town	-0.128**	(0.004)	-0.152**	(0.003)	-0.004	(0.916)
Village	-0.163***	(0.000)	-0.180***	(0.000)	-0.035	(0.396)
Social assistance recipients	0.000	(0.068)	0.000	(0.441)	0.000	(0.125)
Electricity consumption	0.151***	(0.000)	0.110*	(0.032)	-0.010	(0.612)
No. GP per inhabitant	0.000	(0.934)	-0.000	(0.993)	0.003	(0.183)
Constant	1.427***	(0.000)	1.964***	(0.000)	1.419***	(0.000)
N	9853		9027		6978	
R^2	0.328		0.278		0.345	

Note: p-values in parentheses * p < 0.05, ** p < 0.01, *** p < 0.001

4. Norway Case study Report

4.1 Introduction

In this chapter we focus on the reform *Free core time in kindergarten*, in Norway and how it is related to social inequality in school, especially in the immigrant population it was first targeted at. The reform was an arrangement where children in families with low income could get 20 hours of free kindergarten a week if they applied for this. We focus on both quantitative measurements of the effects of the reform on educational results 12 and 13 years after, qualitative retrospective evaluations from policymakers and analyses of media coverage in the time of the implementations of the reform. The reform was first directed at the low socioeconomic background (SES) part of the immigrant population in Oslo in 2006 but from 2010 it was expanded to the rest of the country, with a larger focus on SES.

Educational results are in this chapter measured as children's grade point average (GPA) in the last year of lower secondary school and dropout in the first year of upper secondary school in the quantitative analyses, and more generally in the qualitative parts. Socio-economic status is measured quantitatively both as parents' level of education and parents' income and is seen in relation to immigrant background and gender. In the qualitative parts social inequality is seen in relationship to how it is understood among the people interviewed or those writing articles in the media.

4.2. National Context

'Gratis kjernetid' [Free core time in kindergarten] was a policy designed to increase kindergarten participation in areas with a high proportion of minority language children. It states that children between the ages of 2 and 5 from families with an income below a given limit are entitled to a free core time (20 hours) in kindergarten per week. The income limit for free core time is set annually through the parliament budget resolution.

The target group for the trial scheme we are focusing on here were all children aged 4–5 years. The purpose was to prepare the children for starting school, improve the

Norwegian language skills of minority language children and contribute to socialization of the Norwegian norms and values.

After some trials in the late 90s and early 2000, this trial was launched in 2006 in the Municipality of Oslo and has since been gradually expanded. Since 2007, the trial has included all four- and five-year-olds in the four districts ~~of~~ with high representation of migrants. From 2010 there have also been trials of *Free core time in kindergartens* in some areas of Drammen and the Gamle Oslo district, and from 2011 in Årstad in Bergen. As of 1 August 2011, the trial in Drammen applies to three-, four- and five-year-olds. The scheme was later continued and expanded, from 2015 it became a national program for 4- and 5-year-olds in low-income families (NOU 2012: 101), from 2016 also for 3-year-olds, and from 2019 also for 2-year-olds

In the context of the chosen policy, it is also important to mention another, closely linked policy, namely the Cash benefit adopted by law of 16 June 1998. Cash benefit is a payment to parents with children between one and two years of age who do not or only partially use a kindergarten place. In the media analysis Cash benefit is often discussed along with the *Free core time in kindergarten*.

This report investigates the trial and early phases of the *Free core time in kindergarten* reform that took place in 2006 and 2007 to focus on the early stages of design and get closer to the thinking behind the needs that the reform was planned to meet.

The goal of the core hours in kindergarten policy was to increase childcare enrolment of children from immigrant families, contribute to socialization and better Norwegian skills, strengthen the competence of kindergarten staff in multicultural pedagogy and language stimulation, and contribute to improving the contact between parents and the kindergartens (Drange 2023). The policy was designed to tackle the differences in language development between children who attend kindergarten and children who do not attend kindergarten are particularly large for children with low-educated mothers, minority language children, and children from low-income families (Nou 2010:7). The narrative from the government has moved towards presenting this policy as means for tackling social inequalities and not only as a strategy to integrate immigrant children.

Reports from the trial municipalities show that kindergarten participation has increased, and that more children are moving from short-term to full-time kindergarten. This is also supported by national statistics and national surveys, which show that kindergarten participation has increased significantly for minority-language children up to 2009 and then levelled off (Nou 2012:101). The experience from the pilot has shown positive effects, including increased participation in kindergartens, improved language

development, and a smoother transition to school (Bråten et al., 2014; Drange and Telle, 2015).

Norway is known as an egalitarian welfare-state, with relatively low income-inequality, publicly funded education at all levels, and generous loans available throughout the system of higher education. Oslo, that was the focus of the early trials of the reform that we will focus on in this chapter, is the capital of Norway and has both a higher share of people with higher education and income than the rest of the country, but also a higher share of immigrants and a higher level of inequality and segregation. Thus, such a reform can be expected to be particularly effective in Oslo, but compared to other countries, a large share of the Norwegian 4-year-olds were already in kindergarten in 2006.

4.3. Country based literature review

The reform has been thoroughly evaluated, both qualitatively and quantitatively. Quantitative evaluations have focused on participation in pre-school for low SES and immigrant groups and on national test scores through primary school and beginning of lower secondary school for these groups and have mainly shown positive effects of the reform. Prior to the reform, children of immigrants and of mothers with weak ties to the labor market were found to have spent almost a full year less in kindergarten (three years) before starting school than the average for all children (four years) (Bråten et al., 2014). Drange and Telle (2015) found that the intervention increased participation in kindergartens from low SES immigrant families, and increased test scores at school entry for this group. On average, Bråten et al. (2014) found that the more years a child has attended kindergarten before starting school, the lower the likelihood that the child would score worryingly poorly on assessment tests in Oslo School in the first grade. Drange (2016;2018;2021) also found positive effects on reading in 1st-3rd, 5th and 8th grade, and especially so for children from families with low income and/or a mother who is not working, and in the last years also more so for boys than for girls. Drange (2021) and Drange and Telle (2015) found no effects for those without immigrant backgrounds, as most of these children were already in kindergarten, and found no effects of the intervention on parental employment and education. While Drange (2021) found stronger effects for boys, Havnes and Mostad (2011) found stronger effects for girls when investigating a larger reform from the 70s. Drange (2023) additionally found, in the so far latest evaluation of the reform, that it did not have any significant effects

on the GPA in 10th grade. These findings will be replicated in this chapter, in addition to new analyses of the impact on dropout in the first year of upper secondary school.

Qualitative evaluations have interviewed both parents and kindergarten directors. Some parents have stressed that kindergartens are valuable for children's skills, but that their safety is better at home for the youngest children (Bråten et al., 2014). There was also a higher perceived pressure among the majority mothers than the immigrant mothers to return to work, and thus to place their children in kindergarten at an earlier age. Some parents choose to have their children in kindergarten from an early age because they were dependent on income from both parents. A Fafo report (2014) explains after interviewing the managers of different kindergartens, that kindergartens had different approaches to help children learn Norwegian. Some had clear goals for what children should learn, while others focused more on progress over time. The managers from areas with free core time had more specific focus on skills that the children will benefit from when starting school. However, they pointed out that how much children benefited depended on how often they attended and how long they had been in kindergarten. The kindergarten managers were concerned with the language development of the children and stressed that they should start earlier than the age of four, and hence that the reform should reach also younger children (Bråten et al. 2014).

4.4. Research questions/ hypotheses

In this chapter we have an overall research question, and three sub-questions pertaining to the quantitative part of the analyses, the qualitative part connected to the interviews and the qualitative part connected to the media analyses.

The main question we seek to explore in this chapter is

"How can we understand the reform offering free core hours in kindergarten, in light of social inequality and immigrant background in Norway?"

The quantitative part seeks to answer a more causal question that relates to the actual effects of the reform:

"What are the effects of this reform on social inequality in school results and dropout in 10th and 11th years of school for the immigrant population?".

The qualitative part involves two sets of analyses, one interviewing policy-makers and one media-analyses, and hence consist of two different research questions: "How do policy makers and the people responsible for the implementation and/or the processes

view this in retrospect?" and "How was the reform portrayed in the media during the period of its initial trails?"

4.5. Methods

4.5.1. Research design

Quantitative difference-in-difference analyses

The quantitative part of this chapter takes advantage of the trials of the reform that was implemented in some city areas of Oslo before it was expanded to other city areas. It is thus possible to compare the later school results of the children that were living in the city areas where the reform was available in the correct age groups with those living in other city areas in the same age-group, as well as with children in the same city areas before the reform was implemented. This is called a difference-in-difference design (Strumphf et al., 2017) and makes it possible to reduce the impact from other differences between the areas where the implementation has happened/not happened that could otherwise be driving the results. We use population-wide register data with information about what city areas the individuals were living in the year they turned four, combined with information about their GPA from upper secondary school 12 years later, and information about whether or not they were registered as starting second year of upper secondary school, and thus can be seen as having completed or dropped out of first year of upper secondary school. We add on information about their parents' level of education and income, and if they or their parents have immigrated from another country or not. As the trials of the reform were targeted especially at the immigrant population, it is especially valuable to measure this group and investigate any social inequality in effects for them. Following previous research, it is unlikely to find substantive results for the majority, as most of them were already attending kindergarten (Drange, 2021). There were 5 treated city areas, 4 started the intervention for 4-year olds in 2006 and 1 in 2007. Following previous research, we deleted the 3 city areas situated furthest to the west geographically to increase comparability (the west-side of Oslo is home to those with most money and highest levels of education), and we are left with 6 city areas in the comparability group. We compare cohorts before and after the implementation of the reform, using the cohorts that turn four one year before the reform was implemented and one year after. It should be mentioned that the reform was intentionally tried in city areas with large shares of immigrants and low SES

families, and the comparability groups might not be directly comparable. Still, since the method also uses measures before and after the reform, the problem is reduced. It is also worth mentioning that we measure school results 12 and 13 years after the intervention, and it is, as already shown by Drange (2023), unlikely to find large effects after such a long time. It should also be mentioned that even if previous research has found positive effects on test scores in early years of schooling, better grades and completion of school (that we measure here) was not the intended effects of the reform. We also do not know who actually went to kindergarten, but measure dependent on what city area they live in when they were in the age where they were targeted by the reform.

Qualitative interviews

The Norwegian team conducted two qualitative, structured interviews: one with a policymaker and one with the person involved in the implementation of the policy.

Ethical considerations: The Norwegian team asked the Norwegian Agency for Shared Services in Education and Research (SIKT) for review in January 2025. After some dialogue with the agency on the ethical considerations of our research and the issues related to the General Data Protection Regulation[8], we started the recruitment process in March 2025.

Sampling: The purpose of the interviews was to get insights into the design and implementation of the policy beyond what can be found in the numerous reports and evaluations conducted so far of the reform. Taking the low number of planned interviews, it was important to cover separately both: the perspective of the policymakers who worked on the design of the reform and the point of view of the district leadership from the time when the reform was introduced to gain insight of the practicalities of policy implementation.

Recruitment: The information on the decision making and implementation is made public, therefore the recruitment of the interviewees involved a direct contact with the two persons that ended up being interviewed.

Interview guide: The interview guide was co-designed with the entire team involved in WP5. However, taking that many of the general questions were already well covered in

[8] General Data Protection Regulation: regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC
https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02016R0679-20160504

the existing reports, we adjusted the interview guide in order to gain more in-depth knowledge of the design and implementation on the ground.

Table 4.1 overview of the participants[9]

	Interviewee A	**Interviewee B**
Gender	male	female
Role in the pilot	Implementation	Policy

Media analysis

We also conducted a systematic examination of media texts using Retriever search engine- a media analysis tool available at OsloMet, which covers most of online and print news media in Norway.

We used the following search criteria:

- Time span: 2005-2011 (reflecting the time from just before the introduction of the policy in the local areas and just before upscaling the policy to the national context).
- Newspapers: Aftenposten, Dagbladet, VG, Klassekampen, Groruddalen (this newspaper had only some parts of text available, so we were not able to conduct a full analyses), Avisa Oslo. These are a mixture of national and local newspapers as well as between right, center and left side in the political arena.
- Keywords: ´gratis kjernetid´ [free core time] and ´barnehage´ [kindergarten]
- Results: 174 articles found

In designing this technique, we were mostly interested in the developments of the narratives around the policy from the time just before the implementation of the trial, through the initial stage of the implementation, throughout the later stages up to the time transition towards increasing the cover of the policy to the national level. We were probing, whether the storyline around the reform has remained the same, changed, or whether some aspects of the narratives became more stressed with time.

[9] Due to a high risk of identifiability, we are unable to provide more details about the participants.

4.5.2. Data analysis

Quantitative part

Table 4.2 shows the descriptive information about the quantitative sample. After deleting those with missing values on one or more variables, we are left with 11092 individuals. There are 2815 individuals in the treated group, and 8277 in the non-treated group. Among the treated, 52% have an immigrant background, meaning that either they or their parents immigrated from another country than Norway.

Our dependent variables are GPA in upper secondary school that is standardized within year to account for yearly inflation in grades, and dropout/completion in first year of upper secondary school. We regress this with a dummy-variable for whether or not the city area had the intervention or not, a dummy-variable for time before and after the intervention and an interaction between these (the DID-variable). The DID-variable is also interacted with immigrant background and SES (parents' level of education) to investigate if these groups have had any significant variations in the effect of the reform (a three-way interaction. Separate analyses have also been made). We also control for gender. Standard errors are clustered on city area. We visualize the results as average marginal effects. This can be interpreted as the average change in probability given the change from no treatment to treatment, in the standardized dependent variable for GPA (meaning that the change is seen in standard deviations from the mean) and the dichotomous variable for dropout.

Table 4.2: Descriptive statistics

	%/mean	N
Girls	48.95	6,716
Boys	51.05	7003
Parents lower/upper secondary education (low)	34.36	4,544
Parents short higher education (medium)	34.20	4523
Parents long higher education (high)	31.45	4,149
Immigrant background	31.45	4,315
GPA	4.42 (0.79)	12,244
Dropout	7.03	965

Interviews

We conducted a thematic analysis of the interviews. Since both interviews had a slightly different focus (namely: design and implementation), it is not possible to conduct a thorough comparative analysis. However, both interviewees touched upon both topics in their retrospective reflections, so we gained a complementary picture. The interviewees will be referred to as person A (district leadership) and person B (policy maker). It is important to note that person B in this interview often referred to the national reform, and not only the piloting project.

Media Analysis

In order to answer the research question related to the media analysis, namely - *How was the reform portrayed in the media during the period of its initial trails?*- the OsloMet team conducted a chronological and thematic analysis to capture trends and patterns in media messaging over time. Due to a large number of returns from the initial search (174), we developed a coding system using only a small number of codes for the analyses (poverty, migrants, women, equality, inequality, integration, language). This was a pragmatic choice allowing us to search through the vast amount of data.

4.6. Results

4.6.1. Quantitative results

First of all, we will show some descriptive results, to assess if there is any change in the mean standardized GPA and dropout of the students in the city areas with and without the intervention, before and after the intervention. We show this for the majority for children with immigrant background. For the majority, we do not expect any significant change, as we know that most of these children were already in kindergarten. For the immigrant children, we do not expect any results in terms of GPA, because we here replicate the findings of Drange (2023), and it is measured many years after the intervention, but we expect small or insignificant negative effects when it comes to dropout, as the reform targeted this group.

