Photo by Phillip Schulze

“As-is” analysis of current practice on the systematic support of competence development in early childhood education and care and the transition to primary education in Lower Saxony

BUILDING A FRAMEWORK FOR OUTCOME-ORIENTED EARLY CHILDHOOD EDUCATION AND CARE

Supporting young children’s acquisition of socio-emotional competences, early literacy and numeracy, and facilitating their transition to primary education

A TSI project for Lower Saxony (2024-26)

Niedersächsisches Kultusministerium

unicef

Funded by the European Union

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Acronyms and initialisms

ECEC	Early Childhood Education and Care
EU	European Union
FGD	Focus Group Discussion
KII	Key Informant Interview
NKiTaG	*Niedersächsisches Gesetz über Kindertagesstätten und Kindertagespflege* (Lower Saxony Law for ECEC Provision)
NLJA	*Niedersächsisches Landesjugendamt* (Youth Office of the Federal State of Lower Saxony)
NLGA	*Niedersächsisches Landesgesundheitsamt* (Health Office of the Federal State of Lower Saxony)
nifbe	*Niedersächsisches Institut für frühkindliche Bildung und Entwicklung* (Lower Saxony Institute for Early Childhood Education and Development)
RLSB	*Regionale Landesämter für Schule und Bildung* (Regional Authority for Schools and Education Providers)
SGB VIII	*Sozialgesetzbuch (SGB) - Achtes Buch* (Social Code Book VIII)
TSI	Technical Support Instrument
UNICEF	United Nations Children's Fund

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Executive summary

Introduction

Early Childhood Education and Care (ECEC) forms the first tier in the German education system, and all children from the age of one year are legally entitled to benefit from this service.

Across the European Union, ECEC is regarded as a steppingstone for success in education and lifelong learning. In the past decade, Lower Saxony has increased state funding to improve the structural quality of and the access to ECEC provision for all children, focusing primarily on enhancing the staff-child-ratio and reducing parental fees.

In Germany there is no tradition or mandate for ECEC provision to focus on and plan for achieving specific learning outcomes. The education mandate as decreed in national legislation is to support children in becoming self-determined, responsible, and socially minded individuals (§22 SGB VIII). The education mandate as decreed in the state legislation of Lower Saxony (§§2-4 NKiTaG) sees explorative self-learning in every-day activities as the foundation for early learning.

There is no systemic approach to realising the ambition that all children should – within their individual possibilities – acquire certain levels in competences that are vital for a successful transition to primary school. There is no specific curriculum for elementary education and there are no guidelines for ECEC professionals on how to plan or strive for children to achieve learning and development outcomes.

Aim of the project

Building on the existing education mission and previous ECEC reforms around enhancing access and structural quality, the State Government of Lower Saxony seeks to improve the pedagogical quality and effectiveness of ECEC provision by strengthening systematic and team-based planning to support children achieving developmental milestones and basic skills and competences.

In this context, a project is being implemented to build and validate a framework to strengthen outcome-oriented pedagogy and planning for learning outcomes to support competence development among children.

The project is funded by the European Union via the Technical Support Instrument (TSI). The TSI is the EU programme that provides tailor-made technical expertise to EU Member States to design and implement reforms. Technical support is provided by the Early Childhood Development section of UNICEF Europe and Central Asia Regional Office, in co-operation with the European Commission. On the side of the authorities of Lower Saxony, the project is led by the Ministry of Education and is supported by stakeholders from the areas of ECEC provision, professional training and primary education.

Key definitions

Outcome-oriented ECEC provision creates an enabling environment for ECEC staff and its leadership to provide high quality outcome-oriented pedagogy. It entails a joint responsibility of all who have ECEC provision in their remit.

Outcome-oriented pedagogy involves educators planning for children to achieve learning and development outcomes as a team, thinking from the perspective of the child and collaborating closely with children and their families. The designing and re-designing of learning environments in support of children's learning further involves continuously observing and documenting children's progress as well as constantly self-reflecting on the effectiveness and effects of pedagogy in the setting. Outcome-oriented pedagogy has to take care that all children feel safe and well. Its ambition is to ensure that each child can realise their full potential by scaffolding self-determined learning and enabling self-efficacy. Taking children's needs, learning pathways and circumstances of life into account, outcome-oriented pedagogy systematically encourages and challenges every child throughout elementary education with a child-centred attitude to step by step acquire the competences needed for a successful transition to primary education.

Learning and development outcomes are competences (knowledge, skills, attitudes) that children achieve through the enabling of self-efficacy and (learning) experiences.

"As-is" analysis

The present "as-is" analysis was commissioned as part of the evidence-generation phase of the TSI project, and aims provide an overview of the systematic support of outcome-oriented pedagogy in the provision of early childhood education and care and the transition to primary education in Lower Saxony. This analysis serves as a critical foundation for the development of the framework, establishing the current baseline of practices while identifying both strengths to build upon and gaps to address. The findings will directly inform subsequent recommendations and framework development, ensuring that any new approaches are contextually appropriate, address actual needs in Lower Saxony, and build meaningfully on existing strengths rather than being developed in isolation.

Methodology

This study adopted a comprehensive systems approach to analysing the current state of early childhood education and care in Lower Saxony. Recognising that effective outcome-oriented pedagogy requires alignment across multiple dimensions of the ECEC system, the analysis examined four interconnected areas: enabling environment, curriculum and pedagogy, workforce culture, and quality assurance.

The research was guided by specific objectives within each of these four key areas:

1. **Enabling environment:** Reviewing existing policies, legislation, and regulations; identifying essential components and coordination channels within the ECEC sector
2. **Curriculum and pedagogy:** Understanding curriculum goals, vision, and development process; assessing implementation levels; evaluating curriculum-pedagogy synergy; examining alignment with primary school curriculum
3. **Workforce culture:** Reviewing capacity-strengthening approaches; examining coordination mechanisms and pedagogical knowledge transfer; exploring training provider capacity
4. **Quality assurance:** Reviewing monitoring and assessment mechanisms; considering curriculum review practices

A mixed-methods approach was employed, collecting both qualitative and quantitative data through:

- Desk review of relevant documents including policies, frameworks, regulations, and research reports
- Online survey administered to key stakeholders across the ECEC sector
- Key informant interviews (KIIs) and focus group discussions (FGDs) with stakeholders

The research framework drew on UNICEF's Build to Last framework and the EU ECEC Quality Framework, which offer comprehensive and internationally recognised foundations for evaluating the structural, process, and contextual factors contributing to ECEC quality and sustainability.

Data analysis employed cross-sectional analytical techniques for survey data and thematic analysis for qualitative data. The findings from both quantitative and qualitative analyses were systematically integrated to address core research objectives.

Some limitations included temporal constraints (a two-week data collection window), varying response rates across stakeholder groups, and the inherent limitations of self-reported data.

Findings

1. Enabling environment

1.1 Policy, legislative, and regulatory framework

Early childhood education and care in Lower Saxony operates within a multi-layered governance structure with responsibilities distributed among national, state, and municipal authorities, providers, and settings. The Social Code Book VIII (SGB VIII) establishes the foundational framework at the national level, while Lower Saxony's state-specific legislation (NKiTaG) refines the educational mission and establishes minimum standards for structural quality.

Each ECEC setting must develop its own "pedagogical concept" to serve as the basis for supporting children and implementing the educational mandate. The "Orientation Framework for Education and Upbringing in ECEC settings in Lower Saxony" (established in 2005) provides non-binding guidance on pedagogical approaches and concept development, agreed upon by the state government and provider associations.

The Orientation Plan describes pedagogical guidelines across nine learning areas but does not include structured competence-based learning targets. Parental engagement is emphasised in both legislation and the Orientation Plan, recognising parents as equal partners in supporting children's development.

1.2 Essential components and coordination channels

The ECEC sector in Lower Saxony comprises a diverse network of stakeholders operating within a decentralised system. While municipal youth offices bear overall responsibility for ECEC within their jurisdictions, they predominantly function by delegating this responsibility rather than acting as central coordinators.

As of March 2024, Lower Saxony had 6,020 ECEC settings, with the largest proportion (4,036) operated by private non-profit providers. The Youth Office of the Federal State of Lower Saxony (NLJA) serves as a key regulatory actor, responsible for licensing, inspecting, and ensuring compliance with minimum structural quality standards.

NKiTaG establishes the legal foundation for cooperation between ECEC settings and primary schools, mandating that ECEC settings prepare children for the transition to school. However, no guidelines are provided for the structures of cooperation, leaving ECEC settings and primary schools to develop and implement their own cooperation models.

2. Curriculum and Pedagogy

2.1 Lower Saxony ECEC Curriculum Goals, Vision, and Development Process

The Lower Saxony Orientation Plan serves as a guidance framework rather than a fully structured curriculum. Developed in 2005 through a collaborative process involving various stakeholders, it has not undergone formal revision since, though targeted updates addressing specific areas were incorporated in 2011 and 2012.

The Orientation Plan outlines nine key learning areas: emotional development and social learning; developing cognitive skills; body-movement-health; language and communication; practical life skills; basic mathematical understanding; aesthetic education; nature and living environment; and ethical and religious questions. These are presented as broad developmental goals without explicit competence targets.

Primary data gathered during interviews and focus groups indicates concerns about the continued relevance of the Orientation Plan, with several participants noting that it requires updating after nearly 20 years. Stakeholders identified limited coverage of contemporary educational topics as an area for improvement.

2.2 Curriculum implementation assessment

While the Orientation Plan was established as a self-commitment of municipal and free providers without formal control mechanisms for implementation, most facilities report taking it into account when developing their concepts. Survey data shows that the vast majority of respondents across all categories reported implementing the Orientation Plan to a "large" or "very large" extent.

However, several implementation challenges were identified, primarily related to practical constraints rather than conceptual disagreements. Staff shortages emerged as the primary obstacle, compounded by time constraints for documentation and colleague collaboration. A key challenge appears to be the gap between theoretical frameworks and practical implementation due to resource constraints and limited professional advice and support.

2.3 Analysis of key pedagogical practices

The research examined attitudes, practices, approaches, and knowledge regarding several key areas:

- **Socio-emotional competence development:** This area received the strongest emphasis from ECEC professionals, with 97% of setting leaders and 93% of pedagogues selecting "Emotional development and social learning" as essential for children's development. Practitioners described implementing relationship-oriented approaches where building trust and establishing emotional safety take precedence over academic instruction.
- **Early literacy development:** While valued by ECEC professionals, literacy received less explicit emphasis than socio-emotional development. Pedagogical practices focus on

reading activities, picture books, and language development strategies, with early literacy generally integrated throughout daily activities.

- **Early numeracy development:** This area received notably less attention compared to both socio-emotional and literacy competences. Numeracy skills are primarily developed through play and everyday activities, with practitioners incorporating counting opportunities in daily routines and games.
- **Planning for learning:** Survey data revealed moderate levels of agreement on the importance of planning for children to achieve learning and development outcomes. Observation and documentation were the most prominent methods for planning, though the majority of settings reported not creating individual learning plans for each child.
- **Observation and documentation:** Settings employ multiple observation methods simultaneously, balancing standardised tools with more personalised approaches. Portfolios are the most frequently used documentation method, followed by written observations and photography, while digital documentation tools and video recording show lower adoption rates.
- **Reflective practice:** This practice is highly valued by both pedagogues and setting leaders, though implementation varies. While the majority of leaders reported regularly using observation information to update planning, pedagogues indicated less consistent usage, with time constraints identified as a significant barrier.

2.4 ECEC-primary school curriculum alignment and transition support

Analysis revealed general alignment between the Orientation Plan and primary school curricula in terms of the values they seek to develop in children (e.g. respect, tolerance, social responsibility, etc.), but a less structured approach to competences compared to primary education. While ECEC emphasises play-based learning and exploration, primary education builds on, formalises and extends these foundations into structured teaching.

Stakeholder perceptions of curriculum alignment varied significantly. State and municipal youth office representatives expressed mixed views, primary school teachers showed significant uncertainty and scepticism, while ECEC providers, setting leaders, and pedagogues reported more positive assessments of transition support. This perception gap likely stems from different perspectives on what constitutes "preparedness."

Primary teachers reported mixed assessments of children's preparedness in specific competences, noting increasing disparities in children's readiness that correlate with social and educational background, suggesting the current ECEC system fails to bridge the gap between children from privileged and underprivileged backgrounds.

3. Workforce culture

3.1 ECEC sector capacity-strengthening approaches

The majority of ECEC staff in Lower Saxony are state-recognised educators (Erzieher/-innen) with vocational training, while only 3.93% have higher education degrees. The sector currently faces staff shortages due to increased service demand alongside significant training and staff retention challenges.

Several initiatives support professional development, including practice mentoring (*Praxismentoring*) during initial training, specialised training programs, and advancement

pathways for experienced staff. However, stakeholders noted that the structure of training programs—primarily school-based without pay—creates barriers to entry.

3.2 Coordination mechanisms and pedagogical knowledge transfer

Knowledge sharing within ECEC settings is prevalent, with a majority of providers and staff reporting established mechanisms, primarily through staff meetings. However, time constraints and competing operational pressures were identified as challenges to effective knowledge sharing.

Cross-setting knowledge exchange is also robust, particularly at leadership levels, though pedagogical staff reported less involvement in these initiatives. Where research information reaches leaders, most reported successful knowledge transfer to their settings, primarily through staff meetings and presentations.

Despite these mechanisms, stakeholders identified several systemic challenges to effective coordination, including significant variation between institutions, lack of formal recognition for important meeting types within established workload calculations, and difficulties in knowledge retention due to staff turnover and retirement.

3.3 Training provider capacity

Training for ECEC staff is available through both pre-service education (at universities and vocational schools) and continuing professional development. University representatives expressed the highest confidence in their training coverage, particularly in early literacy and planning for learning, while early numeracy was consistently identified as the weakest area across all provider types.

All stakeholder groups reported that their self-assessed abilities exceeded what they had learned through formal training, suggesting that formal training programs may not be sufficiently aligned with practice requirements. Pedagogues and leaders reported notably high ability levels across most skill areas despite more moderate training levels, suggesting significant skill development through practical experience and non-formal learning

4. Quality assurance

4.1 Available monitoring and assessment mechanisms

Primary responsibility for quality assurance lies with the Youth Office of the Federal State of Lower Saxony (NLJA), which oversees licensing and supervision of childcare facilities. The quality assurance process begins with applying for an operating license, which focuses on structural requirements including staff qualifications, spatial requirements, safety regulations, and the existence of a pedagogical concept.

Inspections on compliance with legal standards for structural quality are not undertaken routinely but are limited to reported dangers to children's wellbeing. The monitoring of pedagogical quality is not systematic, paying tribute to the considerable autonomy of providers with regard to how concepts are implemented and how a provider adopts their own quality management systems.

Both state and municipal youth office representatives expressed significant concerns about current quality assurance practices, highlighting challenges including lack of standardisation, significant variation in provider capability, resource constraints, and difficulty balancing quantity with quality.

Survey responses from providers, setting leaders, and pedagogues revealed a pattern: while participants reported high confidence in the existence of quality standards, they reported less certainty about specific quality assurance practices, with a potential disconnect in communication between leadership and pedagogical teams.

4.2 Pedagogical concept reviews

According to NKiTaG, pedagogical concepts must be regularly updated, though there appears to be no systematic procedure to verify compliance. Survey data reveal variation in review frequencies across stakeholder groups, with providers and setting leaders most commonly reporting reviews every 2-3 years, while pedagogues reported more variable experiences.

ECEC settings appear to review and update their pedagogical concepts primarily in response to various types of challenges and requirements rather than through systematic scheduled reviews. While most stakeholders recognise the importance of regular concept reviews, practical constraints such as time limitations, staffing shortages, and competing priorities often prevent consistent implementation.

Conclusion and next steps

The present report provides insights into Lower Saxony's current ECEC landscape, establishing a foundation for developing a framework for outcome oriented ECEC. The forthcoming report on relevant good practice from other European countries will identify where Lower Saxony could benefit from approaches of other countries to develop its ECEC system across the key areas explored in this report. These international examples will serve as adaptable models to be considered within Lower Saxony's unique context.

Introduction

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In this context, the aim of the TSI project is to build and validate a framework to strengthen outcome-oriented pedagogy and planning for learning outcomes to support competence development among children.

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Report structure

Following the introduction, the methodology chapter outlines the study's objectives, mixed-methods approach, research framework, data collection and analysis tools used, achieved sample, as well as limitations. The analysis is then structured around four interconnected dimensions. First, the enabling environment section examines the policy framework, legislation, and coordination mechanisms that shape ECEC provision. Second, the curriculum and pedagogy section analyses the Orientation Plan's implementation, pedagogical practices supporting key competence development, planning approaches, and transition to primary education. Third, the workforce culture section explores capacity-strengthening approaches, staff coordination mechanisms, pedagogical knowledge transfer, and training provider capabilities. Finally, the quality assurance section reviews monitoring mechanisms and pedagogical concept review processes.

Methodology

Study objectives

This study adopts a comprehensive systems approach to analysing the current state of early childhood education and care in Lower Saxony. Recognising that effective outcome-oriented pedagogy requires alignment across multiple dimensions of the ECEC system, the analysis examines four interconnected areas: the enabling environment, curriculum and pedagogy, workforce culture, and quality assurance. This holistic approach acknowledges that successful implementation of an outcome-oriented framework depends not only on curriculum content but also on supportive policies, skilled practitioners, and effective monitoring mechanisms.

By examining both formal structures and everyday practices, the study aims to identify existing strengths to build upon and gaps to address in the development of the framework. This ensures that the resulting framework will be both ambitious in its vision and achievable within Lower Saxony's specific context.

The “as-is” analysis has therefore been guided by the following objectives, broken down into 4 key areas:

1. **Enabling environment**:
    1.1. Existing applicable policies, legislation, and regulations underpinning the ECEC sector
    1.2. Essential components of the ECEC sector, as well as the existing channels of communication and coordination to ensure adequate coordination, communication and collaboration between the various actors at various levels
2. **Curriculum and pedagogy**
    2.1. Lower Saxony ECEC curriculum goals (i.e. intended overarching outcomes), and the process of curriculum and pedagogy development
    2.2. The level of use of the curriculum by ECEC service providers
    2.3. The extent to which the curriculum and pedagogy work in synergy
    2.4. The extent to which existing curriculum supports continuity with primary school curriculum for smooth transition
3. **Workforce culture**
    3.1. How does the ECEC sector address issues of capacity-strengthening at all levels?
    3.2. Workforce culture of ECEC setting leaders and pedagogues, especially regarding coordination mechanisms at setting level
    3.3. Capacity of training providers and pedagogical support available for ECEC pedagogues
4. **Quality assurance**
    4.1. Monitoring and assessment mechanisms
    4.2. How is curriculum content reviewed in terms of its effectiveness, and how often is this review carried out?

Approach

To achieve the objectives outlined above and respond to a variety of analytic questions, the researcher employed a mixed-methods approach, collecting and analysing both qualitative

and quantitative data. This approach supports effective data collection on both easily measurable metrics, as well as a qualitative investigation of beliefs and attitudes. Qualitative data, which is descriptive, non-numerical information typically gathered through interviews and focus groups provides rich insights into subjective experiences and perspectives. Quantitative data, in contrast, consists of numerical measurements and statistics obtained through surveys and structured data collection instruments.

A further advantage of the mixed-methods approach is that quantitative data is often most useful for understanding "what", while qualitative data often provides a more detailed and nuanced understanding of "how and why" (Denscombe, 2014); these two levels of analysis provide a rigorous combination of descriptive and explanatory power. Additionally, this methodological triangulation enhances validity by cross-verifying findings through different data sources, thereby increasing confidence in the research conclusions and mitigating the inherent limitations of any single method.

The research also employed a participatory approach, incorporating the views and feedback of key stakeholders at every stage, ensuring relevance, appropriateness, and ownership of both the process and findings of this research. The TSI project Stakeholder Group was highly involved in the development of this specific output, providing insights regarding existing documentation, materials, tools and approaches in use in Lower Saxony, data collection participants, as well as feedback throughout the process of developing the report. The Stakeholder Group consists of approximately 35 representatives organised into three thematic subgroups focusing on providers, staff qualifications, and school transitions, bringing together diverse participants from municipalities, ECEC providers, inspection authorities, training institutions, and those involved in primary education transition. Their involvement was achieved through four Stakeholder Group workshops, with the following breakdown of themes by meeting:

Meeting #	Meeting theme	Dates
Meeting 1	Introductory meeting providing an overview of the project and an update on the evidence generation phase	3 December 2024
Meeting 2	Gathering initial information and resources for "as-is" analysis, followed by a discussion focused on curriculum, pedagogy, and workforce culture	9 January 2025
Meeting 3	Preliminary desk review findings and gaps discussion, followed by a discussion focused on quality assurance	30 January 2025
Meeting 4	Presentation and discussion of findings and recommendations of the "as-is" analysis	25 March 2025

Research framework

The research team drew on UNICEF's Build to Last framework (UNICEF, 2020) to develop the research objectives and guide the analysis. This framework was selected specifically because it offers a systems perspective that recognises the interconnected nature of ECEC quality factors, moving beyond isolated programme elements to examine how different components work together within the broader educational ecosystem.

The framework encompasses several key areas, including components that describe the core functions of ECEC systems,[1] as well as a focus on the overall enabling environment[2] (Figure 1). These core functions and the enabling environment largely correspond to the five dimensions addressed in the EU ECEC Quality Framework (Figure 2).