Figure 4.1:

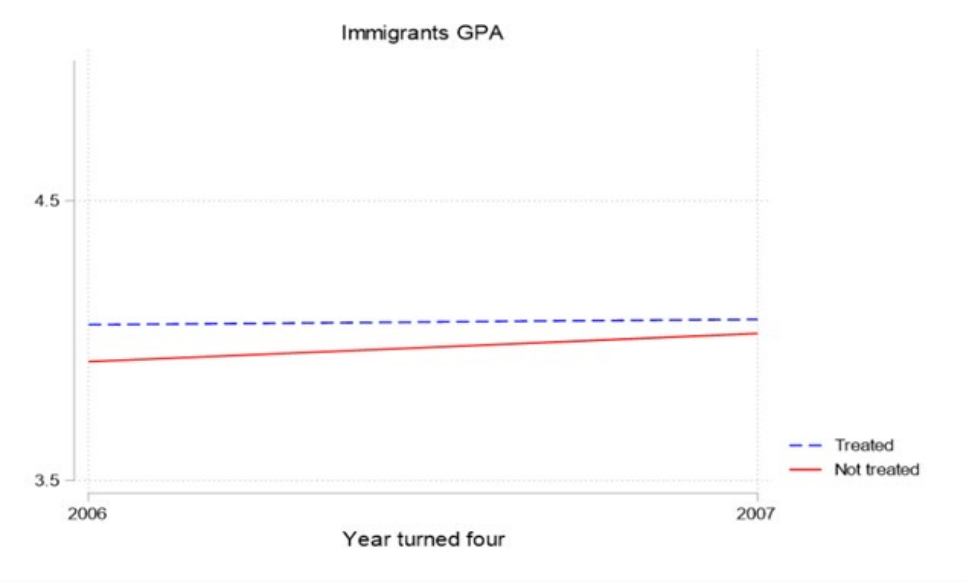


Figure 4.2:

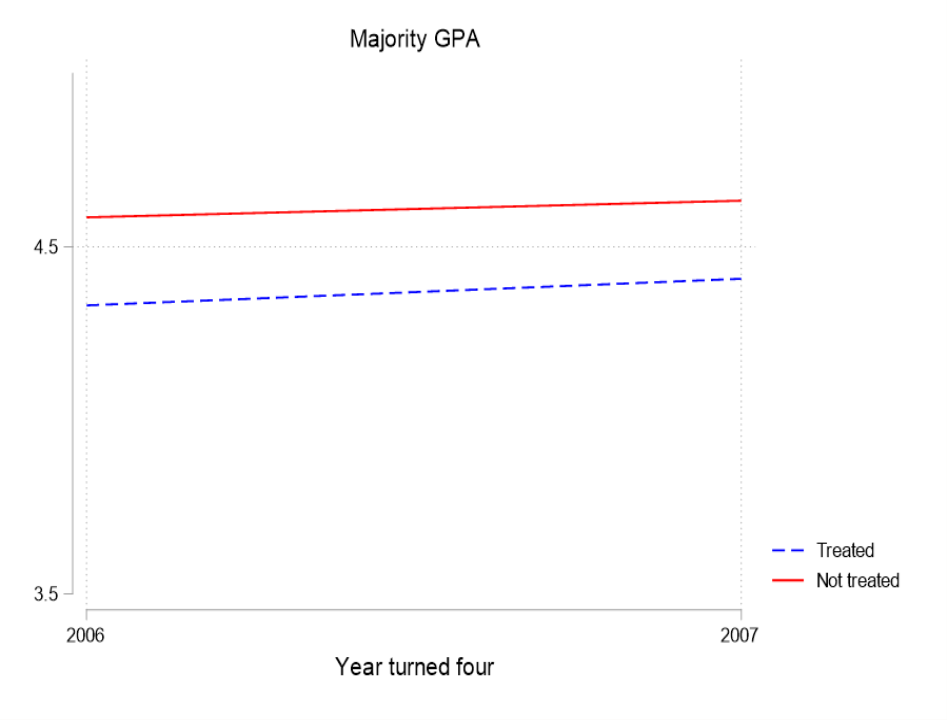


Figure 4.3:

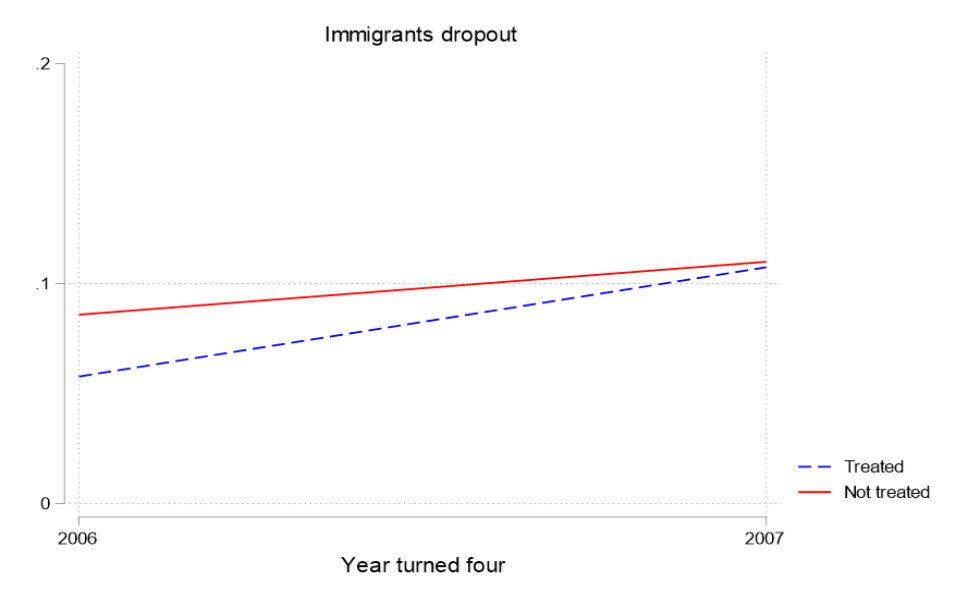
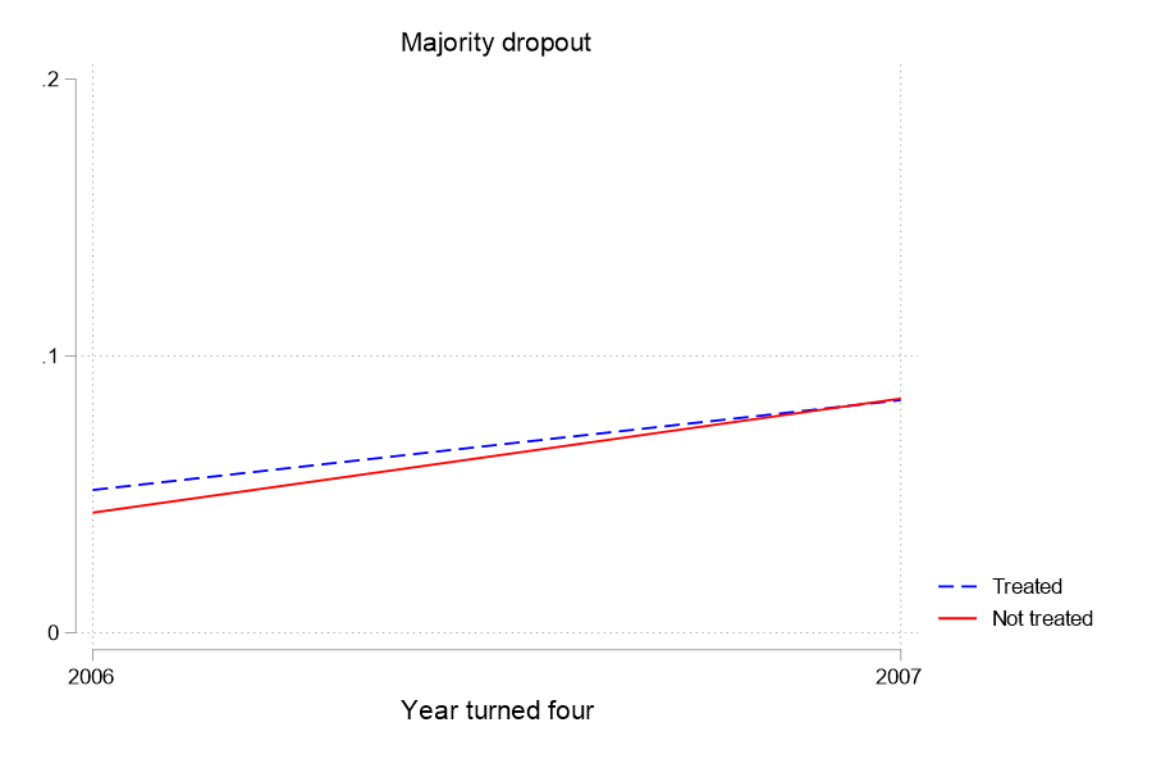


Figure 4.4:

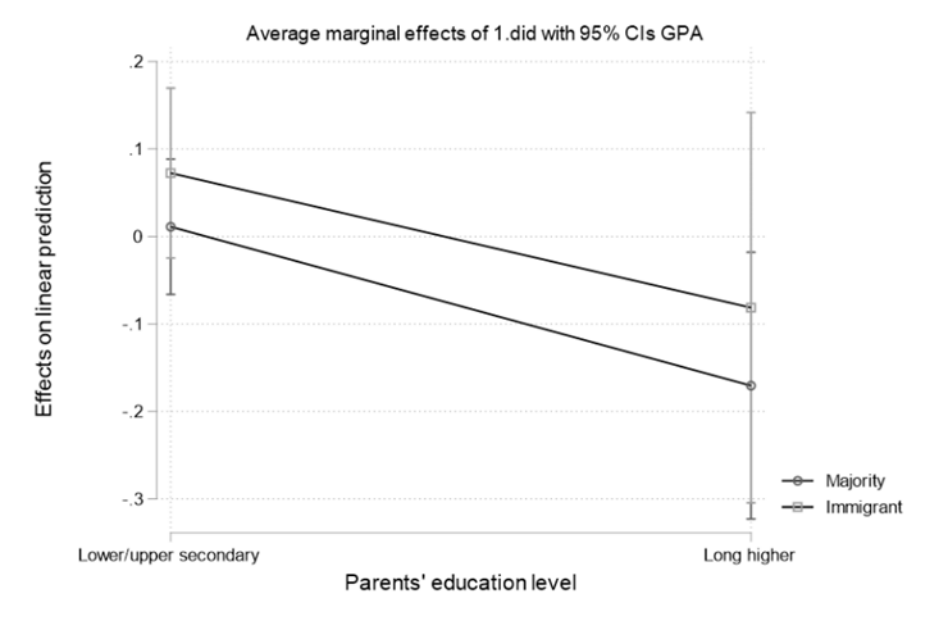


Figures 4.1-4.4 show the descriptive results for the majority and for those with immigrant backgrounds for the cohorts turning 4 the year before and the year prior to the reform.

As could be expected, there is no particular trend for the majority for any of the measures. For the immigrants and children of immigrants, the treated and not treated seem to become somewhat more similar after the implementation, but not in the direction you would expect if the reform had the anticipated effect. From these descriptive findings we would not expect any large effects of the reform this many years after it was implemented in the way we measure it here.

Moving on to the actual analyses, figure 4.5 show average marginal effects of the interaction between the treatment, immigrant background and SES measured as parents' educational level for the outcome GPA in 10th grade. The results are not significantly different from zero, but the direction of the coefficients are in the direction we could expect – the children with immigrant background and with parents with low education seem to have had the largest (but not significant) impact of the reform.

Figure 4.5



The figure also confirms that there is no significant effect (or even a slightly negative) of the reform for the majority or for those with immigrant background with high SES parents. This is consistent with previous research (Drange & Telle 2015; Drange 2023).

Figure 4.6:

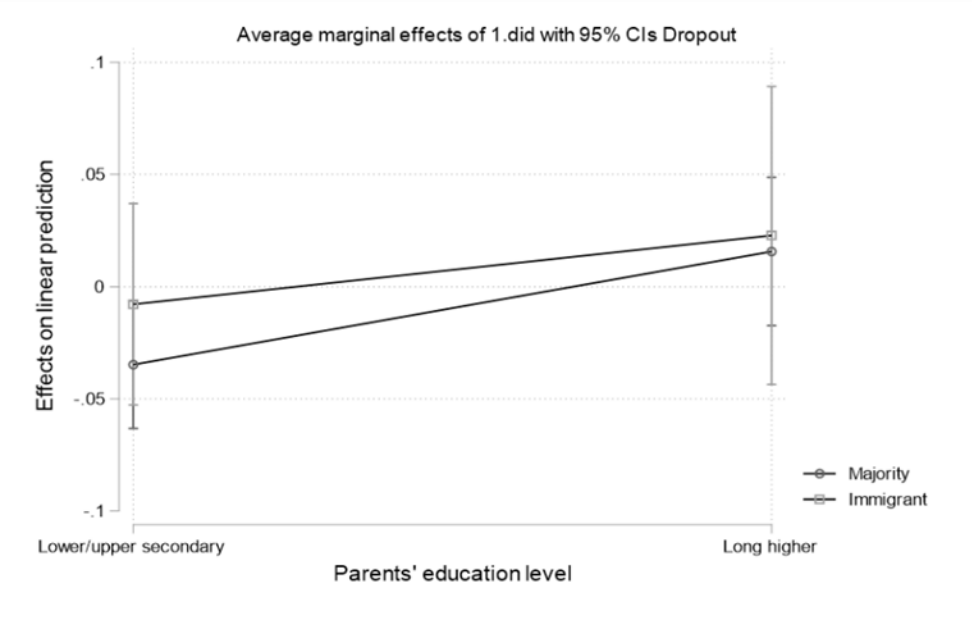


Figure 4.6 shows the average marginal effects from the measure of dropout in first year of upper secondary school. Again, we see no significant effects, and here the coefficients are not in the direction we could expect in terms of immigrant background, even if there seem to be the case that, even if not significantly different from zero, the children with parents with lower levels of education have largest impact of the reform in terms of less dropout. In sum, these results are as could be expected give previous research.

4.6.2. Interview results

Background

Person A explains that the introduction of the pilot project was part of a broader initiative aimed at improving quality of life in socioeconomically disadvantaged areas. The selected pilot neighbourhoods were historically working-class areas that had, over time, seen an increase in immigrant populations due to low housing costs—something that also correlated with lower levels of education. At the time, a range of other challenges was also observed. For instance, there was a noticeable prevalence of lifestyle-related diseases among some women, particularly gestational diabetes, which

led to collaboration with hospitals and local health clinics. Many immigrants were also in need of job training. In this context, the pilot was part of a larger investment in these communities, with free core kindergarten hours being one of several targeted measures. Although both interviewees emphasized language development to be one of the most important possible outcomes of the pilot, Person A explains: "What happened with this measure, what we call ‘free core hours’, was really part of something bigger – it was about improving life for people living in [area], and in the other districts as well."

Neither of the interviewees could recall whether there was research conducted prior to the pilot. Both interviewees have been aware of the evaluations and studies conducted after the introduction of the pilot.

Recruitment

Since the reform was in a large extent designed as a measure to increase participation of migrant children in the kindergartens, the districts have launched an information campaign and reached out to families through various channels: Health stations, the district's service squares, which provide information about municipal services (some of which have minority counsellors), school enrolment, mothers' groups, adult education courses, home visits, posters and brochures, among other things, distributed in shopping centres, open kindergartens, and in addition, "word of mouth" is an important recruitment factor in all districts. Person A, explains that in the initial stages of the reform, they understood the importance of direct engagement in reaching the right individuals for the reform, explaining, “We went door to door to make sure the families who needed it most were reached” and further “We carried out quite active outreach. We went to people’s homes, knocked on doors and said: We have an offer of free core time for your four- and five-year-old."

The information campaign involved also home visits of the implementation team to explain (mainly to the immigrant families) how the kindergartens are organised in Norway and encourage them to enrol their children. Person B also shared an experience from when the reform was expanded nationally. They had spoken to a colleague in another municipality who had gained access to lists from the health centres identifying children not enrolled in kindergarten. This colleague took a proactive approach by going door to door, offering assistance with the application process. However, Person B noted that this method required substantial resources, particularly because it often involved the need for interpreters. In addition, they explained how they reached out to "open kindergartens" (free, informal spaces where parents could bring their children to play).

This approach served as a "segue," allowing parents to experience firsthand what kindergartens were like, with activities such as reading aloud and singing, which helped familiarize them with the concept of kindergarten, something that might have been unfamiliar to many. According to Person B, the municipalities received funding earmarked for recruitment efforts. However, in order to avoid excessive bureaucracy, they were not required to report in detail how these funds were used. As a result, it becomes difficult to pinpoint exactly which measures were the most effective.

Challenges and discussions

When it comes to the implementation of the policy there was consensus across political axis. Person A explains when asked about possible debates: *"I actually have to say that there weren't any debates, not many political disagreements … There was quite broad agreement." This is supported by Person B who explains: "There has been broad consensus on this. I think everyone has seen the common sense in doing something here.*" However, some emphasized the importance this would have in strengthening the Norwegian language of these children, while others were more focused on the impact this would have on getting women into the labour market.

Staffing

Lifting the economic burden from the parents in terms of the free access to kindergarten should be matched with access to good quality kindergartens. At the moment Norway suffers from the lack of kindergarten teachers. Person B explains that although Norway is a geographically vast country with many municipalities facing different challenges and financial situations, much of the necessary groundwork for implementing the reform at the national level was in place, at least on paper.

> *I personally wish. That kindergarten was free for everyone. I think that Norway should actually afford it, because it is a big investment in the future. And, but then the kindergarten offer must also be good, and we now know that right now there is a bit of a crisis with this recruitment. The challenge for both kindergarten teachers and school teachers. That it is so, the number of applicants for the educations is going down, yes, 1/3 of students this year. One of them mentions that the starting salary for a kindergarten teacher is not bad but, but they have to do something about the conditions (…). They have so much responsibility so much they have to do and follow up, and that is also how it turns out. There are more children now with challenges than there were before. (Person B)*

However, the real challenges emerge in practice. Staffing levels in kindergartens are low, sick leave rates are high, and those working as preschool teachers face a heavy workload. At the same time, applications to teacher education programs for early childhood education continue to decline. According to Person B, the framework conditions are simply not good enough. Some measures were introduced in 2025 to improve the situation in socioeconomically disadvantaged areas, but significant challenges remain.

Accessibility

Both interviewees point out that kindergarten capacity and access to kindergarten places did not pose a problem in the district in question, as Oslo municipality already had an ambitious kindergarten policy involving both public and private providers.

> *Oslo had a very ´aggressive´ kindergarten policy here, and they built a lot of kindergartens, and there were many private players who were involved and also (Person A)*

Person A states that one of the key factors in actually getting people to send their children to kindergarten in the piloting project, the location of the kindergarten needed to be in “slipper-distance” to their home. If travel became too extensive, less people would take advantage. This was also important for the kindergarten to be a meeting place in the community. Person B explains: "If the mother is already home with maybe a baby, and getting the three-year-old off to kindergarten—in winter, with poor transport—that just becomes too difficult."

Both acknowledge that in other parts of the city, access to kindergarten places was more challenging, and that this may have affected the implementation. So full accessibility to a kindergarten close by became crucial. Person B explains how the national implementation of the reform became challenging in Sami areas in the north. In these regions, the distances were often too large, and bringing children along on the tundra was an important part of cultural education and traditional ways of life, something that did not align well with the structure and routines of kindergarten.

In terms of accessibility, Person A suggests that “simpler entry points” to apply for kindergarten could potentially help, as many families struggled with the digital application processes. After agreeing to apply, he says:

> *(...)then you have to apply in some way. Then you're faced with a lot of information, and think many of the systems are—shall we say—somewhat intimidating and alienating? I think there should be simpler entry points. Like, if*

> *you became motivated, say through a visit to the kindergarten, and then you met someone there who could help you, and the children could stay behind, so to speak? In other words, there should be an easier way to handle this. And maybe this group isn't really the most digitally inclined target group. But still, a lot has happened over the past 20 years with these immigrant groups, who were mainly the intended target group here. And I know—we know—that we need to do much better. (Person A)*

The system is quite complex and can appear both intimidating and alienating. However, they note that a lot has improved over the past twenty years.