Figure 1: The Build to Last Conceptual Framework

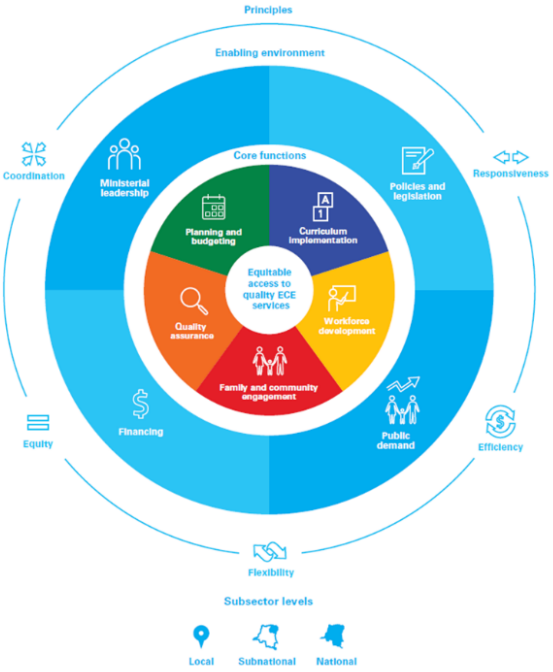
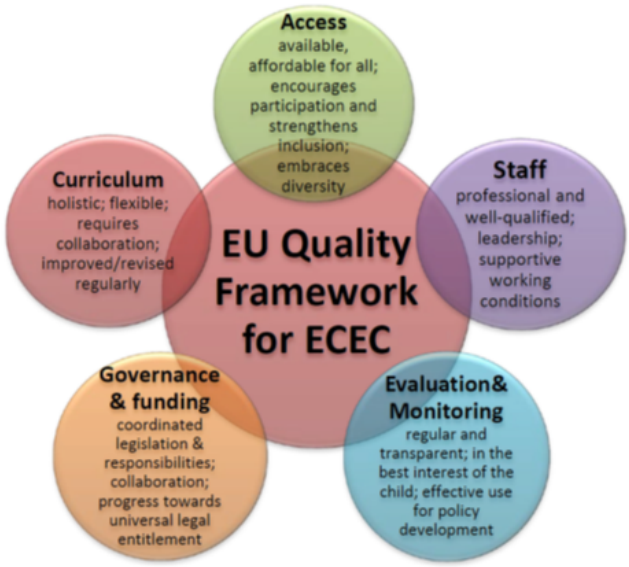


Figure 2: The EU ECEC Quality Framework



While both frameworks offer a comprehensive and internationally recognised foundation for looking at the structural, process, and contextual factors that contribute to the quality and sustainability of ECEC systems, the Build to Last framework provides additional tools and valuable guidelines for analysing good practice in systematically supporting competence development in ECEC and facilitating a smooth transition to primary education.

Given the focus in this study on the current knowledge, attitudes, practices and approaches used by ECEC pedagogues and setting leaders to support children's competence development as part of an outcome-oriented ECEC pedagogy, dedicated focus was given to the curriculum, pedagogy, and workforce components of the framework, but the analysis also touched upon enabling environment and quality assurance components to ensure a more comprehensive approach across components, stakeholders and systems operating in the ECEC sector in Lower Saxony.

Data collection tools and achieved sample

Desk review

Relevant documents and data available in the public domain or held by stakeholders was solicited and analysed for insights into this assignment's key areas of focus. Documents

[1] The core functions of ECEC defined in the Build to Last framework are: planning and budgeting; curriculum development and implementation; workforce development; family and community engagement; and quality assurance.

[2] The key elements of an enabling environment as defined in the Build to Last framework are: ministerial leadership, policies and legislation, financing, and public demand.

included, but were not limited to national and regional commitments, policies, frameworks, and regulations, pedagogical concept development guidance, research reports and studies into areas of focus, existing staff qualification requirements and training curricula, and quality assurance documentation.

Online survey

An online survey was administered to key stakeholders, seeking to gather information across all areas of interest defined above. The selected sampling approach was comprehensive, aiming to reach one pedagogue and one setting leader from each ECEC setting, one teacher from each primary school, as well as one representative of each of the other key organisations, with the exception of the Youth Office of the Federal State of Lower Saxony, where the targeted sample was the total number of employees. This approach was designed to capture potential variations in practice across the diverse ECEC landscape in Lower Saxony, ensuring the sample would be representative of the sector's structural diversity.

This diverse sampling strategy was designed to capture the full spectrum of perspectives across the Lower Saxony ECEC sector. ECEC pedagogues and setting leaders provided insights into daily practices and implementation challenges; primary school teachers offered perspective on transition issues and alignment between systems; representatives from provider organisations contributed understanding of structural and policy factors; while Youth Office employees provided regulatory and quality assurance perspectives. Additionally, ECEC staff trainers from different institutions were included because of the critical role they play in shaping workforce competencies and practices. Finally, including parents ensured the voice of primary beneficiaries is represented. Together, these stakeholders form a complete picture needed for a systems-level analysis that can inform a contextually appropriate framework.

The survey was distributed through a top-down approach, with the Ministry of Education facilitating distribution through relevant organisations and ECEC provider associations, who then cascaded it to their respective providers and settings. The survey remained open for a two-week period, during which the Ministry actively engaged in follow-up communication with stakeholders, sending reminder messages and making direct contact with key organisations to encourage wider participation and increase response rates.

The research team established a target response rate of 20%, aligning with methodological best practices that indicate this threshold typically yields sufficient data for robust analysis (Wu, Zhao, & Fils-Aime, 2022). This targeted sampling approach proved successful in some stakeholder categories, though response rates varied across different groups. Specifically, response rates from Youth Office representatives (25.9%), provider representatives, and training institutions yielded sufficiently robust data, while rates among ECEC pedagogues (0.3-2.1%), setting leaders (2.5-4.8%), and primary school teachers (1.9%) were more limited. This variation was accounted for in the analysis by triangulation with qualitative data where representation was lower, and exercising caution in drawing conclusions about frontline practitioner perspectives.

No target sample was deliberately established for the parent survey as the goal was to allow broad participation and maximise response rates without restricting the sample to predefined criteria.

Table 1: Achieved sample - online survey

Stakeholder category	Target	Targeted response rate	Targeted number of responses	Achieved sample	Achieved response rate
Youth Office of the Federal State of Lower Saxony representatives	27 employees	20%	5	**7**	**25.9%**
Municipal Youth Office representatives	54 offices	20%	11	**13**	**24.1%**
ECEC public provider representatives	approx. 400 providers	20%	approx. 80	**12**	**approx. 15%**
ECEC private provider representatives	approx. 1,400 providers	20%	approx. 280	**20**	**approx. 7.14%**
Public setting leaders	1,984 settings	20%	397	**95**	**4.8%**
Private setting leaders	3,885 settings	20%	777	**99**	**2.5%**
Public setting pedagogues	1,984 settings	20%	397	**41**	**2.1%**
Private setting pedagogues	3,885 settings	20%	777	**13**	**0.3%**
Primary school teachers	1,702 primary schools	20%	340	**33**	**1.9%**
ECEC staff trainers from universities offering BA in ECEC	3 universities	100%[3]	3	**6**	**200%**
ECEC staff trainers from vocational schools	175 schools	20%	35	**23**	**13.2%**
ECEC staff trainers from professional development institutions	107 institutions	20%	21	**19**	**17.8%**
Parents	N/A	N/A	N/A	**137**	**N/A**

Key informant interviews (KIIs) and focus groups discussions (FGDs)

Key informant interviews (KIIs) and focus groups discussions (FGDs) with key stakeholders were also undertaken, with questions specifically designed to triangulate and validate findings from the online survey. Tools were developed and deployed as a combined KII-FGD to allow for varying schedules and availability of respondents. The selected sample approach was both purposive and pragmatic; limited resources were available, making it challenging to speak with every individual holding relevant insights. As such, the research team selected as wide a range of relevant stakeholders as possible, purposefully including a diversity of respondent types and areas of insight.

[3] 100% selected due to small size

The purposive sampling strategy involved a referral-based approach, wherein the research team did not directly contact potential participants. Instead, members of the project Stakeholder Group were engaged to help identify and recommend appropriate stakeholders who could provide valuable perspectives. This method enabled access to specialised professionals with relevant expertise while leveraging existing networks of trust.

Table 2: Achieved sample: KII/FGD

Stakeholder category	Targeted number of KII/FGD	Targeted number of participants	Achieved number of KII/FGD	Achieved number of participants
Lower Saxony Ministry of Education representatives	2 KIIs	**2**	2 KIIs	**2**
Youth Office of the Federal State of Lower Saxony representatives	2 KIIs	**2**	2 KIIs	**2**
ECEC public provider representatives	2 FGDs	**4**	1 KII, 1 FGD	**4**
ECEC private provider representatives	2 FGDs	**8**	2 FGDs	**8**
Public setting leaders	2 FGDs	**6**	1 KII, 1 FGD	**4**
Private setting leaders	2 FGDs	**10**	2 FGDs	**8**
Public setting pedagogues	2 FGDs	**6**	2 KIIs	**2**
Private setting pedagogues	2 FGDs	**10**	2 FGDs	**6**
Primary school teachers	1 FGD	**4**	1 FGD	**6**
ECEC staff trainers from universities offering BA in ECEC	1 KII	**1**	1 KII	**1**
ECEC staff trainers from vocational schools	1 FGD	**2-3**	0 FGD	**0**
ECEC staff trainers from professional development institutions	1 KII	**1**	1 KII	**1**

Data analysis

Survey data was analysed using cross-sectional analytical techniques. The analysis primarily employed pivot tables and cross-tabulations to examine relationships and associations between variables across key disaggregation factors (e.g., participant categories). This approach allowed for the identification of patterns, trends, and potential correlations within the dataset. Descriptive statistics were generated to summarise the central tendencies, distributions, and variations within the quantitative data.

For the qualitative components, the research team employed two distinct analytical approaches aligned with the nature of the data, specifically designed to address the established research objectives:

Survey open-text responses: Quantitative coding was applied to categorise these brief responses (typically 1-2 sentences). Given the concise nature of these comments, a detailed coding framework was not necessary. Instead, responses were directly categorised into clear, predefined groups based on their manifest content, allowing for straightforward frequency analysis while maintaining alignment with research objectives.

Key informant interviews (KIIs): A more robust thematic and interpretive analysis was conducted for these in-depth data sources. This process incorporated elements of grounded theory and followed these sequential steps:

1. Initial review of all interview transcripts to gain comprehensive understanding of content and context
2. Identification of emergent themes and patterns related to research objectives
3. Examination of thematic relationships and conceptual linkages
4. Selection of representative verbatim quotes to illustrate key findings and provide contextual depth

The findings from both quantitative and qualitative analyses were systematically integrated to address the core research objectives. This mixed-methods approach enabled triangulation of data sources, enhancing the validity and reliability of the findings. Areas of convergence between quantitative and qualitative results strengthened the evidence base, while divergences provided opportunities for deeper exploration of contextual factors.

All analyses were conducted with specific focus on the key research objectives that guided this study, outlined in the "Study objectives" section of this chapter. The interpretation of results prioritised actionable insights relevant to the study objectives and practical applications of the findings. This prioritisation refers to the organisation and emphasis of findings rather than selective interpretation—all data were analysed systematically and comprehensively, with findings presented to maximise relevance to the intended research purposes

Limitations

The research faced some methodological and practical limitations that should be considered by readers when interpreting the findings:

- **Temporal limitations:** The data collection window was relatively short (two weeks).
- **Online survey sample size and response rate:** The target response rate of 20% was achieved in some stakeholder categories but fell significantly short in others despite efforts to maximise participation through reminder emails and direct outreach to key organisations. Response rates were notably strong among governance-level stakeholders (Youth Office of the Federal State of Lower Saxony representatives at 25.9% and Municipal Youth Office representatives at 24.1%), as well as above-target among university representatives (200%). Conversely, response rates were particularly low among frontline practitioners, with private setting pedagogues (0.3%), public setting pedagogues (2.1%), primary school teachers (1.9%), and setting leaders (2.5-4.8%) significantly under-represented. To mitigate this limitation, the analysis gives careful consideration to the available practitioner data without overgeneralising, and draws more heavily on the qualitative insights from interviews and focus groups with practitioners to ensure their voices are represented in the findings and subsequent recommendations. Additionally, due to these small sample sizes, differences within categories related to provider type are not statistically meaningful, and therefore the analysis did not focus on comparisons between these sub-groups as it is not likely to yield estimates and differences that might occur by a matter of pure chance and coincidence than statistically substantive differences between sub-groups

- **KII/FGD data collection constraints:** Limited resources and time constraints affected the research team's ability to engage with more stakeholders. Some planned focus group discussions had to be modified to key informant interviews due to participants' availabilities, potentially reducing the diversity of perspectives within certain stakeholder groups. While vocational school teachers had a relatively good survey response rate (13.2%), the lack of KII/FGD participants from this stakeholder category created a gap. The quantitative data collected provides useful insights into vocational training approaches, but lacks the qualitative depth and contextual understanding that interviews would have contributed. This limitation was considered when drawing conclusions about vocational education's role in the ECEC workforce development system.
- **Methodological considerations:** The mixed-methods approach significantly strengthens the validity of findings through triangulation, allowing key insights to be verified across multiple data sources. While differences in response rates across stakeholder groups created some imbalances in representation, the research design deliberately compensated for these variations by integrating qualitative and quantitative data. This integrated approach ensured that perspectives from less-represented groups were still meaningfully captured in the overall analysis. Self-reported data was carefully interpreted with awareness of potential biases, including social desirability bias, particularly for questions about practices and competences. By contextualising survey responses within the broader dataset, the research team was able to draw valid conclusions while acknowledging varying levels of confidence across different aspects of the ECEC system. The findings therefore present a valid, if necessarily nuanced, picture of the current state of outcome-oriented pedagogy in Lower Saxony.

Findings

1. Enabling environment

1.1. Policy, legislative, and regulatory framework

Early childhood education and care in Lower Saxony operates within a multi-layered governance structure where responsibilities are distributed among national, state, and municipal authorities, providers, and settings. At the national level, the Social Code Book VIII (SGB VIII) establishes the foundational framework for ECEC, defining legal entitlements for children and outlining the general education mission in sections (§§) 22-24.

As one of Germany's 16 federal states, Lower Saxony exercises its authority to supplement this federal framework through state-specific legislation, primarily the “Lower Saxony Law for ECEC Provision” (NKiTaG). This state law further refines the educational mission of ECEC institutions and establishes minimum standards for structural quality, such as staff qualification requirements, staff-child ratios and physical space requirements. These standards are minimum requirements that can and shall be superseded by the providers as regulated by §8 NKiTaG. The education mission articulated in §2(2) NKiTaG emphasises explorative self-learning in everyday activities, focusing on designated “areas of education” rather than specific competences or learning outcomes.

The NKiTaG specifies that each setting has to develop its own “pedagogical concept”. This is intended to serve as the basis on which each setting supports children, and it should describe the implementation of the educational and upbringing mandate in accordance with the educational mission set out in the NKiTAG. This concept must include language education for all children and support for those with special language needs, and should be developed and regularly updated by management with staff cooperation (§3).

An official framework providing guidance on pedagogical approaches and pedagogical concept development was established in 2005. The “Orientation Framework for Education and Upbringing in ECEC settings in Lower Saxony” was agreed upon by the state government and the associations of municipal and non-profit ECEC providers as a non-binding self-commitment of municipal and free providers that should be implemented according to the possibilities of each provider. While the original plan has not undergone comprehensive revision, supplementary recommendations regarding speech and language acquisition and (pedagogical) work with children aged under three years were added in 2011 and 2012.

The Orientierungsplan describes pedagogical guidelines aimed at guiding pedagogues to enable children’s learning in different areas to pursue developmental goals. However, it does not include systematic competence-based learning targets that are clearly defined, measurable, and developmentally sequenced - an approach which has been shown to support young children’s competence development in specific domains, particularly in relation to pre-academic (e.g. literacy, mathematics) and social-emotional skills (OECD, 2021).

A belief in the value of family/parental engagement is evident in legislation (NKiTaG), which explicitly recognises parents’ role in children’s development, requiring regular consultation between staff and parents based on documented observations of the child's development (§4(2)). This is reinforced throughout the Orientation Plan, where parents and professionals

are viewed as equal partners in supporting children's development. The Orientation Plan includes detailed guidance on implementing educational partnerships, emphasising regular communication, respect for diverse family backgrounds, and shared decision-making processes. This partnership approach recognises parents' expertise about their children while providing systematic opportunities for engagement through daily interactions, documented development discussions, and formal participation structures such as parent councils.

1.2. Essential components and coordination channels

The ECEC sector in Lower Saxony comprises a diverse network of stakeholders operating within a decentralised yet interconnected system. While municipal youth offices technically bear overall responsibility for early childhood education and care within their jurisdictions, they predominantly function by delegating this responsibility to village mayors or private providers rather than acting as central coordinators or quality assurance bodies. As of 1 March 2024, the total number of ECEC settings in Lower Saxony was 6.020, with the largest part of provision represented by private-non-profit providers (4.036 settings).

Lower Saxony offers several distinct types of early childhood education:

- **Kinderkrippen** cater specifically to infants and toddlers aged 0-3 years
- **Kindergärten** serve children from age 3 until school entry
- **Kindertagespflege** offers home-based care, where qualified childminders care for small groups of children, often in the provider's home.

The Youth Office of the Federal State of Lower Saxony (NLJA) serves as a key regulatory actor, responsible for licensing ECEC providers, inspecting facilities, and ensuring compliance with legal standards for structural quality . To facilitate this regulatory function, the Youth Office operates a web-based system called “Kita Web,” which provides standardised modules for providers to submit operating license applications, report staffing standards, and document structural changes in their facilities. This digital platform streamlines communication between providers and regulators while standardising compliance verification processes. However, while pedagogical inspection falls within NLJA's remit, the focus is on compliance with legal standards and not on the inspection of pedagogical process quality in settings.

NKiTaG establishes the legal foundation for cooperation between ECEC settings and primary schools in § 15. According to this provision, ECEC settings are explicitly mandated to prepare children for the transition to school as part of their educational mission. To accomplish this goal, the legislation further stipulates that ECEC settings are required to “work together with the schools in their catchment area.” However, no guidelines for the structures of cooperation between the systems and the transition process are provided, leaving ECEC settings and primary schools the autonomy to agree locally and develop and implement their own cooperation models and transition practices.

While the law does not prescribe general cooperation structures, §14 NKiTaG does establish specific instruments for binding exchange between systems when difficulties are identified, particularly regarding language development. The law requires ECEC settings to assess children's language skills before their final kindergarten year and mandates a final interview with parents before school enrolment, with the receiving school given the opportunity to participate with parental consent. This creates a formal mechanism for information sharing

between ECEC setting and parents of a child especially on identified language development needs.

2. Curriculum and pedagogy

2.1. Lower Saxony ECEC curriculum goals, vision, and development process

The Lower Saxony Orientation Plan for Early Childhood Education and Care (ECEC) (Orientierungsplan) serves as a guidance framework rather than a fully structured curriculum as defined by UNESCO-IBE (2013) (i.e. a document which describes "what, why, how and how well students should learn in a systematic and intentional way"), though educational systems in different European contexts might categorise such documents differently based on their own traditions and terminology. Developed through a collaborative process involving various stakeholders operating in the ECEC sector in Lower Saxony, the Orientation Plan was established as a self-commitment by the state government and the associations of municipal and non-profit ECEC providers in 2005 and has not undergone formal revision since. However, targeted updates addressing speech and language acquisition and (pedagogical) work with children aged under three years were incorporated in 2011 and 2012. Responsibility for implementation is shared among ECEC providers and professionals, who are tasked with adapting the Orientation Plan's principles to their specific institutional contexts by developing a pedagogical concept.

The Orientation Plan acknowledges its foundation in legal requirements at the outset. In its introduction, it recognises that the core mission of early childhood education - developing children into independent and socially competent individuals - stems from the 1991 Social Code Book VIII (SGB VIII) and is incorporated into the NKiTaG. The Orientation Plan aims to build upon these legal foundations by both clarifying the existing requirements and expanding into additional areas not specifically covered by law. The 9 goals outlined in the NKiTaG educational mandate largely correspond to, or are covered to varying degrees by, the nine key learning areas for early childhood education outlined in Orientation Plan:

1. Emotional development and social learning
2. Developing cognitive skills and the joy of learning
3. Body - Movement - Health
4. Language and communication
5. Practical life skills
6. Basic mathematical understanding
7. Aesthetic education
8. Nature and living environment
9. Ethical and religious questions, basic experiences of human existence

These are presented as broad developmental goals which provide a foundation for holistic development, with approximately two pages of overarching guidance in relation to each area articulating educational processes, pedagogical approaches, and developmental pathways without formulating explicit competence goals or targets (i.e. without specifying what children should be able to achieve). The OECD's Starting Strong VI Report (OECD, 2021) notes that while broad approaches focused on well-being are appropriate for ECEC, skill-specific targets even for young children can effectively support competence development in specific domains, particularly in relation to pre-academic (e.g. literacy, mathematics) and social-emotional skills.

In terms of guidance on pedagogical approaches to achieve these goals, the Orientation Plan emphasises play-based, experiential learning, and encourages adaptability at the institutional level. It also emphasises observation-based planning, discusses creating learning environments, and highlights the importance of child-led activities. However, it provides limited guidance on planning for learning. In addition, while observation is covered, there is limited guidance on how to use observations for future planning, how to document and evaluate the effectiveness of pedagogical decisions. The Orientation Plan also provides limited guidance on planning for mixed-age groups or children with varying abilities.

Primary data gathered during Key Informant Interviews (KIIs), Focus Group Discussions (FGDs), and Stakeholder Group Meetings indicates concerns about the continued relevance of the Orientation Plan. Several participants from both public and private providers noted that the Orientation Plan requires updating, with one provider representative stating: "It needs to be revised... It's 20 years old and missing a lot of things." Specific areas for improvement, and/or enhanced or more detailed guidance identified by stakeholders include limited coverage of contemporary educational topics, including sustainability, participation, multilingualism, poverty, language support integrated into daily activities, and educational observation. Various stakeholders indicated that while some centres have expanded these educational areas beyond what is specified in the Orientation Plan, there is no standardised approach, leading to inconsistent implementation across settings.

Regional language support concepts represent a framework in Lower Saxony designed to guide pedagogical concept development and approaches specifically focused on language development. Developed at the regional level by municipal youth offices and jointly agreed by all ECEC setting providers, these concepts are required to access state funding for language education and language support in ECEC settings. Using this financial assistance, providers are encouraged to ensure that the conditions for immersive language training embedded into day-to-day pedagogy are improved; they can hire additional specialist educational staff or specialist advice, increase the management time of existing specialist staff, or support their staff to get the necessary qualification.

Each of the 54 youth offices in Lower Saxony has developed a regional language support concept as a precondition to apply for funding according to §31 NKiTaG. This document must take into account the recommendations set out in the Orientation Plan regarding speech and language acquisition. A guideline for the development of these concepts is available, and provides a list of requirements as well as a structured approach for creating the regional concept, with sections covering an initial situation assessment, objective setting, specific measures and implementation, evaluation methods (how the implementation of the concept is documented and its effectiveness measured), and participation requirements for childcare facility providers (Niedersachsisches Kultusministerium, 2019).