Obligations for families partaking in the project

Person B explains that after the reform was implemented nationally, a conservative government introduced a policy requiring mothers who enrolled their children in kindergarten to attend Norwegian language courses as an activity obligation. This initially sparked concern within the ministries, where many feared such conditions might deter families from participating in the scheme if it came with strings attached.

> *It was an interesting thing, and I guess it really was. (…) The Progress Party had the Minister of Children [then] and they come up with the suggestion that you should give free core time, but it should be linked to a duty for parents to be active. And then I remember that here we sat in a meeting with those in families with children the ministry and were all the bureaucrats were very anxious about what this would lead to, because we thought that now if there are demands made on parents to get this offer, they will say no thanks.(…) But instead, it turned out that Oslo municipality (…) Bergen, possibly also Drammen managed to set this up, so that language courses were given to mothers, while the child had free core time, and it was a great success. The parents who were asked saw it as a golden chance to get something they would otherwise not had a right to get (…)_And we sat a bit with our mouths open. It was just oi. This was a pleasant surprise, but then it ended after a while. It was just a time-limited trial attempt, or well, it wasn't us who were responsible for it, so we were. (Person B)*

As explained by Person B, the measure was surprisingly well received by many mothers, who viewed it as a valuable opportunity, and it turned out to be more successful than expected. Unfortunately, it was only a time-limited pilot and was not continued. Person B reflects that this might have been due to financial considerations. Many of the women in question had come to Norway through family reunification, which does not trigger the

same economic entitlements as refugee status. Additionally, there is often a diffusion in responsibility when it comes to different aspects of such complex policies. In this case, it was unclear who is in charge in the organization of different components: while the Ministry of Education oversees kindergartens, it does not have responsibility for parents—raising the question of who was actually accountable for following up on this initiative.

Room for improvements looking back:

Extension from Two to Three Years

Although both interviewees agree that the reform was seen as successful both point out the age limit for children participating in the program. Person B believes that a three-year program, instead of two years, would have provided better results for the children's language development, as the reform targeted children the last two years before they started school. “With everything we know about language learning and synapsis in the brain and so on, it would make sense to let them start earlier” person B explains. Person A confirmed this and mentioned that already early in the piloting phase, it became clear that offering three years of free core kindergarten time would be beneficial. Person A went on to explain that this was never really up for debate.

Further targeting

Furthermore, Person A suggests that the program could have been more targeted, for example, focusing on the most disadvantaged groups, although they acknowledge that targeting can be difficult to implement in practice due to the administrative challenges it entails.

Advice

Person A also emphasizes the need to strengthen newcomers’ understanding of the Norwegian system, as there are many small things we take for granted that can easily make someone feel excluded if they don't understand them. “Those who understand the system shout the loudest and get the most,” they say, pointing out that this contributes to widening the gap. This becomes evident later as well, for example in relation to the Norwegian State Educational Loan Fund (Lånekassen), which helps finance education. According to person A’s colleague, immigrants are overrepresented among those who struggle to meet the repayment requirements. In Norway, according to her, it is almost

second nature to see the student loan as a debt that must be repaid and as a tool used to obtain an education. But this is not as clear for those who did not grow up here.

4.6.3. Media Analysis

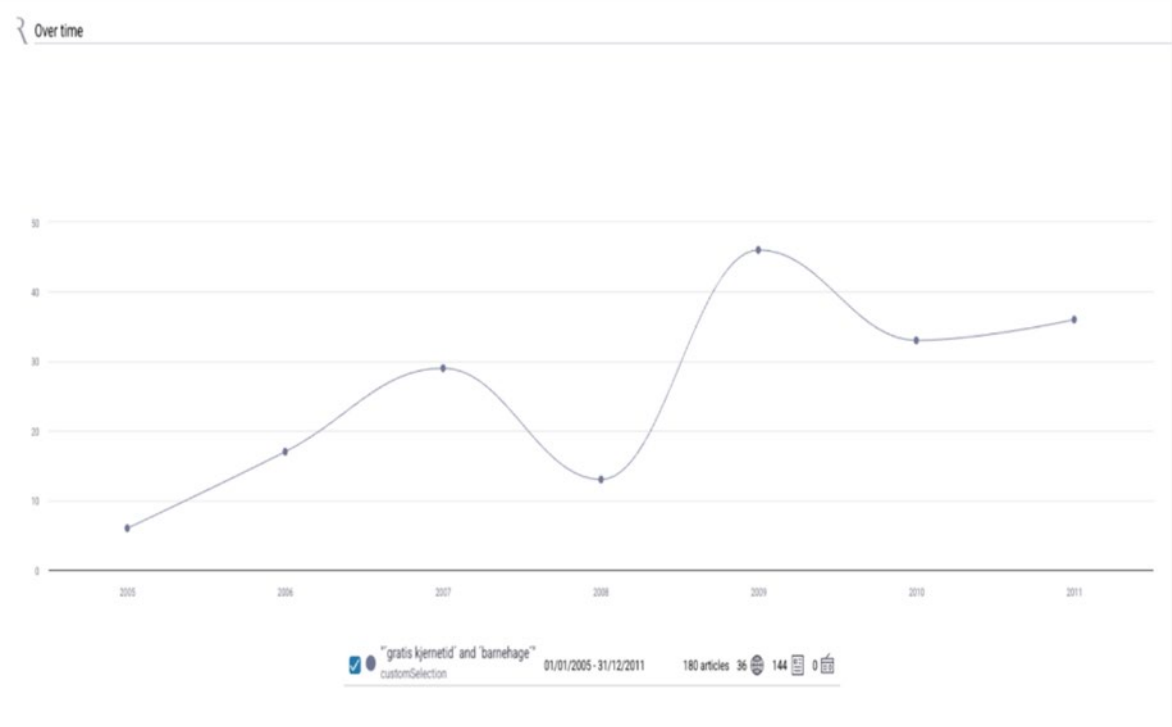
We have decided to search media content between 2005 to 2011. This is when the reform was first trialled in five districts in Oslo. Later the reform was developed, shifted, locally adapted and included additional components: the coverage was expanded to 4- and 3-year-old children, it was made universal in Norway in 2010, shifted from the universal coverage to being means-tested, it included training to teachers for supporting language learning for children with Norwegian as a second language, etc. We limited the period of the analysis firstly because this period already included a large coverage of the topic and secondly, we were interested in researching the media coverage when the reform was new and needed support. Still, already between 2005-2011 the new ideas and shifts in the policy get reflected in the media. In this period, the focus of the reform was also more concentrated on the minority families. We chose to focus on six newspapers, four of which are national, and two which are specifically Oslo based, and one that is local to the area where this is implemented.

We chose the search using the keywords: “free core hours” and “kindergarten”.

In terms of a quick quantitative overview there were:

- 143 articles that were categorised as discussing political issues,
- 133 categorised as describing social issues.
- 101 related to education
- 12 to economy and business

Figure 4.7: The coverage of themes “free core hours” and “kindergarten” in the selected newspapers (in number of articles) between 2005-2011



As a general observation, we can state that from the first glimpse, there was a popular support for the ´Free core hours in kindergarten´ policy. It still was extensively used as a political tool in context of first general, and then local elections and was used as a background in the discussions on migration; Norwegian language vs. mother tongue, migrant integration; social inequalities; women´s labour market activation; youth criminality; crises related to the low numbers of trained educators and too few kindergarten places.

Below we follow the chronological and thematic development of the media discourses analysed by the OsloMet team. It seems to follow a logical development in the debate and shows the reform in the context of the parliamentary and local elections in the country.

2005 was the year of parliamentary elections in Norway, and most of articles mentioning *Free core time in kindergarten* related to it being discussed by several **political** parties as a part of their elections programme (especially on the red and green side, in other words in centre- Labour Party- Ap and left- The Socialist Left Party- SV).

Already at this point, the reform was mentioned by the politicians as a response to the issues relating to migrant integration, thus also the areas with the high proportion of **migrants** were set as the priority areas for piloting the reform.

In 2006, there are increasing discourses on the practicalities and debates on the perceived fairness of the reform, especially the universal cover of the reform was extensively discussed. It was designed to be offered to all families with children in the age of 5 in the chosen areas (with high representation of migrant families in Oslo), no matter what their socio-economic status was. In 2003-2007, Oslo City Council was governed by a coalition of right (Conservative Party- H) and right-wing populist (Progress Party- FrP) parties, while the parliament was governed by the coalition of the Labour Party, the Socialist Left Party and the Centre Party (known as the Red–Green Coalition). As a result, there were some tensions around the policy between the parliament and the Oslo City Council. Initially, the interpretation of the policy by the authorities in Oslo was that the funding needs to be spread to Norwegian classes for migrant children across Oslo, but they were stopped by the parliament and asked to stick to the initial design of the policy, namely that it should cover only the 5 areas in Oslo. The City Council of Oslo argued that the universal coverage would spread the resources too thinly and would result in the lowered effect on the target group. Representatives of the Labour Party rejected this argument claiming that – it would be unfair to provide an individualized special offer exclusively to children from minority backgrounds. In principle, the offer should be provided to everyone within an area [with high representation of migrants]. This argument is further discussed by other politicians and researchers as an important step away from ghettoisation of migrant children. They argue that a universal coverage should give a chance for a better integration of migrant children and majority children in the kindergartens (this issue is raised again in 2009 during the parliamentary elections debates). Adding to this, in 2011 there appears to be a support for this argument in the observation that (seen in retrospect) the ‘core hours in the kindergarten’ policy prevented many majority Norwegians from moving from the districts within the policy trial because the offer of free kindergarten places was an attractive justification to stay. This in turn prevented the ghettoisation of these areas. The importance of integration from early age is further raised in other contexts, including discussions around level of criminality among youth with migration background. Otherwise, 2006 was also a year when the local newspaper (Groruddalen) included descriptions of preparations for the introduction of the trial period and the initial ´successes stories´.

> *It is important to see the historical perspective. Here there are a number of people who do not have the culture that children should go to kindergarten, and when you also have systems that encourage children to stay at home, this is reinforced.(interview with Head of Department at the Directorate of Integration and Diversity, Randi Kleven, cf. ´Klart for tidenes satsing i Groruddalen´, Groruddalen. Publisert på trykk 16.08.2006, ´Bjerke-suksess´, Groruddalen. Publisert på trykk 14.09.2006, ´, fungerer - flere barn i barnehage´Groruddalen. Publisert på nett 01.07.2009 16:28.)*

During the implementation period in 2006/2007, there were also articles expressing doubts over the effect of the policy, especially in terms of the challenges to integration of migrant children in kindergartens, and in consequence having limited effect on their Norwegian skills. Some articles referred to the Danish case (Denmark introduced the reform before Norway) that showed that despite the higher participation in kindergartens, among the migrant children, there was little effect on integration and further on the language abilities of the migrant children, meaning that the minority and majority children do not play together.

The cost of kindergarten was not the only barrier for low participation among migrant families. Many families simply were not interested in childcare and opted for home care. Many sources from 2006 describe the efforts put by the districts into informing and active recruitment measures to engage immigrant families, through a number of different channels, which also included home visits. This was also extensively described by interviewee who was involved in implementation in one of the districts. This created a “culture of support”, where almost all relevant families ended up accepting the offer. Moreover, through the " Groruddal Dirtrict Initiative’, the kindergarten offer was combined with Norwegian language training for the mothers.

> *If we do not make better arrangements for the whole family, it will be difficult to demand that women be put to work. A comprehensive strategy that includes immigrant women's opportunities for expanded childcare schemes, after-school care, a more comprehensive health service and other follow-up, is a clear prerequisite for this scheme to be a benefit for women and society..´Innvandrerkvinner og arbeid´,cf. Aftenposten. published 31.05.2007.*

In 2007, discourse around the *Free core time in kindergarten* started to again revolve around the inclusion of all families who have low socio-economic status, not only within the areas of high representation of migrants. At the time, SV started to discuss in the media the idea that no family should pay more than 5 percent of their gross income for

kindergarten9. 2007 is also a year of the local elections in Norway, and therefore the policy is once again used in the political debates but this time on Oslo- and especially in district- level. This also potentially becomes a part of the reason of the shift from the sole discourse on immigration issue to the broader socio-economic matter for some politicians on the center and left. At the same time, the idea of expanding the policy to 3 year-old children is also more often discussed in 2007 also as a part of the political agenda for the local elections.

Towards the end of 2007, in the second year of the trial, the discourse moves towards the availability of places in the kindergartens. The successful recruitment campaign resulted in the kindergarten places quickly filling up, putting the pressure on the districts to open new places.

> *This year, the district of Grorud has created 88 new kindergarten places. If the district is to achieve full coverage of needs next year, the district must acquire about 340 new kindergarten places.*
>
> *- Large developments are planned, but we need more places than we have development plans for. We probably won't reach full kindergarten coverage next year either," states department manager Sidsel Krakeli in the district. (Chasing more places Neither have enough places nor enough preschool teachers´, cf. Aftenposten. published 13.12.2007. Side: 35)*

This pressure and the quality of the kindergarten offer was also an important topic during the interviews with the policymaker.

This is a part of a broader problem in Norway and includes also the issue of a severe lack of trained educators both in kindergartens and in schools, as well as the reduced capacity of the health centres in Oslo which are responsible for mapping the development of language skills among children. These issues were largely in focus in 2008.

At the start of 2009, there is a series of articles describing the observations about children's abilities to learn the language through play. These narratives coincide with discussions over spreading the trial to other parts of Norway. In 2009, there is also more focus on 'free core hours in kindergarten' and 'cash benefits' policies in the context of gender equality (the latter hindering the equality), and migrant integration (the former being seen as supporting integration). There are more critical voices about the cash benefit as means to demotivate women (especially from ethnic minorities) from participating in the labour market. Cash benefit was defended in several articles by politicians from the Christian Democratic Party- KrF, who were its biggest supporter

from the start. Additionally, there was again parliamentary elections in Norway in 2009, and again the policy was used in the debates of the party programmes and again it was discussed in the context of migrant integration. At the same time, some parties (SV, Ap) begin to discuss the idea to introduce free afterschool homework help to increase equity among pupils. 2009 is also the first time (within the selected period) when the mother tongue of the migrant children is mentioned not only in the context of not speaking Norwegian but as something that could potentially to be supported. This was discussed following the publication of the OECD report on ´Migrant education´ in 2009, which indicated that minority language children do significantly worse at school than other children.

> *The OECD (Organisation for Economic Co-operation and Development) believes that the Norwegian authorities are doing a lot of the right thing to counteract this, but at the same time believes that a number of findings are very worrying:*
>
> *The average age of first-generation students who come to Norway is 10-11 years. This group often does particularly poorly in upper secondary school, especially in vocational training.*
>
> *Children with an immigrant background, especially children under the age of three, are clearly underrepresented in Norwegian kindergartens. Thus, many do not learn Norwegian before they start school. In primary school, minority language pupils score worse on reading tests. Cash benefits, access to kindergarten places and high co-payments are the main reasons why minority children do not attend kindergarten. These economic barriers should be removed, writes the OECD.*
>
> *There is an increasing concentration of minority language students in certain parts of Oslo. The OECD is concerned that the city will be too divided, and that the immigrant population will be left alone. Schools with a large proportion of minority language students are given too few resources to deal with this.*
>
> *Teacher education must be improved. Teachers today are not well enough equipped to meet the challenges in the classroom with minority students. For example, all teachers should have knowledge of how to teach Norwegian to people who do not have it as their mother tongue.*
>
> *The major reform, the Knowledge Promotion Reform, delegated a lot of authority to counties and municipalities. Thus, there is also a big difference between the municipalities and how much resources they spend on facilitating increasing the learning outcomes of minority language students. There is also a lack of*

cooperation, especially between lower and upper secondary schools. (cf. Avslører klasseskille i skolen´, Dagbladet. Published 07.06.2009. Side: 6.)

In 2010, the debate about the mother tongue continues. There is some criticism of the sentiment that the mother tongue disturbs learning of Norwegian. At the beginning this portrayal is solely presented in the newspapers on the left side of the political arena. But the general sentiment remains that the mother tongue is a private issue and only Norwegian language should be supported, this argument concludes that there should no longer be mother tongue assistants in kindergartens and the support should be directed instead to learning Norwegian (this, in turn, is later on in 2011 discussed as a challenge, as most of the substitutes for kindergarten teachers (70%) turn out to be Swedish). In this context, 2011, the integration commission recommended ending the provision of mother tongue education for school children who speak Norwegian well enough to follow Norwegian lessons. The commission also recommend expanding the 'free core hours in the kindergarten' to younger children and to more geographical areas outside of Oslo. There are also several articles that refer to the policy from the school´s perspective in the trial areas, stating the teachers' observations that the children beginning school have a higher level of Norwegian since the start of the reform. One article describes how some kindergartens organise parenting courses for parents who use ´the core hours in kindergarten´.

4.7. Discussion and Conclusion

Our findings in this chapter confirm and extend what has been done in pervious literature examining the reform. Previous evaluations of the reform have generally shown positive effects on especially language tests among children with immigrant backgrounds with low socio-economic status up until 8th grade but did not show any significant effects on grades in grade 10 (Drange 2023). The quantitative results in this chapter confirms this and did not find any significant results for dropout. They also suggest that, even if not statistically significantly different from zero, the reform has mainly had an effect on the targeted group of low SES children with immigrant background. This supports earlier advices that attending pre-school is valuable in terms of improving later school results, and that targeting groups that do not use the offer could improve the chances of low SES and children with immigrant background, that are over-represented in dropping out of school and often have lower grades. Further quantitative research should investigate if the reform has had any impact on reducing drop out from upper secondary school altogether on grades in upper secondary school, and the likelihood of moving on to higher education for this group. It is possible that

even if the results are not statistically significant at this level of schooling, they will be at a later point in these children's educational careers. More subjective measurements such as quality of life and school could also be investigated with survey data.