2.2. Curriculum implementation assessment

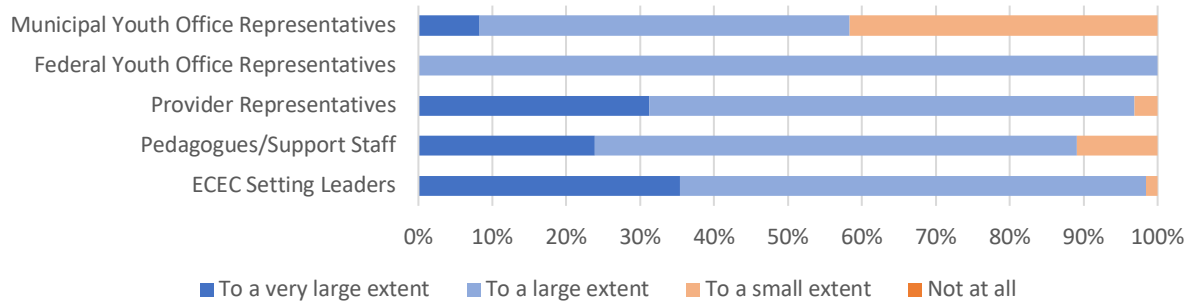
As the Orientation Plan was agreed upon by the state government and the associations of municipal and non-profit ECEC providers as a self-commitment, there is no binding mechanism for implementation. Stakeholder Group members noted during workshop discussions that while pedagogical concepts at the setting level are a prerequisite for the operating licence, they are not checked uniformly in terms of content. Nevertheless, both

Stakeholder Group workshop notes and online survey data suggest that the Orientation Plan serves as a foundational document, and most facilities take it into account when developing their concepts.

When asked about the extent to which their pedagogical concepts are based on the Orientation Plan, the vast majority of respondents across all categories reported implementation to a "large" or "very large" extent. Setting leaders reported the highest levels of implementation (98.4%), followed by provider representatives (ranging from 91.7% to 100%) and pedagogues/support staff (89.1%). Pedagogues/support staff also reported high levels of participation in pedagogical concept development, with 81.2% of respondents answering "yes" when asked whether they had been involved in the process of developing and reviewing their setting's pedagogical concept. Youth Office of the Federal State of Lower Saxony Representatives unanimously reported that the Orientation Plan informs ECEC settings' pedagogical concepts "to a large extent," while Municipal Youth Office Representatives showed more varied perceptions, with 58.3% indicating implementation to a "large" or "very large" extent.

This high level of implementation was confirmed by the KII and FGD respondents across all relevant categories, with one ECEC leader stating: "Yes, completely. We have implemented all areas of the orientation plan in the building and all areas are implemented for the children."

Figure 3: Extent to which different stakeholder categories reported that pedagogical concepts at setting level are based on the Orientation Plan (online survey data)



The survey also sought to understand the degree to which each of the nine specific learning areas outlined in the Orientation Plan are integrated in pedagogical concepts. However, in contrast to the high percentages of respondents indicating the Orientation Plan underpins their work, there were conflicting reports regarding the extent to which specific learning areas and competences are reflected in pedagogical concepts, i.e. while respondents suggested some learning areas were absent from, or had limited coverage within the pedagogical concepts at the setting level, they nonetheless provided details of content in some of these areas in response to subsequent, more detailed, questions. This raises questions as to whether settings are selectively implementing parts of the framework based on their specific priorities, or whether respondents were not familiar with the Orientation Plan's detailed content, particularly since the survey did not explicitly identify these as the key learning areas in the Orientation Plan.

Survey respondents further identified several implementation challenges related to practical constraints rather than conceptual disagreements with the framework. Staff shortages emerged as the primary obstacle, with one public setting leader noting that these

are resulting in a "loss of quality standards" and that "Pedagogically valuable planning, implementation, and reflection are becoming increasingly difficult."

Time constraints further compound these challenges, particularly for documentation requirements and collaboration with colleagues. These practical challenges were strongly echoed in the KIIs and FGDs, with one setting leader explaining,

> *It's a theoretical construct, I say, and it always works well under ideal conditions, but if the ideal conditions aren't there, it's difficult... if half of the colleagues aren't there because they're ill, then it becomes difficult. (Public setting leader, KII).*

Another noted:

> *The particular challenge at my ECEC setting is that we have a very small setting in terms of the framework conditions and that we really need to cover all the educational areas of the Orientation Plan well and give each educational area its own space. (Private setting leader, FGD).*

Similar issues were also flagged by Stakeholder Group members during in-person workshops in Hanover, where discussions suggested that while there is a common understanding of important competences to develop, the actual implementation and approaches vary significantly based on provider type, resources, and institutional capacity:

> *There are big differences depending on the provider. In most cases, the concepts are written by the teams and managers of the ECEC settings. They can seek advice from specialist consultants. These concepts reflect the level of the educational teams in the ECEC settings, but in our view they correspond well with practice. Concepts drawn up by specialised consultants or providers may have a higher pedagogical quality, but are not implemented as authentically in practice. (Stakeholder Group workshop notes – provider representatives)*

A key challenge therefore appears to be the gap between theoretical frameworks and practical implementation, often due to resource constraints and lack of professional advice and support.

Various organisations (both private and public) have proactively developed internal guidance systems to implement the Orientation Plan, complementing the framework developed by the government.

The KII and FGD responses also indicate minimal systematic guidance or support at the state-level for implementing the Orientation Plan. Where facilities received support from specialist consultants, department heads, or quality management systems, these appear to be provider-specific initiatives rather than systematic top-level guidance, which would support a more uniform implementation of the Orientation Plan throughout Lower Saxony. A few respondents mentioned receiving training when the Orientation Plan was first introduced in 2005, with one private setting leader noting that they "had a whole week of training on the Lower Saxony Education and Orientation Plan," but ongoing implementation support appears limited.

Regarding supplementary guidance needs, 30-40% of online survey respondents across categories indicated a desire for supplementary guidance, particularly in addressing challenging behaviours, emotional and social development, parental involvement, and documentation practices. Private provider representatives expressed the highest need for supplementary guidance (52.6%), while private provider pedagogues showed the lowest need (9.1%). This notable difference can be understood in the context of earlier findings in the report, which indicate that many providers have developed their own internal guidance

systems to implement the Orientation Plan. The low expressed need among pedagogues likely reflects that they already benefit from these provider-specific implementation materials and guidance frameworks. Meanwhile, provider representatives, who bear the responsibility for developing these supplementary materials, expressed a much higher need for top-level support in creating effective implementation frameworks for their settings.

Additionally, some KII/FGD participants expressed that the plan itself is sufficiently clear as guidance, with one private setting leader stating, “The Orientation Plan is enough of a guideline in itself,” though many also indicated that updated guidance addressing newer educational areas such as education for sustainable development, or media education would be beneficial.

International literature highlights that "providing practical support materials and setting out clear, informative guidelines for different audiences facilitates curriculum implementation in the ECEC context" (OECD, 2021). This suggests that curriculum frameworks are most effective when accompanied by comprehensive implementation strategies, including detailed guidance materials tailored to different stakeholder groups. Indeed, the proposed outcome-oriented framework for Lower Saxony could serve precisely this function of providing the additional pedagogical guidance and implementation support that has been missing, building upon the foundation established by the Orientation Plan while adding more specific guidance on outcome-oriented pedagogy, assessment approaches, and practical implementation strategies.

2.3. Analysis of key pedagogical practices

Attitudes, practices, approaches and knowledge regarding socio-emotional competence development

Analysis of survey responses from ECEC setting leaders and pedagogues reveals a strong emphasis and importance accorded to socio-emotional competence development in children attending ECEC settings. 97% of setting leaders and 93% of pedagogues selected “Emotional development and social learning”[4] as one of the three most essential areas for children to develop through their participation in ECEC. This is similar to levels expressed by other stakeholders, such as providers (91%), primary school teachers (100%), trainers (88%), local and state authority representatives (90%), and parents (85%).

In open text answers, both pedagogical staff and leaders across public and private providers emphasised the value of “social-emotional stability” and “resource-oriented support,” suggesting a consistent focus on emotional well-being across different ECEC settings.

Setting leaders and pedagogues reported employing diverse practices and approaches to foster socio-emotional competences in young children. The survey data indicates that both roles prioritise participation and cooperative activities, emotional intelligence development, conflict resolution, and role modelling.

The KII/FGD data adds depth to these findings, with pedagogues and setting leaders across public and private ECEC settings having consistently emphasised relationship-building as the foundation for all educational work. They viewed socio-emotional competence development as a continuous process that begins on a child's first day and continues

[4] One of the learning areas included in the Orientation Plan

throughout their time in the setting. Most practitioners described implementing relationship-oriented approaches, where building trust and establishing emotional safety take precedence over academic instruction.

Many respondents reported their settings use specific strategies to foster emotional awareness, such as regular discussions with children about identifying and expressing feelings. These conversations often happen in circle times or through structured projects specifically designed to explore emotions and social interactions. Several leaders mentioned using questions like “How do I feel?” and “What can I do when I'm angry?” to help children build emotional vocabulary and regulation strategies.

Participation approaches appear to be widely valued, with many settings involving children in decision-making processes appropriate to their developmental level. This participatory philosophy extends to the reference educator system (also known as “key person” or “reference caregiver system”) mentioned by several respondents, where specific staff maintain closer relationships with designated children, allowing for more individualised emotional support.

Creating supportive transitions appears to be another key focus area, with practitioners carefully planning transitions between different stages (crèche to kindergarten, kindergarten to school). Some settings have implemented structured programs like “Kindergarten plus”[5] specifically targeting emotional development, while others incorporate social-emotional learning throughout daily routines and interactions. One private setting leader highlighted the transition to school as a particularly important opportunity for socio-emotional development:

> *I think this is always a very exciting topic in educational work, from the small everyday transitions to the transition that begins when the child arrives at the crèche... it is very important to me or to us in our institution to deal with this very consciously. (Private setting leader, FGD)*

Another public setting leader, emphasised the foundational nature of relationship work:

> *relationship work is the basis for our educational work... we make sure that we talk to the children about feelings. What are feelings anyway? What feelings are there? How can I express them? (Public setting leader, KII)*

The same leader also noted however the challenges of implementing socio-emotional development:

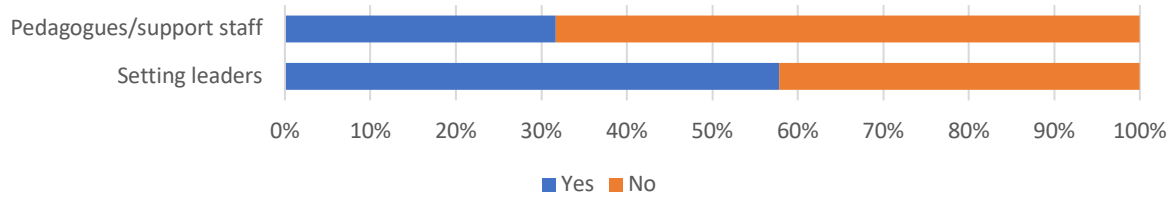
> *In order to work with socio-emotional competences, you need very well-trained staff who are really able to introduce themselves, who are not stressed. They have to be able to recognise the children's different emotions, understand them and have clarity. And that is definitely a challenge. (Public setting leader, KII)*