Although both the qualitative study and media analyses point to the general consensus around the implementation of the ´core hours in the kindergarten´ reform, they also provide some nuances in the political and practical context of the implementation. The interviews shed light on the hands-on procedures the local practitioners carried in collaboration with the district authorities in order to inform the otherwise hard-to-reach migrant communities in their areas. This strategy seems to have contributed to the high uptake of kindergarten places among migrant children. At the same time, the reform was developed, implemented and evaluated in the changing political setting both locally in Oslo, where the reform was initially trialed, and on the national level. Media analyses conducted within this study, show how the reform was discussed, criticized, adjusted and evaluated depending on the political scene at the time. Migration, integration, language support, poverty, equity, fairness and the quality of education have been in the center of these debates widely discussed from the right to the left corner of the political scene in Norway.

Due to time restriction set in media analyses (2005-2011), this part of the study was not able to examine long term effect of the policy on equity in education. Still, it allowed scrutinization of the attitudes and expectations set out at the time of the pilot phase of the reform. In our attempt to answer the question *How was the reform portrayed in the media during the period of its initial trails* we can say that, ´free core hours in kindergarten´, although generally accepted as an important and needed policy, was not immune to being used as a political tool and a channel to opinion expressions about migration, integration and societal fairness in the political programmes across the political spectrum. From the local, bottom-up perspective, the articles relating to this reform pointed to particular challenges of the lack of qualified kindergarten teachers or limited access to kindergarten spaces. One effect of the policy that was discussed in the media and which goes beyond the equity in education but has an indirect effect on it was the participation of parents, especially mothers, in the kindergarten. For many of them, the kindergarten came to represent an important meeting place, a stimulus to learn Norwegian, and a place to practice the language. In this way, increasing the use of kindergarten among children with an immigrant background led to more contact with and more knowledge about Norwegian society, also for the parents.

5. Denmark Case study Report

5.1 Introduction

In 2009, Denmark introduced mandatory language assessment of children in grade 0 (age 6). In this research project we look at the policy change using a multi-method approach.

We conduct a quantitative analysis to examine possible long-term effects of this policy initiative on educational outcomes. Specifically, we investigate whether language assessment mitigated educational inequalities by differentially influencing outcomes across students' background characteristics: parental income, parental education, and immigrant status). Consequently, we define inequality as differences in effects of mandatory language assessment for different groups of students which we know from prior research are educationally disadvantaged (e.g., Analyse & Tal, 2024; Jakobsen & Liversage, 2010; Rangvid, 2007; Trygfondens Børneforskningscenter & Rambøll, 2015). For instance, if mandatory language assessment affects educational outcomes equally for students with different parental backgrounds in relation to socio-economic status, educational background, or immigrant status, respectively, educational inequality will be unaffected. Educational results are measured as children's grade point average (GPA) from lower secondary school (9th grade: ISCED 2).

In addition, we look at the policy change using qualitative approaches consisting of a media analysis and interviews. The interviews supplement the quantitative analysis by focusing on how the mandatory language assessment has been implemented and developed over time. Further, the media analysis shows how the policy reform was portrayed in terms of social implications in the media.

The chapter is structured in the following way: first, an overview of the wider national context is provided as well as more detailed policy introduction. This is followed by a literature review relating to the reform in focus here and the research questions that have guided these examinations. The methods section will describe the chosen methods relating to our quantitative data analysis, the interviews, and the media analysis. The chapter then presents the results of the quantitative and qualitative analysis, and finally, the combined findings are briefly discussed and concluded.

5.2. National Context

In 2009, Denmark implemented a nationwide policy reform requiring that all children enrolled in Grade 0 – the first year of compulsory schooling – undergo a standardised language assessment. The reform marked a major institutional shift in Danish early education, motivated by a political ambition to reduce social inequality through earlier detection of learning needs and more timely pedagogical support (Ministry of Education, 2008). Rather than introducing a new practice, the reform sought to formalise and harmonise existing language assessment procedures, which had until then been unevenly implemented across municipalities and schools.

Before the reform, there was no national requirement to conduct language assessments at school entry. However, a national survey by the *Danish Evaluation Institute* (EVA, 2011) found that approximately 60% of schools were already conducting some form of language screening in Grade 0 prior to the reform. These assessments varied significantly in purpose, quality, and follow-up, and some were part of broader pedagogical observations, while others involved more structured tools – but with no consistent criteria or national oversight. As a result, children's access to early language support was largely determined by local policy or individual school practices, contributing to disparities in early educational opportunities.

The 2009 reform aimed to address these differences by standardising the timing and content of language screening across all public schools. Although the law did not mandate use of a specific assessment tool or procedure, it required that the results of the screening be documented and integrated into each child's individual learning plan (*elevplan*). The goal was to ensure that all schools systematically assessed language development and used the results to inform pedagogical decisions. In practice, however, implementation continued to vary across municipalities, especially regarding how the results were followed up. Private schools, which educate approximately 15% of Danish children, were not covered by the reform and remained free to choose whether and how to conduct such assessments (EVA, 2011).

This reform must be understood within a broader policy shift in Denmark and internationally towards early intervention and school readiness. Drawing on research from developmental psychology and economics, Danish policymakers increasingly emphasised the importance of early language development as a foundation for later educational success and social mobility (Heckman, 2006). The Ministry of Education explicitly positioned the language assessment reform as part of a strategy to "level the

playing field" for children from different social backgrounds by reducing the gap in preparedness at school entry (Ministry of Education, 2008).

In sum, the 2009 policy reform institutionalised a national expectation for early identification of language difficulties and provided a framework for more equitable educational support at the start of compulsory schooling. While its legal mandate applied only to public schools and left some implementation details to local discretion, the reform marked a turning point in the Danish approach to addressing inequality through early educational intervention.

5.3. Country based literature review

A growing body of Danish research has investigated the role of early language skills in shaping children's educational trajectories and the potential of early interventions to mitigate social inequality. Language development in the early years is widely recognised as a critical foundation for later academic achievement, especially in literacy and comprehension (Bleses et al., 2018). However, studies consistently show that children's language competencies at school entry are strongly stratified by social background. Children from low-income families, those whose parents have limited education, and children from immigrant backgrounds are at greater risk of language delays and less likely to receive adequate support (Gupta & Simonsen, 2010; Hansen & Broström, 2011).

Several studies have evaluated the effectiveness of early language interventions in Denmark. The *SPELL programme* – a large-scale randomised intervention – found that early literacy skills can be improved through structured pedagogical activities, particularly when educators are trained in implementation (Bleses et al., 2021). Importantly, the authors noted that effects varied across groups: children from immigrant and low-income backgrounds showed differential gains, suggesting both the promise and the complexity of early interventions as tools for equity.

Other studies have explored the broader impact of early childhood education on academic outcomes. Using administrative register data, Gupta and Simonsen (2016) examined the long-term effects of early childhood centre-based care and found positive impacts on test scores in later schooling. These effects were particularly strong for children from disadvantaged backgrounds, supporting the notion that early institutional support can mitigate some of the effects of socioeconomic inequality. Their findings align with international research emphasising that early interventions are most cost-

effective and impactful when targeted at children with elevated risk factors (Heckman, 2006; Cunha et al., 2010).

Despite these insights, there remains limited evidence on the long-term effects of Denmark's reform that instituted mandatory language assessment. Some cohort-based studies suggest that early improvements in language skills may not always translate into long-term academic benefits, especially if not followed up with sustained support (De la Porte et al., 2022). Furthermore, recent PISA data indicate improvements among students from non-Western immigrant backgrounds in Denmark, with narrowing performance gaps noted in 2022 compared to previous cycles (OECD, 2023). It remains, however, unclear whether these improvements reflect the impact of early interventions – such as the 2009 language assessment and compulsory Grade 0 – or broader structural and educational changes.

In sum, while early language interventions hold considerable promise for reducing inequality in educational outcomes, their effectiveness depends on the quality of implementation, the broader institutional context, and the capacity for sustained follow-up. The 2009 Danish language assessment reform represents a step towards institutionalising early intervention but also raises important questions about variation in uptake and its long-term impact across different social groups. We contribute to this research agenda by looking at the 2009 change towards mandatory language assessment accounting for school differences to test the effect of the mandate on language assessment.

5.4. Research questions

The analyses are guided by a common research aim integrating the different parts as well as three more specific research questions pertaining to the quantitative, qualitative and media analysis. The broad research aim is to investigate how the policy change introducing mandatory language assessments can be understood in light of its intentions, design and implementation as well as effects on educational inequality?

The quantitative part seeks to answer the following research questions:

1. What are the long-term effects of the mandatory language assessment on educational outcomes, measured as GPA by school leaving?
2. Did the policy change reduce socioeconomic disparities in long-term outcomes?

The interviews were guided by the following research question:

3. How were the design and implementation of the mandatory language assessment perceived and how are the test regime evaluated by relevant stakeholders.

The media analysis was conducted on the basis of the following research questions:

4. To what extent does the media content found identify the language assessment as having positive or negative consequences?

Taken together, the three parts of the research design supplement each other. While the quantitative analysis evaluates the effects of the policy change, the interviews and media analysis contextualise the quantitative results in terms of justifying the intentions and the rationale underscoring the design and implementation as well as providing important information regarding the interpretation of (lack of) effects and possible mechanisms.

5.5. Methods

5.5.1. Research design

In this study a multi-method approach was employed consisting of a quantitative analysis of register data and a combination of interviews and a media analysis laying out an evaluative perspective on the language assessment tests.

5.5.1.1. Quantitative part

This study uses an Interrupted Time Series (ITS) design to assess the impact of a nationwide policy reform introduced in Denmark in 2009, which mandated language assessment of all children in Grade 0 (the first year of primary school). The primary outcome is academic achievement in Grade 9, measured as students' final Grade Point Average (GPA). The ITS approach allows us to estimate changes in the level and trend of academic performance before and after the reform, while accounting for pre-existing trajectories.

The ITS design leverages the temporal structure of the data to identify whether a significant shift in GPA occurred following the introduction of the reform. The key identification assumption is that, in the absence of the policy, the pre-reform trend in GPA would have continued unchanged.

We include school-cohort fixed effects to ensure that only within school-cohort variation across time is used and to control baseline differences between school-cohorts. Accordingly, including school-cohort fixed effects strengthens causal identification.

In sum, our quantitative analysis strategy examines differences in outcome for 0 grade cohorts before and after 2009 within the same school.

5.5.1.2. Qualitative part

Interviews

The interviews followed the interview guide developed in the STRIDE research project. The interview guide was translated into Danish and contextually adapted to align with the selected reform under analysis. Because the language assessment tests are designed solely to identify children in need of additional language support, we considered it relevant to use these interviews to gain deeper insight into how the assessments are subsequently applied. This includes understanding how they are used to tailor support to the identified needs of individual children. A question was therefore added to the interview guide, in which informants were asked about their knowledge concerning the subsequent initiatives, including whether and how such initiatives are subject to quality control.

We conducted a total of three interviews involving four informants. Although a ministerial gatekeeper served as an access point for identifying potential informants, we were unable to secure an interview with the department within the Ministry of Education responsible for policy development, due to limited availability at the department.

Instead, we established contact with an informant from the *Styrelsen for Undervisning og Kvalitet* [Department of Education and Quality; herafter STUK] within the Ministry of Education. STUK advises institutions and municipalities on high-quality teaching and childcare, supervises the quality of all schools and educational institutions across the country, and contributes to ensuring that both ministerial services and sectoral guidance are grounded in the best available knowledge base. As the reform in question is ongoing, STUK holds day-to-day ministerial oversight. We interviewed an informant who has served as project leader for the implementation and evaluation of language assessments in preschools since 2018. Although the informant's primary role pertains to preschools, the informant also possessed knowledge regarding the use of language assessments in primary schools.

The second informant is employed by Aarhus Municipality in the Department of Children and Youth and is responsible for all matters related to language assessment in primary schools. The informant has worked with children's language development in the municipality since 2006 and has thus been involved with the language assessment practices both prior to and since the initial implementation of the reform. The informant provides guidance to school professionals conducting the assessments and serves as a liaison between the ministerial department (STUK) and school staff. In this capacity, the informant communicates the knowledge base for the language assessments developed by STUK and by the research institution, Trygfonden's Centre for Child Research [*TrygFondens Børneforskningscenter*], responsible for the design and content of the assessments. Furthermore, the informant is responsible for implementing ongoing legal and technical updates to the assessments.

Informants 3 and 4 were interviewed together at the request of Informant 3. Both are employed at the research institution formally responsible for the academic development and evaluation of the language assessments (Trygfonden's Centre for Child Research). Informants 1 and 2 both identified Informant 3 as the key researcher behind the academic development of the assessments since their initial implementation. Informant 3 led the development of the knowledge base, evaluation frameworks, and the design of the assessments throughout the years since the implementation of the reform. Informant 4 is a project leader at the institution and is partially responsible for communicating research findings on the language assessments to key stakeholders (e.g., schools, municipalities, the ministry). Both informants hold leading roles in relation to the language assessments and, through their work at the research institution, possess substantial knowledge of the policy development, implementation, and evaluation of the reform.

Table 5.1: Informants

Informant	Place of Work	Expertise	Gender	Means of identification
1	Ministry Department for Education and Quality	National level: Implementation and Quality Assurance of Language Assessment Tests at Age 3; since 2017	F	Through NSG gatekeeper
2	Municipality Department of Children and Youth	Local level: Implementation and Quality Assurance of Language Assessment Tests at Age 6; since 2006	F	Through NSG gatekeeper

3	Research Institution	Research leader and principal developer of the official language assessment tests; since implementation	F	Snowball sampling
4	Research Institution	Research leader, Communication and Political Contact on the official language assessment tests; since implementation	F	Snowball sampling

The composition of the group of interviewees meant that we expected to find less information on how the language assessment had been developed on the level of policymakers, but that we instead would find more information on how the language assessment tests had been implemented and developed in scope and content on a continuous basis. Furthermore, as Informants 3 and 4 occupied institutional roles that positioned them as key stakeholders in the historical and ongoing development of the language assessment, we expected their perspectives to be generally positive. In contrast, Informants 1 and 2, by virtue of their more external vantage points, might be more likely to articulate potential critical perspectives.

Media analysis

The data for the media analysis was gathered using the *Infomedia* database, which contains Denmark's largest media archive with articles stretching all the way back to 1990. The search comprised the 4 most important national newspapers: *Jyllands-Posten, Politiken, Information*, and *Berlingske*; and the two most significant tabloids: *BT* and *Ekstra Bladet*. The covered period was fixed to 01/01-2007 – 31/12-2024, which includes media entries from two years before the reform was enacted until the present. The reform is ongoing and has been updated several times since its first enactment, and the effect of the measures might be expected to emerge gradually, so we have chosen to include any mentions of the policy and its effects or consequences since its inception.

Roughly, the search string can be translated as follows:

> language AND (assessment OR test) AND kindergarten AND class (sprogvurder* OR sprogtest*) AND børnehaveklasse*)

The search resulted in 102 hits out of which 16 were included while the rest was not, as they did not fit the scope of the research question of the media analysis. The distribution of the identified articles is shown in Table 5.2 below.

Table 5.2: Included Articles According to News Paper

Newspaper	Orientation	Hits
Jyllands-Posten	Broadsheet, right leaning	3
Berlingske	Broadsheet, right leaning	5
Politiken	Broadsheet, centre-left leaning	6
Information	Broadsheet, left leaning	1
Ekstra bladet	Tabloid, centre-left leaning	0
BT	Tabloid, right leaning	1

Source: Authors search on Infomedia.dk

Of the 16 included articles the first by Svane & Damsgård Andersen (2008) only mentions compulsory language assessment as one element in a more comprehensive reform of primary and lower secondary schools (ISCED 1 & 2) without otherwise going into any detail about the language assessments. Of the remaining 15 articles, two by Vestergaard (2011a; 2011b) mentions compulsory language assessment as one of several government initiatives intended to improve on what was seen as disappointing results of the PISA tests in Danish schools in the early 2000's, but they do not examine in any detail the impact of language assessments in particular, so we exclude these from the analysis below as well.

The analysis thus concentrates on the remaining 13 articles of which five are concerned with the original language assessment policy from 2009 (Jessen, 2009; Mainz, 2014; Ejsing, 2017; Domino, 2017; Skovhus Larsen, 2023); and the last eight (Broström, 2018; Littauer, 2018; Nilson & Lund Kristiansen, 2018; Lund Kristiansen, 2018; Thuesen, 2018; Jespersen, 2019; Matthiessen, 2019; Weber, 2019) are about an amendment to the policy turning the language assessment into a test that must be passed to be able to enter 1st grade.

5.5.2. Data analysis

5.5.2.1. Register-based analysis

We use population-wide registry data from Statistics Denmark (*Danmarks statistik*) including students who started grade zero between 2006 and 2012 in public schools. Students in private schools are excluded from the analysis, as these institutions were not subject to the mandatory assessment requirement. We exclude students who are younger than five and older than eight years old when they started grade 0.

The final analytic sample includes 369.962 students with no missing values on the variables used. Table 5.3 shows descriptive statistics for sample used for analysis.

Table 5.3: Descriptive statistics for analytic sample

	Mean	SD	Min	Max
GPA (7-point scale)	6.98	2.51	-3	12
GPA (standardised)	0.00	1.00	-4	2
Age at school entry	6.08	0.33	5	8
Low parental education	0.11	0.31	0	1
Medium parental education	0.69	0.46	0	1
High parental education	0.20	0.40	0	1
School entry year	2009.05	2.00	2006	2012
Low income	0.25	0.43	0	1
Immigrant	0.09	0.29	0	1
Female	0.49	0.50	0	1
Mother unemployed	0.19	0.39	0	1
Observations	369.962			

Source: Authors computations using data from Statistics Denmark

Dependent variable

The main outcome is students' GPA in Grade 9, originally recorded on the Danish 7-point grading scale. To facilitate comparison across cohorts and account for overall shifts in grading practices, GPA is standardised within entry cohorts, resulting in a z-score variable with mean 0 and standard deviation 1.

Independent variables

The main independent variable is school entry year which is the year the child started in grade 0. We have computed the school entry year by looking at the first time a child has been registered as a student in a primary school (*Grundskole*) based on the comprised student register (KOTRE). Based on the registry, twice as many students started school in 2007 based on the other school starting years and no students have been assigned in 2006. Therefore, the group of students starting school in 2006 has an "inferred school starting age" based on the birth year. This means that 7-year-olds registered as attending school for the first time in 2007 have been assigned to school starting in 2006 as 6-year-olds. The remaining cohorts have been assigned to their actual school starting year based on the registry data. All subsequent variables are calculated based on the register-based school starting year. Cohorts entering grade 0 before 2009 will be unaffected by the mandatory language assessments while cohorts entering from 2009 and onwards are affected. The remaining independent variables fall into three categories.

First, to investigate differential effects of the reform across social groups, we include three key indicators of children's socioeconomic background: parental education, parental income, and immigration background. These variables are defined in the year children are first registered as entering school. Parental income is measured using the equivalised disposable income, a standardised indicator developed by Statistics Denmark. This measure reflects the total disposable income of a household – after taxes and transfers – adjusted for household size and composition using the modified OECD equivalence scale. We use the income measure for the year the child entries school in 0 grade. We use a binary indicator for low-income which identifies children in the bottom quartile of the equivalised income distribution.

Parental education is based on the highest completed level of education across both parents, as recorded in registers. We construct a three-level categorical variable: 1) Low parental education: Neither parent has completed education beyond compulsory school (9th or 10th grade: ISCED 2), 2) Medium parental education: At least one parent has completed upper secondary education or a vocational qualification (ISCED 3-4), but neither holds a tertiary degree, and 3) High parental education: At least one parent holds a degree from higher education (ISCED 5).

Immigration background is categorised according to Statistics Denmark's official definitions: 1) Immigrants: Children born abroad to parents who are also born abroad and not Danish citizens at birth, 2) Descendants: Children born in Denmark to immigrant

parents, also foreign-born and non-citizens at the time of the child's birth, and 3) Majority population: Children born in Denmark to at least one parent born in Denmark and holding Danish citizenship. For analytical purposes, immigrants and descendants are combined into a single immigrant background category, while the rest are considered part of the majority population.

Second, we control for student age at school entry, gender, and a dummy for whether the child's mother is outside the work force (e.g., students, unemployed, retired).

Third, we include model specific controls in terms of 1) a continuous variable capturing linear change over school entry cohorts (time trend) and 2) an interaction between time and reform (post-reform trend) which captures whether trends changed *after* the reform.

Finally, we include school-by-cohort fixed effects to account for unobserved school-level heterogeneity and cohort-specific conditions. Standard errors are clustered at the school-cohort level.

5.5.2.2. Interviews

The interviews were conducted as online interviews through Microsoft Teams. The interviews lasted between 40-60 minutes. All interviews were recorded with the application feature in Microsoft Teams and simultaneously transcribed with the built-in AI generated feature. All AI generated interview transcripts were subsequently adjusted manually according to the video recording as reference to check the validity of the transcripts. Following this, we conducted a thematic analysis of the interviews deductively informed by the interview guide, grouping the interviewees' responses according to the following categories reflecting the basic interests of the interview guide.

Table 5.4: Thematic overview of interview coding

Thematic Categories	Description
"Relevant experience and job description"	Answers pertaining to the interviewee's relevant experience and current job.
"Experience with focussing on inequality in Education"	Answers pertaining to the interviewee's experience with working with inequality in Education.
"Experience with legislation"	Answers pertaining to the interviewee's experience or knowledge on the legislative

	aspects of the reform in particular and inequality in education in general.
"Familiarity with Reform Milestones"	Answers pertaining to the interviewee's knowledge with the development, implementation, and evaluation of the reform.
"Knowledge Base of Reform Development"	Answers pertaining to the interviewee's acquaintance with the knowledge base for the development and implementation of the reform.
"Influential Stakeholders in Reform Development"	Answers pertaining to the interviewee's knowledge of stakeholders who have influenced the development and/or implementation of the reform.
"Reform Success Evaluation"	Answers pertaining to the interviewee's professional valuation of the success of the reform.
"Reform Challenges"	Answers pertaining to the interviewee's assessment of significant challenges in the development and/or implementation of the reform.
"Advice for Future Policy Makers"	Answers pertaining to the interviewee's recommendations for policymakers.
"Subsequent Language Support"	Answers pertaining to the interviewee's knowledge on how and which measures is implemented after the language assessment test and the quality of these are ensured.

Interviewee responses were tagged with the categories above, and all relevant passages were subsequently assigned with keywords that could provide further details on the content or positioning of the interviewee statements.

5.5.2.3. Media analysis

We initially coded the media content according to how the policy was described in the articles in either positive, negative, or neutral terms. For each code, we then performed an inductive analysis to identify the following subthemes: early interventions (positive), equality of opportunity (positive), test design (negative), well-being (negative), resources (neutral), and collaboration (neutral).

5.6. Results

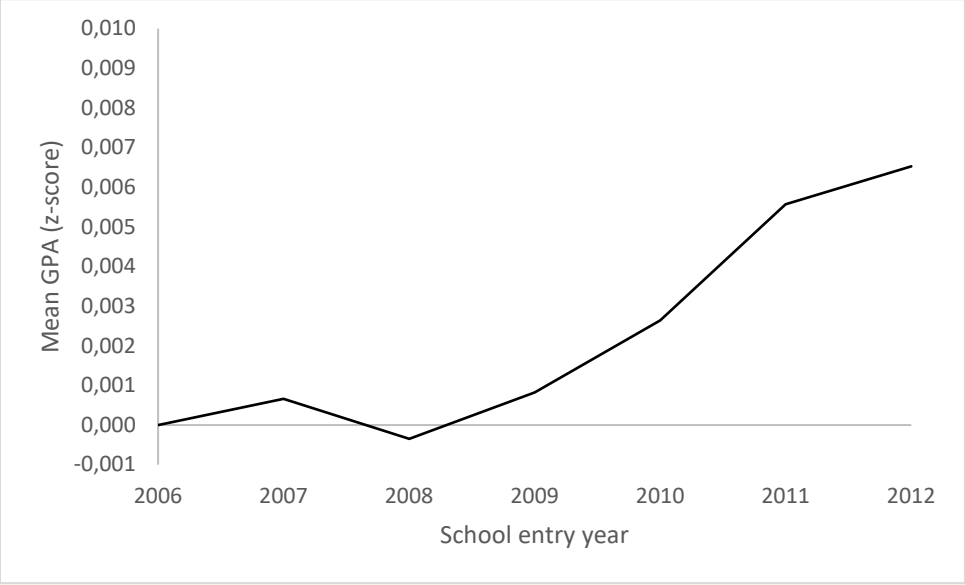
5.6.1. Results from register-based study

We present results from the quantitative analysis in two parts. First, we show results from our main model in which we estimate the average effect of mandatory language assessment on (standardised) GPA. Second, we investigate how mandatory language assessment affected educational inequality by analysing heterogeneous effects across students' socioeconomic characteristics.

5.6.1.1 Main effect of mandatory language assessment

To descriptively assess the development in standardised GPA before and after the introduction of mandatory language assessment, Figure 5.1 plots mean standardised GPA by school entry year.

Figure 5.1: Development in average standardised GPA by school entry year



Source: Authors work using data from Statistics Denmark (N=369.962)

Note: Based on collapsed means of standardised GPA by school entry year. Reform introduced in 2009 (vertical line).

The figure shows that standardised GPA increased from 2006 to 2012 and that this increase took off in 2008-2009 which was just around the introduction of mandatory language assessment.

To assess the overall impact of the introduction of mandatory language assessment on academic performance, we estimated a series of stepwise regression models using standardised GPA in Grade 9 as the outcome. Table A1 (appendix) presents our results from five models, ranging from a simple bivariate regression to a fully specified model with extensive controls and fixed effects.

The analysis reveals a small but robust positive effect of mandatory language assessment on students' academic achievement in lower secondary school (ISCED 2). In the fully adjusted model (Model 5), the reform is associated with an increase of 0.031 standard deviations (SD) in students' standardised GPA at the end of Grade 9 ($p < 0.001$). This estimate is statistically significant and remains stable across specifications.

In the baseline model (Model 1), which includes only school fixed effects and the reform indicator, the estimated effect is close to zero (0.004 SD) and nonsignificant. However, once time trends and individual-level covariates are introduced in subsequent models, the reform effect becomes consistently positive and statistically significant, peaking at 0.031 SD in the final specification.

When converted to the original Danish 7-point GPA scale, the estimated effect of 0.031 SD corresponds to approximately 0.08 grade points, given a standard deviation of 2.5 in the original 7-points scale. The Danish 7-point scale has a standard-deviation of 2.5. We can therefore compute a grade-point value of our estimated effects. Our estimated effect of 0.031 corresponds to approximately 0.08 grade points (2.5*0.031). The size of the effect is in line with findings from other early intervention policies targeting general populations (Heckman & Kautz, 2013). While the main effect is small, it provides a foundation for examining whether the reform contributed to reducing educational inequality – an issue explored further in section 2.6.1.2.

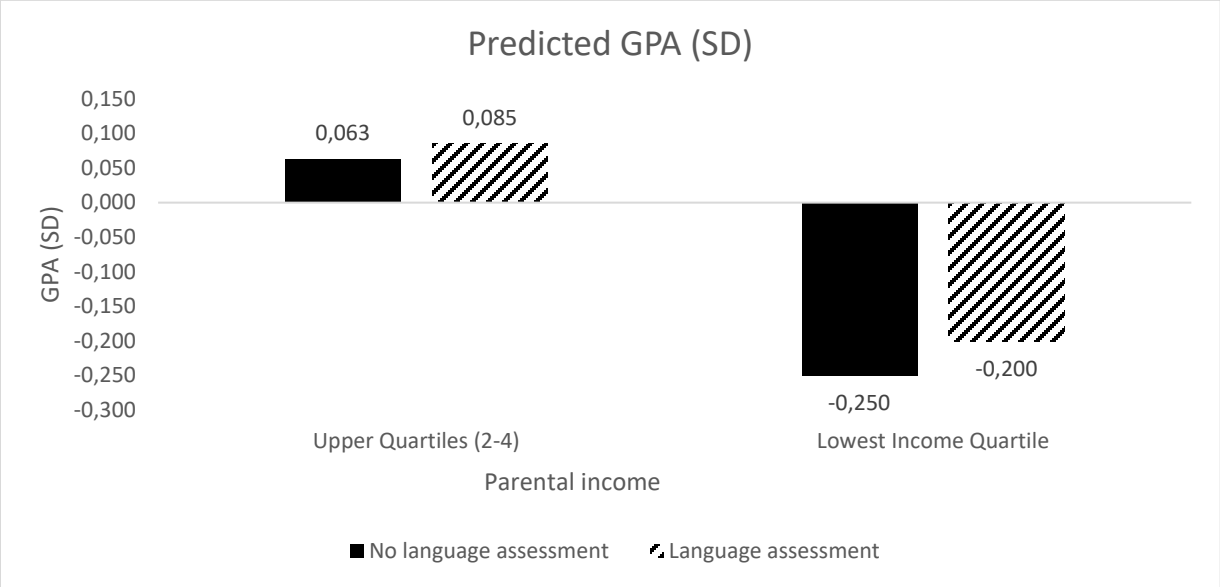
In Model 2, we include a linear time trend and its interaction with the reform indicator to test the assumption of stable pre-trends and allow for potential slope changes after the reform. Neither variable was statistically significant, indicating a stable pre-reform trajectory in GPA and no evidence of a change in slope post-reform. This supports the identification strategy based on an interrupted time series design.

5.6.1.2 Heterogeneous effects

Reform effects by parental income

To investigate if the 2009 language assessment reform affected students differently depending on their parental income, we estimated models with an interaction term between the post-reform indicator and a binary indicator for low-income background (defined as being in the lowest income quartile). Figure 5.2 shows the predicted standardised GPA before and after the reform for students from both low-income and higher-income households.

Figure 5.2: Predicted standardised GPA before and after the introduction of mandatory language assessment, by parental income



Source: Authors work using data from Statistics Denmark (N=369.962)

Results indicate a modest increase in GPA for both groups following the reform (significant at the 1 % level). For students from higher-income families, the predicted GPA increased from 0.063 to 0.085, while for students from low-income families, the increase was from −0.250 to −0.200. This implies that while both groups benefited from the reform, the gain was somewhat larger for the low-income group, corresponding to a slight narrowing of the achievement gap.

In order to assess the impact of a single variable as an average across the entire dataset, we estimate average marginal effects (AME). AME allows us to express the "average effect" of a change in the variables for an "average student". AME of the

reform is significantly larger for low-income students (see Table 5.5), suggesting that the intervention may have had a small equalising effect on academic performance.

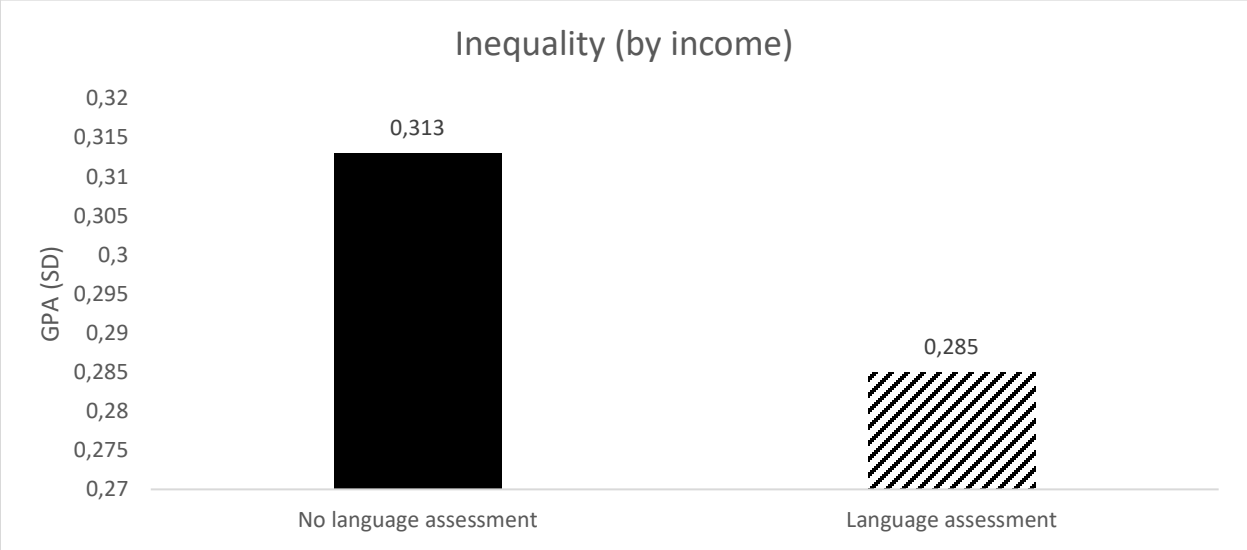
Table 5.5: Predicted GPA for higher - and low- income students pre-/post introduction of mandatory language assessment

	No language assessment	Language assessment	**Difference (AME)**
Not low	0.063	0.085	0.022
Low	-0.250	-0.200	0.050
Gap	0.313	0.285	-0.028

Source: Authors computations using data from Statistics Denmark (N=369.962)

Accordingly, as shown in Table 5.5 and Figure 5.3, the difference in predicted GPA between the two groups decreased from 0.313 before the reform to 0.285 after.

Figure 5.3: Inequality by income before and after the introduction of mandatory language assessment



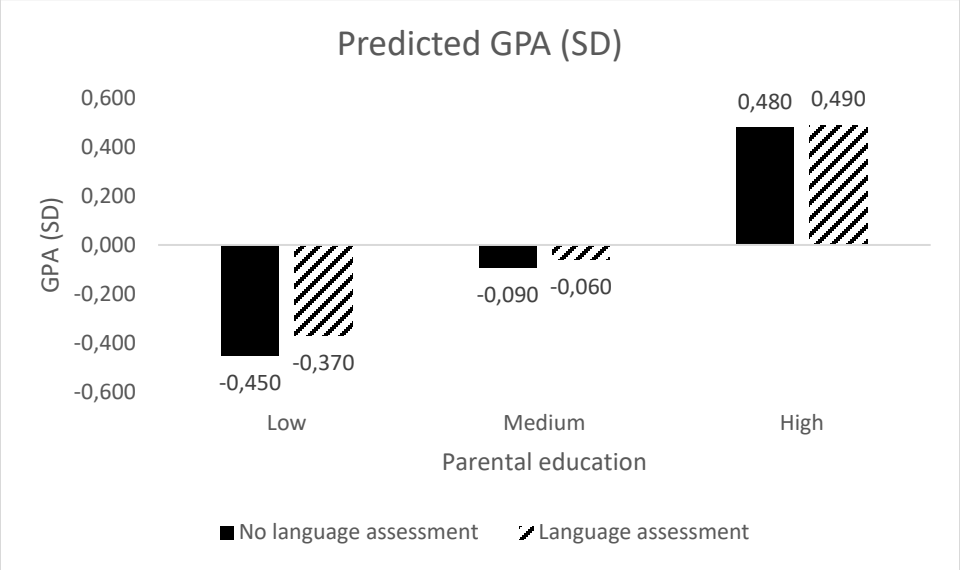
Source: Authors work using data from Statistics Denmark (N=369.962)

Reform effects by parental educational background

We next examined whether the introduction of mandatory language assessment had differential effects based on parental education, using a three-category variable: (1) low education (maximum lower secondary education: ISCED 2), (2) medium education (upper secondary or vocational education: ISCED 3 & 4), and (3) high education (tertiary

education: ISCED 5+) shown in Figure 5.4, The effects were found significant at 1 % level (low. vs. medium) and five % level (high. vs. medium).