[5] Kindergarten plus is an educational and prevention programme developed by the German League for the Child that strengthens the personalities of four- to five-year-old children in ECEC settings by promoting their social, emotional, and intellectual development through nine structured modules. The programme uses hand puppets, games, exercises, and conversations to help children identify emotions, develop communication skills, and resolve conflicts non-violently. The programme includes a module on the topic of 'school transition' where children's hopes and fears about starting school are addressed. Since 2019, Kindergarten plus START has also been available for two- and three-year-olds, offering methods and materials that can be integrated into everyday activities. Further details can about this programme be found at: https://www.bildungsserver.de/innovationsportal/bildungplusartikel.html?artid=1212

This observation highlights the importance of the relationship between staff well-being and their capacity to effectively support children's socio-emotional development. Research consistently demonstrates that educators' emotional availability and regulatory capacities directly impact their ability to model and scaffold emotional competencies for young children (Buettner, Jeon, Hur, & Garcia, 2016; Jennings & Greenberg, 2009). Studies show that educators experiencing stress, burnout, or limited emotional resources are less able to respond sensitively to children's emotional needs or implement effective socio-emotional learning strategies (Whitaker, Dearth-Wesley, & Gooze, 2015). Conversely, when educators' well-being is supported through appropriate resources, training, and workplace conditions, they demonstrate greater capacity to create emotionally supportive learning environments that foster children's socio-emotional competence development (Jeon, Buettner, & Grant, 2019). This interconnection between practitioner and child well-being represents an important consideration for systems aiming to strengthen outcome-oriented pedagogy focused on socio-emotional development.

Asked whether they were aware of any other tools and approaches that could be used to help children develop socio-emotional competences, aside from those currently implemented, setting leaders indicated higher awareness of additional approaches for socio-emotional development (57.8%) compared to pedagogues (31.7%):

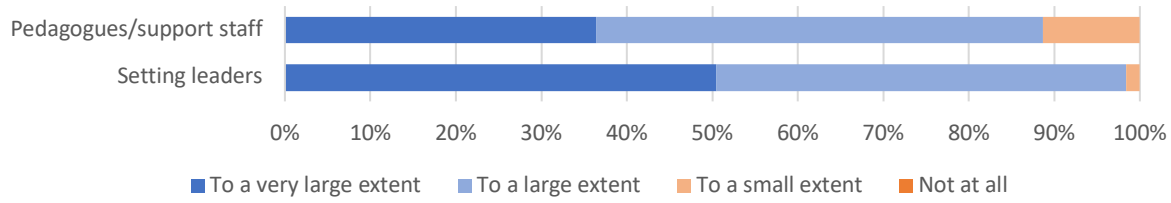
Figure 4: Setting leaders and pedagogues/support staff responses to whether they were aware of any other tools and approaches that can be used to help children develop socio-emotional competences (online survey data)



Of those who responded “Yes”, 74% of leaders and 31% of pedagogues provided examples. This notable disparity in awareness levels between setting leaders and pedagogues seems to reflect the natural difference in professional experience and exposure between these roles. Setting leaders typically have more years of professional experience, broader professional networks, more extensive training, and greater exposure to different pedagogical approaches through their leadership responsibilities, including participation in provider meetings and professional development events. Their role often requires them to maintain awareness of emerging practices to inform strategic decisions and pedagogical concept development in their setting. While this experience gap is to be expected in any hierarchical organisation, it does raise considerations about how effectively specialised knowledge is shared within settings.

When asked about the extent to which socio-emotional competence building is part of their pedagogical concepts, both leaders and pedagogues responding to the online survey reported that these competences were reflected to a large or very large extent.

Figure 5: Setting leaders and pedagogues/support staff reporting the extent to which the pedagogical concepts in their settings support socio-emotional competence development (online survey data)



This is reinforced by qualitative data from KIIs and FGDs with setting leaders and pedagogues, with multiple respondents directly confirming that socio-emotional competences are anchored in their concepts, and several describing these competences as an essential part of their conceptual orientation and fundamental for developing other skills. This consistent emphasis indicates that socio-emotional competence building is viewed as a critical component of ECEC and is formally recognised within pedagogical concepts rather than treated as an incidental outcome.

Attitudes, practices, approaches and knowledge regarding early literacy development

Survey data suggests that while early literacy is valued by the surveyed ECEC professionals, it receives less explicit emphasis compared to socio-emotional development. 70% of setting leaders and 78% of pedagogues selected “Language and Communication” including early literacy development as one of the three most essential areas of the Orientierungsplan for children to develop through their participation in ECEC. This is similar to levels expressed by other stakeholders, such as providers (84%), primary school teachers (85%), trainers (77%), and local and state authority representatives (70%). However, less than half (42%) of the parents who responded to the survey selected “Language and Communication” as an essential area for children to develop through their participation in ECEC.

In open text answers, only one pedagogue specifically mentioned “Language and Communication” as an additional essential area. Similarly, open responses from setting leaders contained limited direct references to literacy development. When mentioned, literacy was often framed within broader educational contexts rather than as a standalone priority, which is in line with guidance provided in the Orientation Plan. This relatively modest representation of literacy in the open text data suggests that while it is recognised as important, it may not be perceived as the most pressing priority compared to socio-emotional development.

In terms of pedagogical practices and approaches for early literacy development, survey data reveals that both setting leaders and pedagogues place significant emphasis on reading activities, picture books, and language development strategies to foster early literacy.

KII and FGD data suggests that early literacy is generally integrated throughout daily activities rather than taught formally in settings; this in line with guidance from the Orientation Plan. Pedagogues described creating literacy-rich environments with accessible books and writing materials that children can explore independently. Several mention incorporating letters into the physical environment, with one setting using an approach where the names of items like clocks or light switches are posted under these items using large letters, making written language as a natural part of the environment.

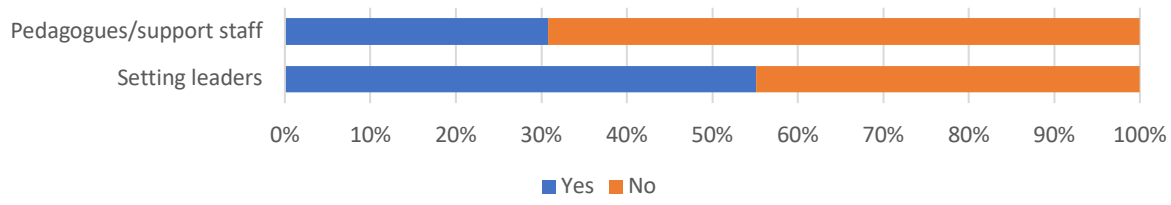
Regular storytelling, reading aloud, and dialogue-based conversations form the foundation of language development approaches. For older children, particularly those in their pre-school year, more targeted book projects and activities supporting name recognition and writing are common. Language documentation using tools like BaSIK sheets[6] helps track development and identify areas needing additional support.

Settings with higher percentages of children with migration backgrounds described adapting their literacy approaches, often incorporating movement activities to facilitate language learning beyond verbal instruction. Several respondents mentioned using visual communication systems with symbols to bridge language gaps, though they noted frustration with limited resources for interpretation services.

These findings align with those presented in the report on the "Evaluation of the implementation of the educational mission of language education and language promotion in Lower Saxon day-care centres" (Niedersachsisches Kultusministerium, 2022). Based on a survey of educational professionals in the day-care centres, the evaluation found that a wide range of activities are implemented in the ECEC setting to promote the children's language development, in particular reading picture books, consciously using their own language as a role model and combining language and movement. Targeted support measures, e.g. for the development of vocabulary and grammar, were found to be much less common.

Asked whether they were aware of any other tools and approaches that could be used to help children develop early literacy skills, aside from those currently implemented, setting leaders responding to the online survey indicated higher awareness of additional approaches (55.1%) compared to pedagogues (30.8%). Of those who responded "Yes", 78% of leaders and 25% of pedagogues provided examples. As noted in the previous section, this knowledge gap between setting leaders and pedagogues likely reflects the natural difference in professional experience and exposure between these roles, while also raising considerations about how effectively specialised knowledge is shared within settings.

Figure 6: Setting leaders and pedagogues/support staff responses to whether they were aware of any other tools and approaches that can be used to help children develop early literacy competences (online survey data)



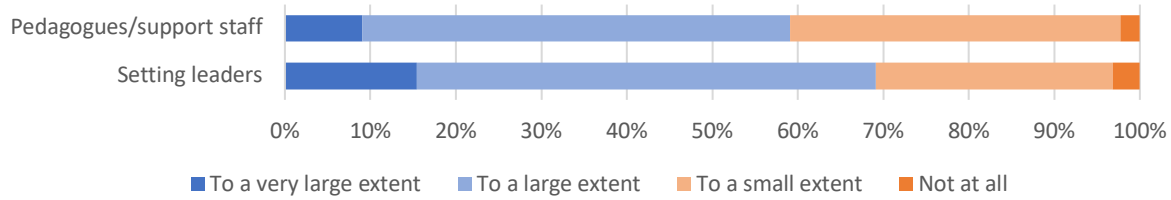
However, KII and FGD respondents identified significant challenges in applying their knowledge effectively. Supporting children with migration backgrounds or language barriers presents particular difficulties, with several leaders expressing frustration about limited resources for interpretation services and cultural mediators. Many noted that despite

[6] Further details on approaches to observing speech development can be found at the following link: https://www.biss-sprachbildung.de/btools/begleitende-alltagsintegrierte-sprachentwicklungsbeobachtung-in-kindertageseinrichtungen-basik/

understanding effective approaches, they struggled with limited time and staffing to implement them consistently.

When asked about the extent to which early literacy is reflected in their pedagogical concepts, the majority of leaders and pedagogues responding to the online survey reported that this competence is well-integrated in pedagogical concepts, though to a lesser extent than socio-emotional competences:

Figure 7: Setting leaders and pedagogues/support staff reporting the extent to which the pedagogical concepts in their settings support early literacy development (online survey data)



KII and FGD participants also addressed the topic of early literacy integration in pedagogical concepts, though with less explicit emphasis than socio-emotional development. Several leaders mentioned that early literacy is integrated into their pedagogical concepts, typically as part of the Orientation Plan's educational areas. However, early literacy appears to be more actively pursued in daily practice than it is reflected or emphasised in their written pedagogical concepts. Most frequently, participants mentioned literacy was pursued in connection with pre-school preparation activities as defined in their concepts. Several leaders referred to writing activities as part of the transition to school and working on pre-school folders.

Attitudes, practices, approaches and knowledge regarding early numeracy development

Survey data suggests that early numeracy development receives notably less attention compared to both socio-emotional competence and literacy among responding practitioners. None of the pedagogues and only 4% of setting leaders selected “Basic Mathematical Understanding” which is one of the domains of the Orientierungsplan as one of the three most essential areas for children to develop through their participation in ECEC. This is similar to levels expressed by other stakeholders, such as providers (3%), primary school teachers (12%), trainers (2%), local and state authority representatives (5%), and parents (5%).