Figure 5.4: Predicted standardised GPA before and after the introduction of mandatory language assessment, by parental education



Source: Authors work using data from Statistics Denmark (N=369.962)

The results show improvements in standardised GPA for all educational groups. Among students with low-educated parents, the predicted GPA increased from −0.45 to −0.37, a gain of 0.08 standard deviations. For students with medium-educated parents, the increase was more modest – from −0.09 to −0.06 – while students with highly educated parents saw virtually no change (from 0.48 to 0.49).

Although the relative improvement for students from low-education backgrounds is encouraging, the gap between low- and high-education groups remains substantial (approximately 0.86 standard deviations post-reform). The reform appears to have slightly reduced inequality but not dramatically altered the overall structure of academic disparities tied to parental education.

Average marginal effects (see Table 5.6) support this pattern, showing a larger reform effect for the low-education group compared to the medium and high groups. However, interaction terms are not consistently statistically significant across model specifications, suggesting that the equalising effect of the reform on this dimension may be less robust than for income background.

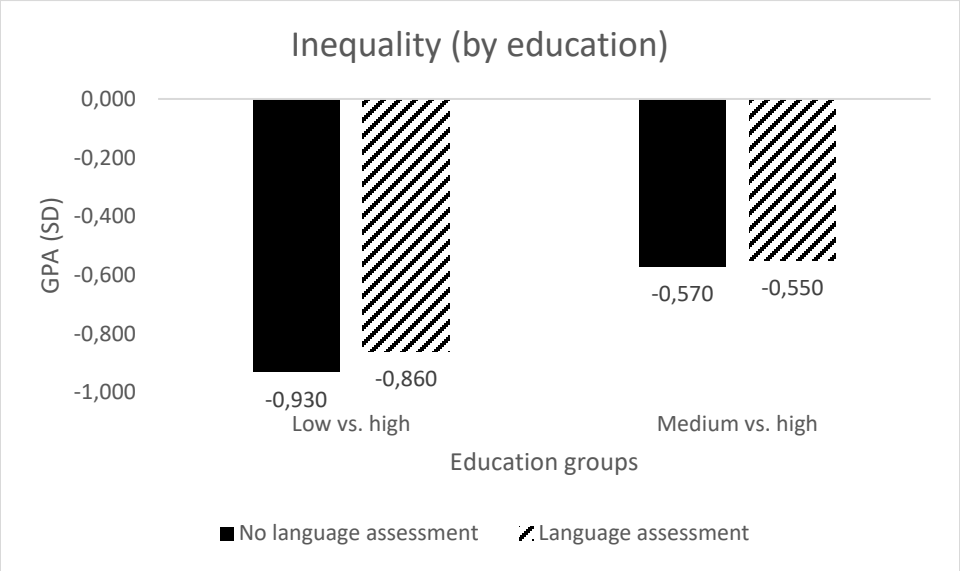
Table 5.6: Predicted GPA for students with different levels of parental education pre-/post introduction of mandatory language assessment

	No language assessment	Language assessment	**Difference (AME)**
Low	-0.450	-0.370	0.080
Medium	-0.090	-0.060	0.030
High	0.480	0.490	0.010

Source: Authors computations using data from Statistics Denmark (N=369.962)

In terms of inequality differences in GPA between the different groups changed post reform. Table 5.6 shows changes between low and high and between medium and high parental education, respectively.

Figure 5.5: Inequality by education before and after the introduction of mandatory language assessment



Source: Authors work using data from Statistics Denmark (N=369.962)

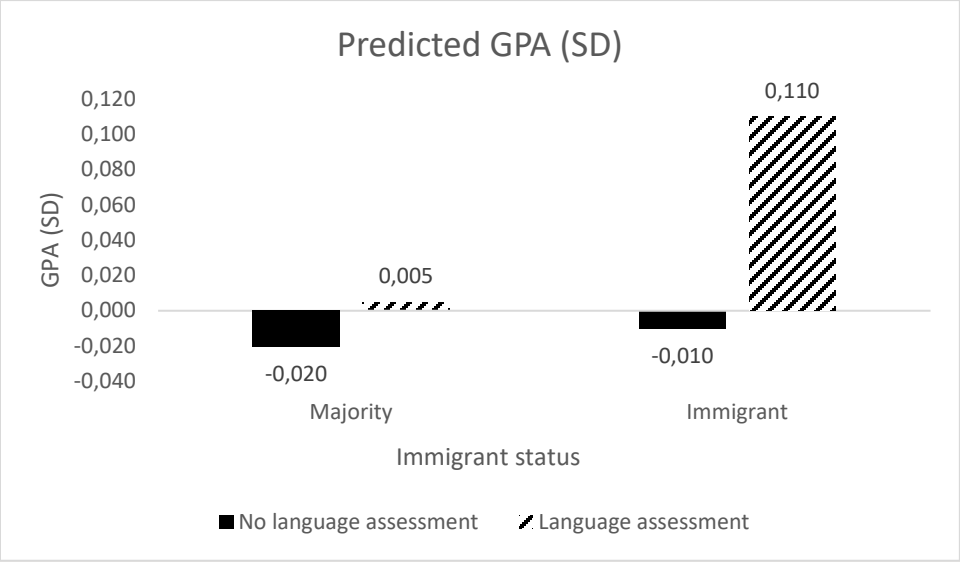
As suggested by the figure, gaps narrowed slightly between students with low and highly educated parents after the introduction of mandatory language assessment.

Reform effects by immigrant status

We also examine whether the effect of the introduction of mandatory language assessment varied by immigrant background. While immigrant children have consistently had lower average academic achievement in Denmark (OECD, 2016), it has been a key policy goal to close this performance gap through early educational support. Language development has been seen as a crucial domain for intervention, given that many immigrant children begin school with weaker Danish language skills (Gupta & Simonsen, 2010; Rambøll & EVA, 2011).

Figure 5.6 presents the predicted standardised GPA before and after the introduction of mandatory language assessment by immigrant status. Among children without immigrant background, the predicted GPA increases slightly from -0.02 before the reform to 0.01 after the reform. In contrast, children with immigrant background experience a more marked increase, from -0.01 to 0.11. While the two groups had near-identical performance levels before the reform, a substantial gap emerges post-reform, with immigrant-background students now outperforming their majority peers in standardised GPA when accounting for other explanatory factors. The difference is significant at the 1 percent level.

Figure 5.6: Predicted GPA before and after the introduction of mandatory language assessment, by immigrant status



Source: Authors work using data from Statistics Denmark (N=369.962)

One possible interpretation is that immigrant-background students benefited more from the reform, particularly because it targeted language acquisition – a domain in which they are more likely to face early challenges. The mandatory language assessment may have increased the likelihood that their language needs were identified and addressed systematically, thereby improving their long-term academic performance.

However, this finding must be interpreted with caution. The increase among immigrant-background students may also reflect changes in cohort composition or unobserved confounding factors, such as differences in school or municipal implementation. Descriptively, GPA among immigrant-background students appears to increase already from 2009, which raises questions about whether part of the observed improvement reflects an overall positive trajectory rather than a reform effect.

Overall, the analysis suggests that the reform may have contributed to a reduction in inequality by improving the performance of immigrant-background students more than that of their majority peers. Table 5.7 shows AME as well as gap before and after the introduction of the mandatory language assessment.

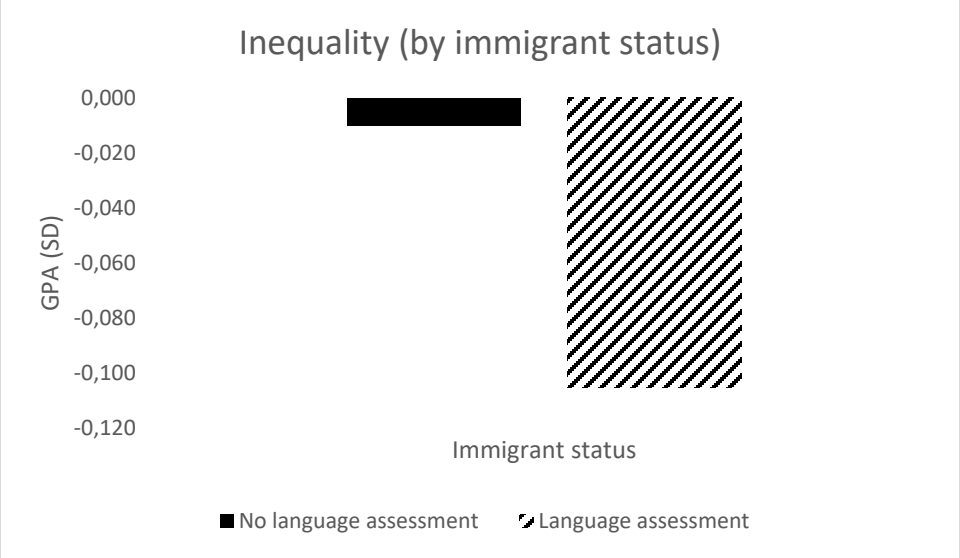
Table 5.7: Predicted GPA for majority and immigrant students pre-/post introduction of mandatory language assessment

	No language assessment	Language assessment	**Difference (AME)**
Majority	-0.020	0.005	0.025
Immigrant	-0.010	0.110	0.120
Gap	-0.010	-0.105	-0.095

Source: Authors computations using data from Statistics Denmark (N=369.962)

Figure 5.6 visualises differences in GPA gap between majority and immigrant students before and after the introduction of mandatory language assessment in order to assess inequality. Due to a large marginal effect for students with immigrant background, differences in GPA remains large after the introduction of mandatory language assessment, although now in favour of immigrant students.

Figure 5.7: Inequality by immigrant status before and after the introduction of mandatory language assessment



Source: Authors work using data from Statistics Denmark (N=369.962)

Robustness Checks

To assess the robustness of the estimated effects, we conducted a series of sensitivity analyses addressing potential violations of key assumptions in the ITS design.

First, we tested for the presence of pre-existing trends in the outcome between treated and untreated cohorts. This was done by including a linear time trend and an interaction term between time and the post-reform indicator. Neither term was statistically significant, suggesting no strong evidence of differential trends prior to the intervention, and thus supporting the ITS assumption of parallel pre-trends.

Second, we estimated a placebo reform effect using the 2007 cohort – two years before the policy change. Since no reform was implemented that year, any significant finding would indicate a potential violation of the ITS design assumptions. Indeed, the placebo test yielded a statistically significant and negative effect on GPA, raising concerns about the stability of pre-reform trends or the presence of other unobserved factors influencing student outcomes prior to 2009. This finding suggests that the observed reform effect should be interpreted with caution, as it may partly reflect changes not directly related to the screening policy.

Third, we conducted exclusion tests to assess whether specific school entry cohorts disproportionately drive the results. Excluding the 2007 cohort from the analysis did not materially alter the reform estimate. Similarly, excluding the 2011 cohort – where we observed a noticeable increase in mean GPA – did not meaningfully affect the magnitude or direction of the reform effect. These results suggest that the main findings are not driven by early or late outlier cohorts.

Taken together, the robustness checks indicate that while the main findings are relatively stable across model specifications, the presence of a significant placebo effect in 2007 weakens the causal interpretation of the reform impact. It underscores the importance of considering other concurrent developments in the educational system when evaluating the effects of the 2009 reform.

While the main analyses indicate a substantial positive effect of the reform on the GPA of students with an immigrant background, several robustness checks were conducted to assess the credibility of this finding. First, immigrant-background students showed improvements in GPA already from the 2009 entry cohort – the year the language screening was introduced. However, no significant pre-trend was detected in the formal test, and the magnitude of the effect increased after 2009, which does not rule out a causal interpretation. Second, analyses excluding specific cohorts showed that the results were not driven by particular entry years. Specifically, when excluding the 2011 entry cohort – where the average GPA was slightly higher across all groups – the reform effect remained stable.

Taken together, although the upward trend among immigrant-background students may reflect broader developments in early education or integration policies, the timing and size of the observed change suggest that the introduction of mandatory language assessment contributed to improved academic performance in this group. Nonetheless, the results and in particular the size should be interpreted with some caution, as other unobserved policy changes or cohort dynamics may also have played a role, in particular the introduction of mandatory grade 0 in 2009 (folkeskolen.dk, 2008).

5.6.2. Interviews results

5.6.2.1. Main developments of the language assessment tests

The language assessment test in kindergarten class is closely connected to and constitutes just one part of a national language assessment programme implemented in both kindergartens (age 3) and kindergarten classes (age 6). These language assessments are conducted at different levels of education and are overseen by different authorities at both the national and local levels. Despite these differences, it is evident that the two assessments were intended to form an integrated whole, representing a combined effort to mitigate disparities in children's language development. In the data material, the two language assessment tests therefore intertwine in the responses of all informants, as they did not always analytically distinguish between the two in their answers. In most cases, it has been possible to determine the referent of the interviewees' statements during data analysis. In cases where this has not been possible, the interviewees' statements have not been included in the analysis.

Although informants 2, 3, and 4 all had extensive experience working with the language assessment tests since their implementation in 2009, it was difficult for them to recall precise details regarding the initial development and implementation of the reform initiative. Informant 2, however, was able to detail how she had worked with language assessment as a politically defined practice at the local municipal level since 2006. She thus drew attention to the fact that language assessment was a common practice in some municipalities prior to the implementation of the tests in schools in 2009, and also before the introduction of language assessment in kindergartens in 2007. However, these early language assessment initiatives were uncoordinated nationally, as not all municipalities had adopted them as part of their local practice. Furthermore, the practices were diverse in terms of form, content, and resource allocation.

As the language assessments have been conducted annually since 2009, the informants were unable to provide specific details about each iteration of the test. However, they were able to provide corroborative information at a general level regarding the ongoing development of the initiative. They all described how the practice had evolved from a locally diverse and decentralised approach to one increasingly

characterised by centralised standardisation and a reduction in critical discourse surrounding the tests.

Informant 1 drew attention to the fact that the language assessment tests had primarily been developed by researchers at Trygfonden's Centre for Child Research, and that they represented a research strand that had been challenged by researchers from other institutions (Informant 1). According to both Informants 1 and 2, Trygfonden's Centre had been instrumental in the academic development and ongoing evaluation of the assessments. When asked about this, Informants 3 and 4 confirmed this view and added that the Centre had been quite successful in winning the Ministry's open calls for tenders. On her own initiative, Informant 3 – reflecting on the success of the reform – remarked that "a slide in public attitude" had occurred since the initial critical voices were raised, and that the idea of conducting language testing in schools was now perceived, as she phrased it, as more "neutral" (Informant 3). Thus, the interviews suggest that the practice of language assessment have gained popular support over time.

Informant 2 noted that, initially, the language assessment test had been mandatory, although there were no specific requirements for how it should be conducted, and no formalised or standardised requirements for the test material. However, the informant recalled that Aarhus Municipality quickly decided to use a particular test material – an early version of the current test – because it appeared to be "thoroughly and well-grounded in research" (Informant 2).

Informant 1 highlighted challenges related to ministerial support for the language assessments in connection with IT. To support the digital implementation of the tests, an IT solution had at one point been developed. However, in 2017, it was decided that the Ministry would no longer provide IT support for the assessments. Emphasising local autonomy, the development of IT solutions was privatised. For a time, an older version provided by the Ministry remained in use, but by around 2019, all ministerial IT support was discontinued due to compliance issues with GDPR requirements. For a period, therefore, no ministerial IT support was available, and although it was legitimate to have diverse local practices, the test material provided by the Ministry "kind of required the use of IT support measures" (Informant 1). This account was supported by Informant 3, who confirmed that although the Ministry still provided the test material, local municipalities were responsible for selecting their own IT support provider (Informant 3).

When asked about the effects of this privatisation, Informant 1 responded that there was, in practice, only one private provider of IT support measures, which effectively limited the local freedom of choice. This situation also had the consequence that the IT provider "contributed to the definition of how it was possible to work with language assessment," which posed a challenge "for better or worse," as the private provider "had taken some liberties" in the development of IT support that were not aligned with the Ministry's original intentions (Informant 1).

In the most recent iteration, it was made mandatory to use a specific test material provided on an online digital platform at the following address: sprogvurdering.dk. Informant 1 emphasised that the decision to streamline all language assessments represented a significant and recent shift, marking a departure from the broader policy trend of prioritising local autonomy, which still applies to the age-3 language assessments conducted in kindergartens.

Informants 3 and 4 were particularly informative in describing how this mandatory digital language assessment had been prepared and subsequently evaluated, as both had played key roles in its development. Prior to the political decision to standardise all language assessments by requiring the use of this specific tool, an extensive trial involving over 7,000 children was conducted. According to both informants, the trial was highly successful: the new digital platform received positive feedback from stakeholders ranging from the participating children and teachers to local municipalities. The new tests, they emphasised, not only standardised the testing methodology but also significantly reduced the time required to complete the assessment – with an average duration of approximately 19 minutes. This improvement promised increased local efficiency as well as enhanced national measurability and comparability (Informants 3 and 4).

5.6.2.2. Key challenges

The language assessment tests are limited in their scope to only providing data and knowledge about the language development of individual children at the time of the test. Although it is stipulated in the rules and regulations that an inadequate language assessment test result should lead to additional and targeted language development for the child in question, there is no legal requirement on the nature of this additional language support. The informants were therefore all asked about their knowledge of the measures intended to take effect after a language assessment test had been conducted. Informant 2 noted that schools, in her experience, used the data provided by

these tests to ascertain and raise awareness about challenges either at the local school level or at the municipal level. At the municipality where Informant 2 worked, annual thematic workshops were scheduled with the intent of providing inspiration for continued language development. However, there was no follow-up on the impact of these workshops.

While schools, according to Informant 1, have a more substantial support structure in place for subsequent targeted language support compared to kindergartens, it was mentioned that there was no quality assurance of this support, and that what followed from the tests remained a "black box". Informant 1 emphasised that this appeared to be reflecting a decentralising tendency that runs counter to the centralising trend of formalising and standardising the language assessment tests. However, "it is their [the teachers] professional judgement that should go into effect here. And in many ways, it makes perfect sense, because they are the ones with the pedagogical knowledge," Informant 1 emphasised.