In open text answers, among all setting leaders and pedagogues, explicit mentions of mathematical or numerical skills development were minimal. None of the pedagogues directly referenced early numeracy as an additional essential area for development. This limited presence in the data should not necessarily be interpreted as devaluing numeracy, but may instead reflect a hierarchy of priorities where competences such as socio-emotional foundations are seen as precondition for the development of pre-academic skills such as early numeracy.

In terms of pedagogical practices and approaches for developing early numeracy in young children, both setting leaders and pedagogues prioritise the integration of numeracy into everyday activities and play-based learning approaches.

KII and FGD data also suggests that numeracy skills are primarily developed through play and everyday activities rather than formal instruction. Pedagogues described incorporating counting opportunities in daily routines, such as counting children during morning circles or figuring out how many plates are needed at mealtimes.

> *Everything else happens in our everyday group work, so that the children start doing maths without realising it. How many children are actually sitting down? How many plates do I need to cover? (Private setting pedagogue, FGD)*

One setting mentioned specifically designing their playground with mathematical concepts in mind, creating physical spaces that naturally encourage numerical thinking.

> *We redesigned our playground with the concept of maths in the open air, which is how our playground was conceived. We then developed a concept together where children are introduced to maths in a playful way. (Private setting leader, FGD)*

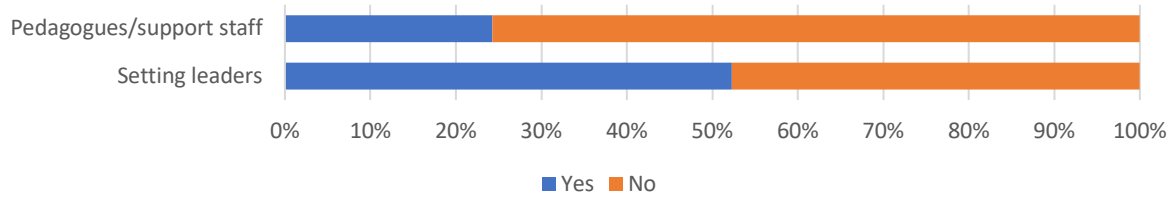
Games requiring counting and number recognition were commonly mentioned by KII and FGD participants, with materials accessible to children during free play periods.

> *There are also certain games in the group such parlour games that don't work without arithmetic. So it's always there every day in a playful way. (Private setting pedagogue, FGD)*

For older pre-school children, more targeted activities involving number recognition and basic counting are introduced, though respondents consistently emphasised maintaining a playful approach. Several pedagogues mentioned that they adapt the complexity of mathematical activities based on children's developmental readiness and interest level.

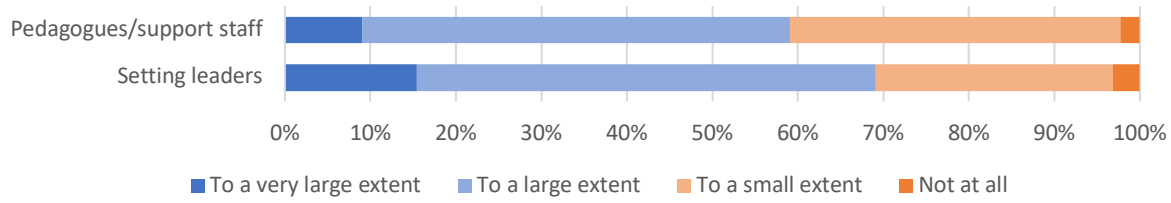
Asked whether they were aware of any other tools and approaches that could be used to help children develop early numeracy skills, aside from those currently implemented, approximately half of setting leaders (52.3%) and a quarter of pedagogues (24.3%) reported awareness of additional numeracy approaches. Of those who responded “Yes”, 72% of leaders and 33% of pedagogues provided examples. As noted in the previous section, this knowledge gap between setting leaders and pedagogues likely reflects the natural difference in professional experience and exposure between these roles, while also raising considerations about how effectively specialised knowledge is shared within settings.

Figure 8: Setting leaders and pedagogues/support staff responses to whether they were aware of any other tools and approaches that can be used to help children develop socio-emotional competences (online survey data)



Early numeracy appears to be less integrated in pedagogical concepts compared to socio-emotional and early literacy competences, with only 52.4% of leaders and 45.5% of pedagogues indicating that early numeracy is reflected in setting concepts to a large or very large extent.

Figure 9: Setting leaders and pedagogues/support staff reporting the extent to which the pedagogical concepts in their settings support early numeracy development (online survey data)



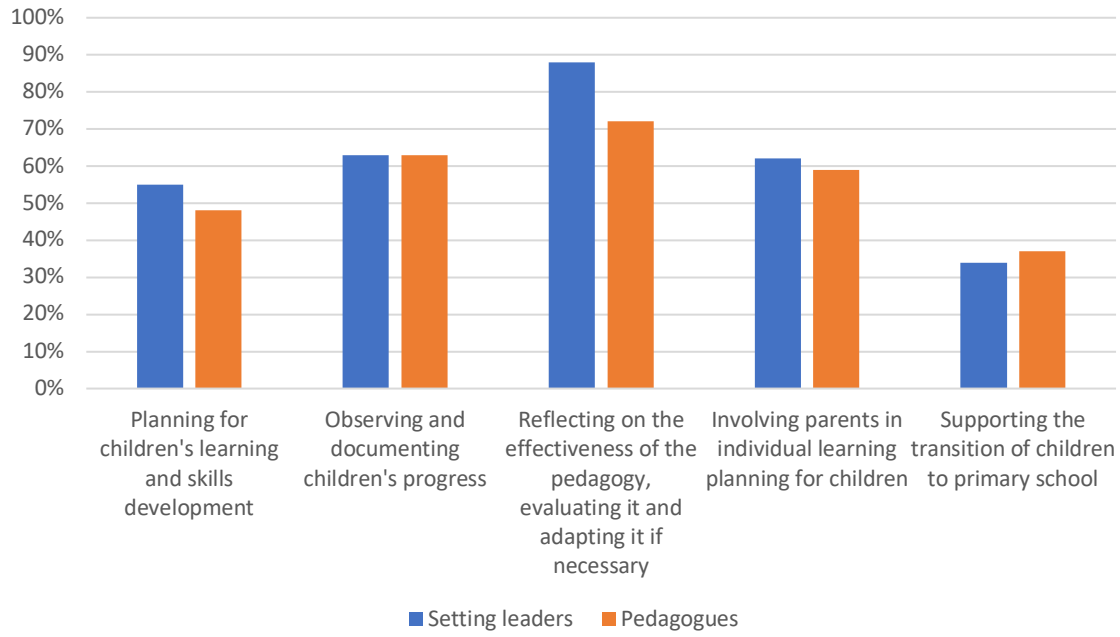
KII and FGD respondents also indicated limited integration of early numeracy in setting-level pedagogical concepts. Several leaders indicated that numeracy appears in specific sections of their concepts, particularly in areas focused on pre-school preparation rather than being integrated throughout. Respondents also suggested that many settings base their concepts on the Orientation Plan, which includes “Basic Mathematical Understanding” as a required educational area to address. Despite these inclusions, early numeracy received noticeably less conceptual attention than socio-emotional development in leaders' descriptions of their pedagogical concepts. While mathematical activities clearly occur in these settings, the formal integration of early numeracy into documented pedagogical concepts appears less emphasised or is at least less prominently featured in their discussions of curriculum approaches.

Planning for learning and competence development

Survey data reveal moderate levels of agreement among ECEC professionals on the importance of planning for children to achieve learning and development outcomes. As shown in the figure below, just over half (55%) of setting leaders and just under half (48%) of pedagogues/support staff consider “planning for children's learning and skills development” as one of the three most essential elements for quality ECEC in terms of pedagogical approaches and practices.

It is however important to recognise that observation and reflection represent integral components of effective planning for learning rather than separate pedagogical processes. The higher prioritisation of observation (63% for both groups) and reflection (72% and 88% respectively) can be understood as professionals valuing a cyclical, evidence-based approach to planning for learning outcomes. This reflects contemporary pedagogical understanding where observation of children's interests, abilities, and developmental progress provides the foundation for responsive planning.

Figure 10: Prioritisation by setting leaders and pedagogues/support staff of elements they consider most essential for quality ECEC in terms of pedagogical approaches and practices (online survey data)



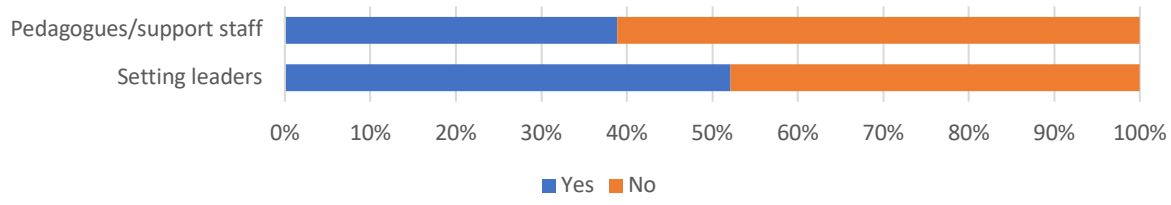
Online survey data from setting leaders and pedagogues also suggests that they employ various approaches to planning for learning, with observation and documentation being the most prominent methods.

When describing tools and approaches used for planning, KII and FGD respondents also mentioned a combination of observation-based, interest-led, and structured methods. One public setting leader explained the challenges around time for planning:

> *Planning takes time and we are elementary educators. We are not equated with teachers. It's very clear at school. Teachers at school have time to prepare their pedagogy and this is always taken a little less seriously by educators. But the preparation of educators is just as intensive as in a school. (Public setting leader, KII)*

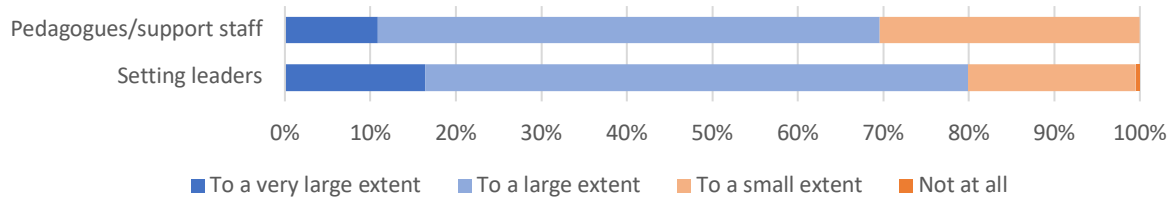
Setting leaders indicated higher awareness of additional planning approaches (52.1%) compared to pedagogues (38.9%):

Figure 11: Setting leaders and pedagogues/support staff reporting whether they were aware of additional planning approaches (online survey data)



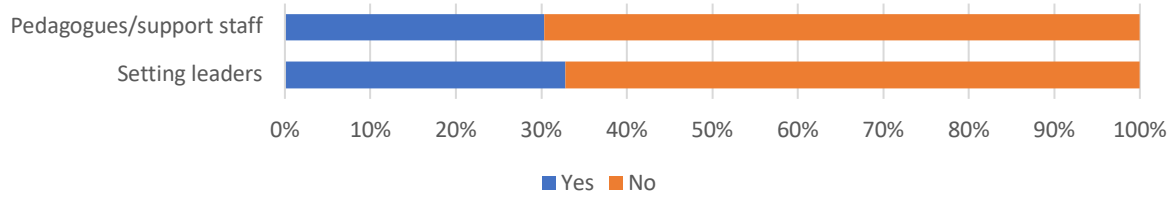
Both setting leaders and pedagogues generally reported that pedagogical concepts effectively support planning for learning:

Figure 12: Setting leaders and pedagogues/support staff reporting the extent to which the pedagogical concepts in their settings support planning for learning (online survey data)



Survey answers concerning the development of individual learning plans suggest that the majority of both setting leaders (67.2%) and pedagogues (69.6%) do not create individual learning plans for each child.