Informant 3 also addressed the lack of knowledge regarding the subsequent language support measures but noted that a recent study might suggest that adequate measures were being implemented – although the study could not specify which measures these were. Nevertheless, this precise question is the topic of an upcoming study at the research centre, according to informant 3.

5.6.2.3. Policymaking and recommendations for the path ahead

As a final question, all informants were asked to provide possible recommendations for policymakers based on their professional experience and insights into successful policy development and implementation. All four informants expressed that the language assessment test regime was exemplary in terms of being a successful reform in which much had been done correctly. As such, they largely based their recommendations to policymakers on this reform experience.

Informant 1 emphasised that successful reforms take time to develop and implement, and that initial unintended outcomes should not necessarily result in the rejection of a reform or an immediate desire for modification. Patience, she argued, is key to allowing a reform to become embedded within the various parts of the system.

Informant 3 suggested that reforms should be carefully planned, and that conducting pilot studies or test runs on a smaller scale would be beneficial before moving toward

large-scale implementation. Informant 1 additionally emphasised the importance of providing appropriate support to those responsible for implementing a reform at different levels of the system, and the significance of reviewing how a reform is enacted and operationalised. This point was echoed by Informant 2, who stressed the importance of equipping practitioners with relevant knowledge and fostering their professional judgement – not only through increased access to in-service training, but also by allocating the necessary resources to improve working conditions that support reflective and professional practice on a daily basis.

Informant 2 also underlined the necessity of enabling data-informed decision-making. However, while data collection and monitoring were recognised as valuable for analysis, Informant 1 also pointed out that it is vital not to lose sight of the tangible impact on individual children. Informants 3 and 4 likewise stressed the importance of incorporating children's perspectives more systematically in reform development. While other stakeholders are often well represented in the policy design process, children frequently lack equivalent representation and influence (Informants 3 and 4).

5.6.3. Media analysis results

Very few articles in the biggest Danish newspapers have focused on the language assessment policy. Much more prevalent were articles about municipal policies in a few cities which involve a combination of pre-school language screening and the practice of "bussing" children scoring below a certain threshold to other schools in the city. These municipal policies are seemingly much more controversial and newsworthy. The analysis below is thus limited to only 13 articles. It is divided into two parts, analysing the media content related to the original policy from 2009 and the amended policy of 2018-2019 respectively.

5.6.3.1. Language assessment and early intervention

The main theme of the first four articles, which focus exclusively on the original 2009 policy, is that language assessment is a necessary but insufficient condition for implementing early interventions intended to rectify linguistic inequalities. There is general agreement in the reviewed articles that it is important to identify children in need of assistance to overcome language difficulties and that the language assessment policy can serve this goal. Thus, according to a researcher quoted by Jessen (2009), "[i]f a child has good attention to language at the start of kindergarten class, there is less risk that the child will have difficulty reading later. On the other hand,

children with language difficulties have a relatively high risk of having reading difficulties later. Screening at the start of school makes it possible to take preventive action as early as the kindergarten class for the children who especially need it." A representative of kindergarten-class teachers in the country concurs that it is useful to have an assessment of the children's language skills, but points out that such assessment, without further resources to assist the children in need of help, is insufficient: "It is good if we can quickly identify the children who need extra help. But we are looking forward to seeing if extra resources will be set aside to teach and support the children who, according to the language test, have a poor language" (Jessen, 2009). Language assessments alone are insufficient to rectify linguistic disadvantages.

Another issue concerns collaboration between different educational institutions as well as the timing of language assessments and early interventions; this topic is addressed in the article by Mainz (2014). The article reports on an evaluation conducted by the Danish Evaluation Institute (EVA), which found that "94 percent of 837 kindergarten-class teachers across the country said that, after starting school last year, they had discovered one or more children in their class with language difficulties." However, 55 percent of the teachers were surprised by these findings because they had not been informed by the kindergartens that the children had such difficulties. The article, which includes statements from two researchers, a kindergarten teacher, and a representative of the Union of Early Education Teachers (BUPL), goes on to present possible explanations for why children with language difficulties are not identified earlier and why some children have more difficulties than others in developing language skills. Finally, it outlines some of the negative consequences of falling behind classmates in terms of language abilities, thereby underscoring the claim that early language screening in kindergartens should be prioritised and that a more systematic procedure for informing kindergarten-class teachers should be developed.

Similar views are expressed in the articles by Domino (2017) and Ejsing (2017); the latter presents the findings of a recent report on language assessments in Copenhagen kindergarten classes and records various reactions to these findings from municipal politicians and a researcher. According to the article, "44.2 percent of non-Western pupils in the Copenhagen 0th grade were assessed […] as having either a 'need for extensive language stimulation' or a 'need for extra language stimulation'. In 2014, the figure was almost two percentage points higher. By contrast, only 11.7 percent of 0th-grade pupils with a Danish or Western background in 2015 were assessed as needing special language interventions." Both the politicians and the interviewed expert

express concern over the results and argue that kindergartens and schools need to do more to assist children with language difficulties. Similar concerns are voiced by the Minister for Children and Social Affairs, who also invokes the statistics to justify holding immigrant parents to account for not using daycare facilities such as nurseries and kindergartens, asserting that these settings provide children with an “introduction to Danish society” (Domino, 2017). The final item concerning compulsory language assessments is an opinion piece by Skovhus Larsen (2023), which is considerably more critical of the assessments than the other articles included in the analysis. Skovhus Larsen, a kindergarten teacher, contends that the assessment material is wholly misleading: “Last week, my partner and I completed [the test] in our 0th grade, even though it doesn't make sense at all. It tests the kindergarten children in something they have not learned yet, and which no one expects a five- or six-year-old child to be able to do.” Consequently, she argues that rescinding the requirement should be a priority for the Government.

In summary, the language assessment policy is portrayed in the majority of articles as a necessary but insufficient condition for addressing inequalities related to language abilities. It needs to be complemented by earlier assessments and interventions in kindergartens, as well as the necessary resources to make a real difference. However, one piece presents a more fundamental critique of the assessment design.

5.6.3.2. From language assessments to language tests

In 2018 the Danish Government published a strategy called *One Denmark Without Parallel Societies. No Ghettos in 2030.* One of the initiatives in this plan was later incorporated into the Act on Primary and Lower Secondary School (2019) as a provision requiring language tests of children at the beginning of kindergarten class in schools with more than 30 percent of the pupils living in residential areas on the Government’s list of “vulnerable residential areas,” and pupils must pass the test before they can enter 1st grade (§ 11a). Children who fail the test must complete a “language-stimulation course” before taking the next test, and they cannot enter 1st grade before they have passed the test. The representations of this new policy in the articles identified can be divided into two themes: (1) language tests as prerequisites for egalitarian intervention and (2) language tests as impediments to community belonging and well-being.

The first theme reiterates the previously-outlined arguments that language assessments are necessary for identifying children who require intervention. Thus Lund

Kristiansen (2018) and Weber (2019) quote two successive Ministers of Education as making this case for the new test. According to the latter minister, it “is crucial for children to be able to interact on an equal footing with their classmates when they are at school. This requires that the children can function linguistically when they enter 1st grade. The language tests are intended to ensure just that, and we therefore risk that children will be left behind if we do not introduce the tests.” A similar claim is made in Nilson & Lund Kristiansen (2018) by a child psychologist and an educational expert, as well as in an opinion piece by Jespersen (2019). According to the experts cited in Nilson & Lund Kristiansen (2018), it is important that children with language difficulties are identified and given the right assistance to catch up with their peers. However, the same experts caution that we also need to be careful not to adopt too narrow a focus on language skills to the detriment of other important domains of learning. As one of the experts states in another interview: “Regardless of the fact that there are some children who pass the second time, it will be the case that those children will already have the feeling that they are worth less than their peers” (Lund Kristiansen, 2018). The articles under analysis displays the opinion that Identifying children in need of language assistance is commendable, but it is also highlighted that the requirement that they pass a test to be able to continue in 1st grade may have negative consequences for their self-esteem.

A complementary point is made by a principal of one of the affected schools interviewed by both Littauer (2018) and Weber (2019). The principal agrees that pupils experiencing language difficulties should be identified and assisted, but he also believes that “introducing the possibility of failing kindergarten pupils is not a good idea.” Schools already assess pupils’ language abilities and work with parents and other professionals to assist relevant pupils during the school year before they make an overall assessment, which sometimes results in pupils having to repeat kindergarten class. But, according to the principal, “it makes no sense to let some children retake kindergarten solely because of language difficulties. You risk putting an otherwise well-functioning child's development on hold. In addition, there are consequences for the child, who is excluded from a community and may feel defeated by having to retake the class” (Littauer, 2018). The social and emotional consequences of the policy are too grave, according to the principal: “I simply think it is ethically wrong that children of six or seven years old have to take a test where you can pass or fail. In this way, it will be the children who will be responsible for not having learned the language well enough. They are the ones who experience being taken out of the community and having to say goodbye to their friends, and it is harsh” (Weber, 2019). Brief critiques along similar

lines are also made in opinion pieces by Broström (2018) and Matthiessen (2019), as well as by Thuesen (2018).

In summary, the media representations of the 2018–2019 language-test policy pivot between arguments that the policy is essential for equalising educational opportunities and concerns that it poses likely negative consequences for affected children's social and emotional well-being.

5.7. Discussion and conclusion

This report has examined the effects of the 2009 Danish language assessment reform using a multi-methods approach. By combining rich administrative register data, qualitative interviews, and media discourse analysis, we aimed to provide a comprehensive understanding of the reform's implementation, continued development, impact, and implications. In this section we first present the results of the multi-method study followed by discussion of robustness and limitations.

The findings show that while the reform had a small but statistically significant average effect on standardised GPA by Grade 9, its impact was uneven across social groups and closely linked to variation in local practices and institutional responses. This highlights both the potential and the limits of universal, early intervention policies in promoting educational equality – particularly when implementation is decentralised and loosely monitored.

The quantitative results indicate that the reform is associated with a small but significant effect on standardised GPA. While modest in size, this effect suggests that early, universal interventions can have long-term academic benefits. The interaction analyses reveal unequal effects across social groups: students from low-income and low-education families experienced slightly larger improvements, suggesting a narrowing of performance gaps in line with the reform's ambitions. The reform was associated with a markedly larger improvement in academic performance among immigrant-background students than among their majority peers. While the GPA of majority students remained largely stable, immigrant students experienced a significant post-reform increase in standardised GPA, leading to a noticeable widening of the achievement gap in their favour. These heterogeneous effects support the idea that standardised assessments can benefit groups that previously lacked access to early identification and support structures.

Importantly, the analysis does not isolate the effect of the language assessment from the concurrent introduction of compulsory Grade 0, which also took place in 2009. These reforms jointly represented a major institutional shift in early education in Denmark and should be understood as a combined policy package. The fact that students were both required to start school earlier and undergo language assessment likely contributed to the observed outcomes. Additionally, it is important to note that the most recent cohorts included in the analysis may have been affected by the COVID-19 pandemic. In particular, students who started Grade 0 in 2012 and thus completed Grade 9 in 2021 were exposed to disrupted schooling due to national lockdowns. Moreover, they were partly exempted from final exams, and their GPA scores may reflect teacher-assigned grades rather than standardised assessments. This makes comparisons with earlier cohorts more uncertain and could bias estimates of long-term academic performance in the final cohort.

The qualitative interviews reveal substantial variation in how the reform was implemented and how the language assessments evolved locally over time. In the absence of a national control mechanism, there was no guarantee of consistent application or systematic follow-up across schools. This effectively left it to individual teachers to interpret and act upon assessment results in their pedagogical practice. Some schools had already developed local screening routines prior to 2009 and were thus better prepared, while others had to establish procedures from scratch. These insights align with findings from the media analysis, which show that the reform was initially framed as a necessary (but insufficient) policy to address unequal early support. However, over time, the public discourse became less critical, although critics continue to point at the lack of a clear implementation strategy and the additional workload imposed on schools without corresponding resources. These qualitative insights help to contextualise the modest average effects found in the quantitative analysis. The potential of early assessment to improve outcomes may depend not only on its introduction, but on the extent and quality of follow-up. The observed improvement in outcomes for immigrant-background students, for example, may reflect a stronger institutional response to language needs when assessments made those needs visible. However, given that some schools already conducted language assessments before the reform, the marginal benefit of the national requirement may have been smaller in those settings.

The robustness of the main findings has been tested through a range of model specifications and sensitivity analyses. The positive average effect on GPA remains statistically significant when controlling for socio-demographic characteristics, time

trends, and school fixed effects. Placebo tests using 2007 as a 'fake' reform year produce a significant negative effect on GPA. This unexpected result raises concerns about unobserved factors or coinciding changes around that time and suggests that the observed effects in 2009 should be interpreted with caution. However, additional robustness checks show that excluding the specific cohorts, such as 2007, does not substantially alter the main findings, lending support to the interpretation that the 2009 policy change played a central role. Moreover, interaction models show no significant differential pre-trends, further strengthening the causal interpretation. As such, the results appear robust across multiple empirical checks.

The substantial post-reform improvement for immigrant-background students warrants special attention. While these students did not differ significantly from majority students prior to the reform, their predicted GPA increased considerably more after 2009. Event study models indicate that this trend accelerated after the reform, although improvements had already begun around 2009. It is plausible that both the earlier school entry and the systematic identification of language needs contributed to these gains, particularly for children acquiring Danish as a second language. Still, the precise mechanisms remain unclear, and further research is needed to disentangle the effects of institutional change, demographic shifts, and broader policy developments during the period.

Taken together, these findings suggest that early language assessment, when implemented at scale, can contribute to small but meaningful improvements in academic achievement and help reduce inequalities among key demographic groups. Universal programs with structured follow-up procedures may be particularly beneficial in contexts where prior practices were fragmented and unevenly implemented. However, the modest average effects underscore the need for comprehensive support systems that go beyond assessment alone to achieve substantial improvements in educational inequality.

Appendix

Table A1. Effect of mandatory language assessment on GPA (standardised) in 9th grade

	(1) Raw effect	(2) + Time trends	(3) + Controls	(4) + School FE	(5) + School-cohort FE
Mandatory language assessment (MLA)	0.004	-0.006	0.035***	0.031**	0.031***
	(0.003)	(0.010)	(0.009)	(0.010)	(0.009)
Time trend in GPA (TT)		-0.000	0.006*	0.005	0.005
		(0.003)	(0.003)	(0.003)	(0.003)
TT * MLA		0.002	-0.018***	-0.017***	-0.017***
		(0.004)	(0.003)	(0.004)	(0.003)
Age at school entry			-0.206***	-0.212***	-0.212***
			(0.005)	(0.006)	(0.005)
Immigrant			0.048***	0.063***	0.063***
			(0.006)	(0.010)	(0.007)
Low education			-0.349***	-0.335***	-0.335***
			(0.005)	(0.007)	(0.006)
High education			0.648***	0.559***	0.559***
			(0.004)	(0.005)	(0.004)
Low income			-0.338***	-0.302***	-0.302***
			(0.004)	(0.005)	(0.004)
Female			0.349***	0.348***	0.348***
			(0.003)	(0.004)	(0.003)

Mother outside the labor market			-0.202***	-0.190***	-0.190***
			(0.004)	(0.005)	(0.005)
Constant	-0.000	-0.000	1.116***	1.160***	1.160***
	(0.003)	(0.004)	(0.028)	(0.034)	(0.032)
R^2	0.000	0.000	0.195	0.219	0.219
Number of observations	369.962	369.962	369.962	369.962	369.962

Standard errors in parentheses. * p < 0.05, ** p < 0.01, *** p < 0.001

Source: Authors computations using data from Statistics Denmark

Table A2: Heterogeneous effects of mandatory language screening across parental background

	(1) Income	(2) Education	(3) Immigrant
Mandatory language assessment (MLA)	0.023*	0.028**	0.022*
	(0.010)	(0.010)	(0.009)
Low income (LI)	-0.317***		
	(0.006)		
MLA * LI	0.028***		
Low education (LE)		-0.366***	
		(0.009)	
High education (HE)		0.572***	
		(0.006)	
MLA * LE		0.056***	
		(0.011)	

MLA * HE		-0.021**	
		(0.007)	
Immigrant (I)			0.006
			(0.010)
MLA * I			0.097***
			(0.013)
Constant	1.168***	1.165***	1.172***
	(0.032)	(0.032)	(0.032)
R^2	0.219	0.219	0.219
Number of observations	369.962	369.962	369.962

Standard errors in parentheses. * p < 0.05, ** p < 0.01, *** p < 0.001. Include all control variables and fixed effects from table A1 M5.

Source: Authors computations using data from Statistics Denmark

Overall Conclusion

This collated report has comprehensively evaluated the long-term impacts of significant Early Childhood Education and Care (ECEC) policies across England, Poland, Hungary, Norway and Denmark using a rigorous mixed-methods approach. Drawing on quantitative analyses, qualitative interviews with key stakeholders and media analyses, this report offers a complex and multi-faceted understanding of the effectiveness and broader implications of particular early childhood education interventions at reducing educational inequalities.

Quantitative findings across each study provide mixed results, highlighting the nuanced and often context-dependent nature of ECEC impacts. Some studies, like England's Sure Start, indicate a positive effect on the likelihood of disadvantaged students obtaining post-16 qualifications, however, this effect becomes statistically non-significant when controlling for a broader set of variables. For Hungary, no overall effect of kindergarten attendance was found, but evidence of positive impacts on mathematics and reading test scores was observed among children from families experiencing material hardship. Poland's analysis reveals a strong correlation between increased preschool availability and better eighth-grade exam performance, particularly in urban areas, although regional disparities persist despite overall improvements in access. Norway's *Free core time in kindergarten* initiative also reveals a positive, though not always statistically significant, effect on grade point average amongst the study's targeted population, children from low SES and immigrant backgrounds. These results are consistent with findings at lower levels of schooling. Denmark's reform resulted in small statistically significant average effects on standardised GPA, but these effects were uneven across social groups and varied according to locality and institution. The students who received the most improvements in academic achievement, however, were those from low-income, low-education and immigrant backgrounds. In sum, the quantitative results throughout each study often point toward positive effects for disadvantaged groups, but also underscore the necessity for further development and improvement of ECEC policies to increase the likelihood of combatting educational inequalities.

Some methodological challenges throughout the quantitative sections include sample size limitations, data availability and the complexity of isolating policy effects over long periods.

Qualitative interviews with policymakers and practitioners reveal a strong consensus on the intrinsic value and perceived positive impact of ECEC reforms, particularly in addressing educational inequalities and fostering social inclusion. Stakeholders often emphasised the importance of early intervention for academic achievement, socio-emotional development, and family well-being. Key themes included the value of child-centred pedagogical approaches, the significance of dignifying and respectful community engagement and the transformative power of involving parents and local communities. However, interviewees also highlighted persistent challenges, such as the politicisation of education, chronic underfunding, a lack of cohesive long-term strategic planning, complexities in data sharing and impact evaluation, and the difficulties of implementing universal reforms which also adhere to localised needs. In Poland, the crucial, yet often invisible, role of the "third sector" (NGOs) in driving access and innovation, particularly in rural and disadvantaged areas, emerged as a unique and vital component of reform success.

The media analyses further contextualised the public and political discourse surrounding these ECEC initiatives, reflecting a spectrum of views. While policies like Sure Start in England and mandatory kindergarten in Hungary generally garnered widespread political and public support, they were not immune to criticism, often related to funding sustainability, effectiveness, and political motivations. Common themes throughout all studies included debates regarding overall policy effectiveness and implementation, financial allocations, the availability of kindergarten places, teacher shortages and the balancing act between universal provision and targeted support for the most disadvantaged. Media coverage often revealed the instrumental use of ECEC in broader political agendas, such as labour market activation or national integration, highlighting ongoing societal tensions and regional divides. Nonetheless, the sustained volume of media attention underscores the growing recognition of ECEC as a vital component of child development and social policy, raising public awareness and shaping political priorities.

In conclusion, while the long-term, statistically measurable impacts on reducing educational inequalities may show varying degrees of robustness across contexts and specific outcomes, the qualitative evidence strongly suggests that ECEC reforms have laid crucial groundwork for future efforts to address systemic disparities. The perceived benefits by stakeholders, coupled with the broad societal support and sustained media attention, reinforce the notion that investing in integrated early years support programs is critical for fostering long-term benefits for children and families, particularly those facing multiple disadvantages. Future research should aim to overcome existing

methodological limitations by employing larger, more representative longitudinal datasets and adopting designs capable of capturing sustained impacts over time. Furthermore, comparative evaluations with other early years initiatives and reforms are recommended to deepen the understanding of the conditions under which such ambitious policies succeed or falter in promoting greater equity in educational outcomes.

Overall Appendix

Guide For Qualitative Interviews by NKUA

Cover Note for partners

All the questions should ask the opinions of the interviewees and not of the organisation. Please, try that the name of the organisation isn't revealed in order to minimise the possibility of revealing the interviewee's identity. For reasons of anonymity, names of persons and organisations should be omitted in the transcription and analysis.

The information sheet and the consent forms should be the same for all partners. Please use those prepared changing only the logo and contact info details. Do not forget to collect only written consent forms signed.

The interview guide is prepared to act as a tool for semi-structured interviews. That means that while we need to collect answers on the specific axes of the guide, the questions could be rephrased or asked in different order based on the interview flow.

Please pay attention that where 'policy' is mentioned it means that the policy maker should be asked about the specific [name] policy implemented in ECEC.

If deemed necessary, each partner is free to add national specific questions to a certain limit.

According to STRIDE proposal 2-4 interviews is expected to be conducted. We suggest conducting 3 interviews. If possible, it would be useful to have a variety of interviewees. For example, a policy maker involved in the design and first stages of the policy, a policy maker involved in later stages, a policy maker and evaluator.

Interview guide

Place and role of the interviewee

- Could you please describe your position and role in the organisation? (Note: if different also ask about the current position and role in the same or other organisation)
- What is your overall experience in policy/policies on inequalities in education? (Note: We are interested in their professional experience on the topic)
- What was your role in the design/development/implementation of the (specific) policy?

Content, goals and timeline of the policy

- On what kind of inequalities did you focus through this policy? Why?
- Can you describe the main goals of the policy?
- Can you describe the timeline of the policy? (e.g., time of design, when did it start to be implemented, duration, is it still running, is it going to end at some point, etc.)
- Did this policy relate to any other policy domains? If yes, which ones and how?

Deliberation with beneficiaries and stakeholders

- Did any kind of deliberation precede the policy or occur during any phase?
- Were other stakeholders involved in the design and implementation of this policy? What roles did they hold?
- Did you involve the beneficiaries of the policy at any stage of the policy development? How? Was their involvement effective?
- Did you collaborate with other policy institutions during the design and implementation of this policy?

Use of data

- Did you use research data in the design of this policy? What kind of data? Where did you find the data?
- More specifically, did you use any longitudinal data in the design/implementation of the policy? If yes, to what extent did these data assist you in this process?
- [Note: if the answer is no in the previous question, ask the following two questions:]
    - Why? Are they not collected in [country]? Were they difficult to access?
    - Do you think longitudinal data would offer any assistance during the development of this policy?
- Did you (or the policy team) have to overcome any obstacles during the design and implementation of this policy? Can you mention some example(s)? How did you overcome them?
- Was the policy design and implementation affected by any kind of political changes and/or decisions?
- Was the policy design and implementation affected by any European and/or international developments/ policies? (e.g., EU directives, OECD reports, PISA).

Evaluation

- Has the policy been evaluated?
- [Note: If no, ask why, wasn't it foreseen? Isn't it yet scheduled? If yes, ask the following]
    - Who evaluated the policy? (The policy team, another independent organisation). Which was the role of the beneficiaries in the evaluation process?

Overall assessment and recommendations

- Which in your opinion are/were the strong points and the weaknesses of the policy?
- Based on your experience, do you have any recommendations for policy makers on issues about inequalities in education?

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Glossary

General list of acronyms and terms

Term	Definition
Early childhood education and care (ECEC) / early childhood care and education (ECCE)	'Early childhood education and care' or 'early childhood care and education' (ECEC, or ECCE as termed by UNESCO) refer to: 'Provision for children from birth through to primary education that falls within a national regulatory framework, i.e., it has to comply with a set of rules, minimum standards and/or undergo accreditation procedures' (European Commission/EACEA/Eurydice/Eurostat, 2014, p. 155). UNESCO defines Early Childhood Care and Education (ECCE) as the "holistic development of a child's social, emotional, cognitive and physical needs in order to build a solid and broad foundation for lifelong learning and wellbeing". Sources: EASNIE Glossary: https://www.european-agency.org/resources/glossary/early-childhood-education-and-care-ecec-early-childhood-care-and-education-ecce UNESCO: https://www.unesco.org/en/early-childhood-education/need-know
ECE (Early Childhood Education)	Early childhood education (ECE) covers all forms of organised and sustained centre-based activities – such as pre-schools, kindergartens and day-care centres – designed to foster learning and emotional and social development in children. These programmes are generally offered to children from the age of three to around 6–7 years. Source: OECD 2013 Education Indicators in Focus – 2013/02 (February)
Eurydice	Eurydice is a network of 43 European National Units providing data and analyses on European education systems. It publishes descriptions of national education systems, comparative studies on key topics, and data and visuals on a range of education issues. Eurydice supports policy-making in education. National Units are

	appointed by the responsible public authority in each country, usually the ministry responsible for education policy. Source: https://eurydice.eacea.ec.europa.eu/
ISCED International Standard Classification of Education	ISCED is the reference international classification for organising education programmes and related qualifications by levels and fields. ISCED 2011 (levels of education) has been implemented in all EU data collections since 2014. ISCED-F 2013 (fields of education and training) has been implemented since 2016. ISCED 2011 has nine education levels, from level 0 to level 8 : • ISCED 0: Early childhood education ('less than primary' for educational attainment) • ISCED 1: Primary education • ISCED 2: Lower secondary education • ISCED 3: Upper secondary education • ISCED 4: Post-secondary non-tertiary education • ISCED 5: Short-cycle tertiary education • ISCED 6: Bachelor's or equivalent level • ISCED 7: Master's or equivalent level • ISCED 8: Doctoral or equivalent level Source : https://ec.europa.eu/eurostat/statistics-explained/index.php?title=International_Standard_Classification_of_Education_(ISCED)
OECD	The OECD (Organisation for Economic Co-operation and Development) is an international organisation that serves as a forum and knowledge hub for data, analysis, and best practices in public policy, collaborating with over 100 countries worldwide. Source: https://www.oecd.org/en/about.html

England Case study Report

Terms	Definition
Millennium Cohort Study (MCS)	A major multidisciplinary longitudinal birth cohort study following the lives of approximately 19,000 young people born in the United Kingdom between September 2000 and January 2002. Also known as "Child of the New Century," the study tracks

	physical, cognitive, and social development, as well as family circumstances, to understand how early life experiences influence outcomes in adulthood. Source: https://cls.ucl.ac.uk/cls-studies/millennium-cohort-study/
National Pupil Dataset (NPD)	A vast longitudinal database managed by the UK Department for Education (DfE) that contains detailed information on pupils in state-funded schools in England. It links pupil characteristics (such as age, gender, ethnicity, and eligibility for free school meals) with their educational attainment data as they progress through the school system. It is a primary resource for educational research, policy evaluation, and the production of school performance tables. Source: https://www.gov.uk/government/publications/national-pupil-database-npd-privacy-notice
MCS-NPD dataset	A high-resolution research resource created by linking the **Millennium Cohort Study (MCS)** survey data with the **National Pupil Database (NPD)** administrative records. This linkage allows researchers to combine rich family background information (from parent and child interviews) with the child's official, government-recorded school history, including standardized test scores (Key Stages 1–5), school types, and attendance records. Source: https://cls.ucl.ac.uk/data-access-training/linked-data/education-data-linkage/
Key Stages	The distinct phases of the National Curriculum in England, grouped by pupil age and year group. Each stage sets out the educational knowledge and standards students are expected to reach. Progress is typically measured through national assessments (such as SATs) or external examinations (such as GCSEs and A-Levels) at the end of each stage. Source: https://www.gov.uk/national-curriculum
UK Data Service (UKDS)	The UK's primary national repository and platform for accessing a vast collection of social, economic, and population data. Funded by the Economic and Social Research Council (ESRC), it

	provides researchers, students, and policymakers with a single point of access to over 7,000 high-quality datasets, including the UK Census, major longitudinal studies (like the MCS), and government-sponsored surveys.
Children with special educational needs (SEN)	A legal and educational designation for children who have learning difficulties or disabilities that make it harder for them to learn than most children of the same age. These children require special educational provision—support that is additional to or different from what is normally available to pupils in general classes—to ensure they can access the curriculum and make progress. Source: https://www.gov.uk/government/publications/send-code-of-practice-0-to-25
Free School Meals (FSM)	A statutory benefit providing healthy meals to school-aged children from low-income families in the United Kingdom. While its primary purpose is nutritional, FSM status is widely used in educational research as a **proxy for socioeconomic disadvantage**. Eligibility is primarily determined by whether a household receives certain means-tested benefits, such as Universal Credit or Income Support. Source: https://www.gov.uk/government/publications/free-school-meals-guidance-for-schools-and-local-authorities
Sure Start	A flagship UK government initiative launched in 1999 designed to support families with children under the age of five living in disadvantaged areas. The programme provides "integrated" services—combining early education, childcare, health services, and family support—under one roof. Its core objective is to improve children's "school readiness" and long-term life chances by breaking the link between poverty and low educational attainment. Source: https://commonslibrary.parliament.uk/research-briefings/cbp-7257/

Sure Start Local Programmes (SSLP)	The initial, area-based phase of the Sure Start initiative (1999–2003) targeted at the 20% most deprived neighbourhoods in England. Unlike later models, SSLPs were led by local partnerships of parents, community groups, and local authorities, granted significant autonomy to design services tailored to their specific community's needs. They focused on children under four and their families, providing a "core offer" of integrated health, education, and family support services. Source: https://assets.publishing.service.gov.uk/media/5a7f4c6a40f0b6230268ea73/The_impact_of_Sure_Start_local_programmes_on_7-year-olds_and_their_families.pdf
Sure Start Children's Centres (SSCC)	A statutory network of community hubs in England designed to provide a "one-stop shop" for families with children under five. Established under the Childcare Act 2006, SSCCs transitioned the original Sure Start mission from a targeted experiment into a universal service. They integrate early education, physical and mental health services, parenting support, and employment advice to improve child development and close the "attainment gap" between disadvantaged children and their peers. Source: https://www.gov.uk/government/publications/sure-start-childrens-centres
National Evaluation of Sure Start (NESS)	A comprehensive, multi-year research project commissioned by the UK government to assess the impact of the **Sure Start Local Programmes (SSLP)**. Running from 2001 to 2012 and led by researchers at Birkbeck, University of London, NESS utilized a quasi-experimental design to study thousands of children and families. It evaluated four main areas: local context (community change), implementation (how services were delivered), impact (outcomes for children and parents), and cost-effectiveness. Source https://www.bbk.ac.uk/school/psychological-sciences/research/national-evaluation-of-sure-start

General Certificate of Secondary Education (GCSE)	General Certificate of Secondary Education (GCSE) is the primary academic qualification taken by students in England, Wales, and Northern Ireland at the end of compulsory secondary education (typically at age 16). GCSEs cover a wide range of subjects, with English, Mathematics, and Science being mandatory. They serve as a critical gateway for further education (A-Levels/T-Levels), apprenticeships, and entry-level employment. Source: https://www.gov.uk/government/publications/gcse-9-to-1-grade-scale-explained/gcse-9-to-1-grade-scale-explained
Lower Layer Super Output Areas (LSOA)	A geographic hierarchy used by the Office for National Statistics (ONS) to report small-area statistics in England and Wales. LSOAs are designed to be consistent in size, typically containing a population of **1,000 to 3,000 people** (or 400 to 1,200 households). They are the primary geographic unit used to calculate the **Index of Multiple Deprivation (IMD)**, allowing researchers to identify specific pockets of disadvantage that might be hidden within larger council wards or boroughs. Source: https://webarchive.nationalarchives.gov.uk/ukgwa/20220401215420/https:/www.ons.gov.uk/methodology/geography/ukgeographies/censusgeography

Poland Case study Report

Term	Definition
E8 - eighth-grade exam	a mandatory final test taken by students in Poland at the end of primary school. It assesses their skills in Polish, mathematics, and a modern foreign language, and the results are used for admission to secondary schools.

Central Statistical Office / Statistics Poland	The central government institution responsible for collecting, analysing, and publishing official statistical data about the economy, population, and society in Poland.
Central Examination Commission (CEC)	the national body in Poland responsible for preparing, administering, and supervising external state examinations
Voivodship (województwo)	the highest-level administrative region in Poland, similar to a province.
County (poviat)	a mid-level administrative unit in Poland, located between a municipality and a voivodeship.

Hungary Case study Report

Term	Definition
Hungarian National Social Inclusion Strategy (HNSIS)	The Hungarian national strategy within the EU Roma Integration Framework was issued in 2011 and amended in 2014. It addresses issues of those living in long-term deprivation, children of poor families and the Roma minority.
National Assessment of Basic Competences (NABC)	The National Assessment of Basic Competencies is a state-level assessment of mathematical and literacy skills conducted every year among all students studying at 6th, 8th and 10th grade across the country. The first NABC took place in 2001. Source: https://www.oktatas.hu/kozneveles/meresek/kompetenciameres/alt_leiras
Hungarian Life Course Survey (HLCS)	A longitudinal panel survey of a Hungarian cohort who were in 8th grade in 2006 for 6 waves) The HLCS followed 10,000 youths on an annual basis (with 7092 respondents in 2012). The survey sampled regular students who participated in the NABC and SEN students who completed a simplified version of the literacy test.

Source:
https://www.inclusivegrowth.eu/files/call-23/session-4-3_Hungarian-Life-Course-Survey.pdf
https://real.mtak.hu/13516/1/bwp1401.pdf

Norway Case study Report

Term	Definition
Norwegian Agency for Shared Services in Education and Research *(SIKT)*	Sikt is a government IT provider delivering national services for education and research. Their goal is to help institutions and researchers administering their data in a secure, ethical and legal way, and to share anonymized data. Source: sikt.no
Free core time	The Norwegian government secures 20 hours of free core time per week for 2-, 3-, 4-, and 5-year-olds, and children with delayed school start, who live in households with low income. From August 1, 2024, families with an annual income under 642,700 NOK are entitled to free core time. From August 1, 2025, the income limit will increase to 669,050 NOK. Source: regjeringen.no

Denmark Case study Report

Term	Definition
Individual learning plan [*elevplan*]	From kindergarten class through grade 9, every student must have an individual student plan for ongoing evaluation, as required by *Folkeskoleloven* [the Danish Folkeskole Act] (§13b).

Trygfonden's Centre for Child Research [*Trygfondens børneforskningscenter*]	Trygfonden's Centre for Child Research is an interdisciplinary research centre at Aarhus University BSS. They specialise in scientific impact evaluation.
Danish Evaluation Institute [*Danmarks evalueringsinstitut*]	EVA produces and shares independent, policy-relevant knowledge that supports quality development in early childhood provision and education.
Deparment of Education and Quality [*Styrelsen for uddannelse og kvalitet]*	STUK is a subsection under the Ministry of Education that works to strengthen the quality of early childhood provision and education for all children, students, and adult learners by translating knowledge and data on effective practice into actionable guidance across the education system.

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