Figure 13: Setting leaders and pedagogues/support staff reporting whether they create a learning plan for each child (online survey data)

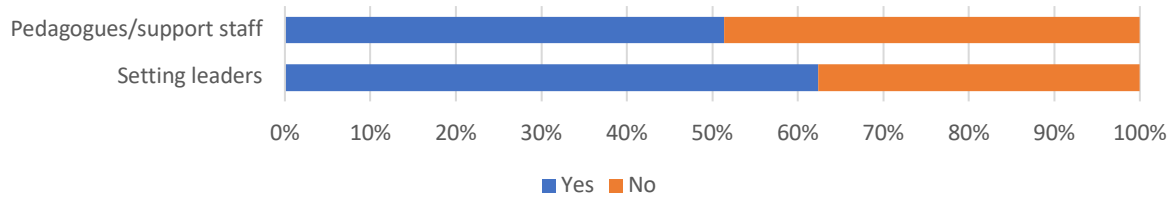


KII and FGD data on individualised learning plans corroborates the finding that formal learning plans for each child are not typical practice. Most settings explicitly state they do not create individual learning plans except for children with identified special needs who receive integration support. Instead, they employ observation-based documentation to track development and inform planning. A private setting pedagogue clarified this distinction, noting “not a learning plan for each child, but development documentation and also regular meetings with parents.” A public provider representative similarly explains they “observe the children and, of course, also hold development meetings with the parents” but “don't draw up a proper learning plan.”

Several respondents indicate that while individualised learning planning would be theoretically beneficial, practical constraints make it infeasible. A private setting leader pointed to limited preparation time, noting that her nine teaching staff collectively have just 22 hours weekly for all planning. Similarly, a private setting leader confirmed that “learning planning for each individual child is not feasible” given current conditions.

Among those who do create individual plans, parental involvement varies, with slightly more setting leaders (62.4%) compared to pedagogues (51.4%) reporting that parents are involved in individual learning planning.

Figure 14: Setting leaders and pedagogues/support staff reporting whether they involve parents in individual learning planning (online survey data)



Those who responded positively were also asked how they involve parents in individual learning planning for children. Reponses suggest that parent involvement in learning processes occurs primarily through regular development discussions rather than collaborative learning planning. Most settings conduct these discussions at least annually, typically around children's birthdays or key transition points. A private setting leader described a more structured approach where“ in this development meeting the child carer and parents develop an educational goal together. The responsibilities are then also defined. So what can the parents do to achieve the goal? And what can the ECEC setting do?” For children receiving special needs support, “round table” meetings involving parents and all supporting professionals occur more frequently.

This collaborative approach to developing educational goals and defining shared responsibilities between home and setting environments represents a notable finding relevant to framework development, as international literature consistently supports strengthened parental engagement in children's education in ECEC contexts (OECD, 2021). Research shows that strong parental involvement in ECEC can improve children's reading and numeracy outcomes and have a positive impact on their behaviour and social and emotional skills, particularly for socio-economically disadvantaged children (Sim, Bélanger, Stancel-Piątak, & Karoly, 2019; OECD, 2020).

Responding to the same question of how they involve parents in individual learning planning for children, several practitioners also mentioned informal parent engagement through daily conversations, though one private setting pedagogue noted an increasing challenge in engaging parents as educational partners: “you notice a lot, even here in our practice, even if it's still a village, that parents don't really want to engage with their children at home in this respect and actually like to pass it on to the ECEC settings.” The pedagogue also suggested that changing family circumstances may contribute to this trend, including increased work demands on both parents, resulting time constraints, and parental exhaustion. The pedagogue observed that parents often seek personal downtime after work rather than engaging in structured learning activities with their children, leading to expectations that educational development should primarily occur within ECEC settings. This observation highlights potential tensions in the educational partnership model that many settings espouse.

Observation and documentation

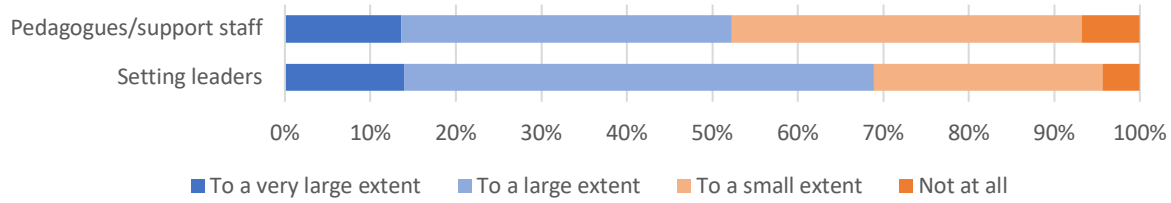
Survey responses from setting leaders and pedagogues indicate that they utilise various methods to observe and document children's learning and development.

Around half of the setting leaders (55.0%) reported that their observation procedures consider social-emotional education, early literacy, and early numeracy “to a large extent,”

while pedagogues/support staff more frequently indicate these areas are accounted for only "to a small extent" (40.9%). Notably, there is a perception gap between leaders and pedagogues, particularly in public settings where leaders reported more extensive procedures (52.2% "to a large extent") than pedagogues (33.3%).

This discrepancy highlights a complex implementation challenge that could stem from multiple factors: insufficient communication of expectations from leadership to staff, limited dedicated time for documentation, varied training experiences, or different perceptions of what constitutes comprehensive observation. This finding is relevant for framework development, as it indicates that effective support for observation practices may require addressing both cultural and structural factors—not just providing additional resources or training, but also ensuring clear leadership guidance, practical implementation strategies, and shared understanding of priorities across all staff levels.

Figure 15: Setting leaders and pedagogues/support staff reporting the extent to which their observation procedures consider social-emotional education, early literacy, and early numeracy (online survey data, disaggregated by provider type)



The KII and FGD participants described diverse approaches to observing and documenting children's development, with varying levels of domain specificity. While observation tools for language development appear more structured and systematised, documentation of socio-emotional competences and numeracy skills seems less formalised or integrated into broader developmental documentation frameworks. Several respondents acknowledge time constraints affecting comprehensive documentation, with a private setting leader noting that implementation can be "incredibly stressful for staff."

Overall, settings appear to employ multiple observation methods simultaneously, balancing standardised tools with more personalised approaches to capture children's holistic development. This finding has implications for framework development, suggesting a need for more integrated, streamlined documentation approaches that address all key developmental domains with comparable depth and structure.

The frequency of different documentation methods reported by survey respondents reveals consistent patterns between setting leaders and pedagogues. Portfolios are the most frequently used method, with 58.9% of setting leaders and 53.2% of pedagogues using them "very often," followed by written observations, which are employed "often" by 45.8% of leaders and 48.9% of pedagogues. Photography is also widely utilised, with approximately half of both groups using this method "often." Digital documentation tools and video recording show notably lower adoption rates, with 35.6% of leaders and 42.2% of pedagogues reporting they "never" using digital tools, while video recording is "never" used by 34.4% of leaders and 35.6% of pedagogues. Development checklists occupy a middle position in reported frequency of use. These findings suggest a preference for traditional documentation methods across both groups, with limited uptake of newer technological

approaches. They also demonstrate an existing foundation for systematic observation and documentation that could potentially support outcome-oriented approaches.

Figure 16: Frequency of different documentation methods used by setting leaders (online survey data)

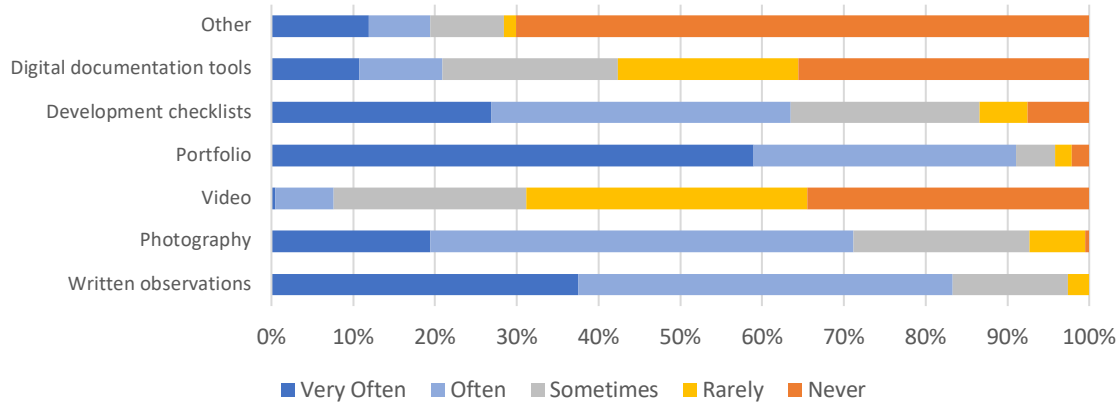
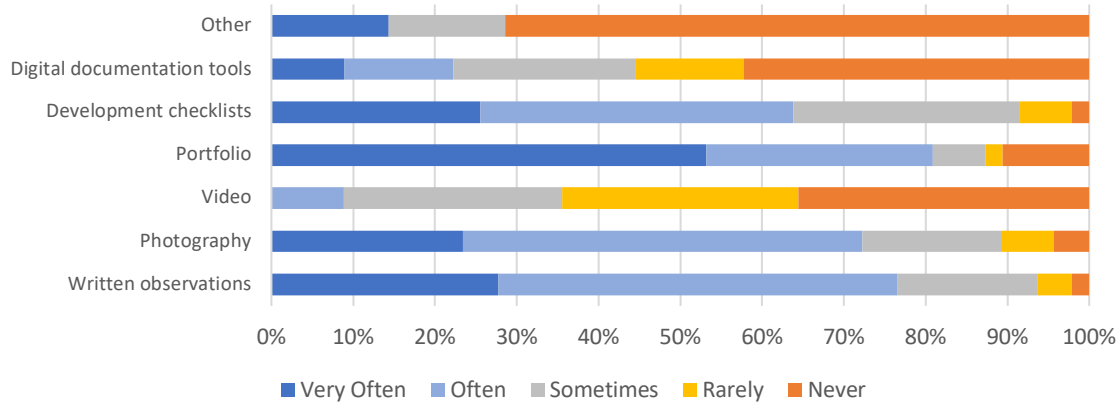


Figure 17: Frequency of different documentation methods used by pedagogues/support staff (online survey data)



The report on the "Evaluation of the implementation of the educational mission of language education and language promotion in Lower Saxon day-care centres" (Niedersachsisches Kultusministerium, 2022) also provides some insight into the observation and documentation approaches, practices, and tools used by pedagogues at the setting level. Based on a survey of educational professionals in the day-care centres, the evaluation found that a majority of educational professionals begin observing and documenting children's language development in writing as soon as they enter the ECEC setting, and not just in their last year of kindergarten.

Reflective practice

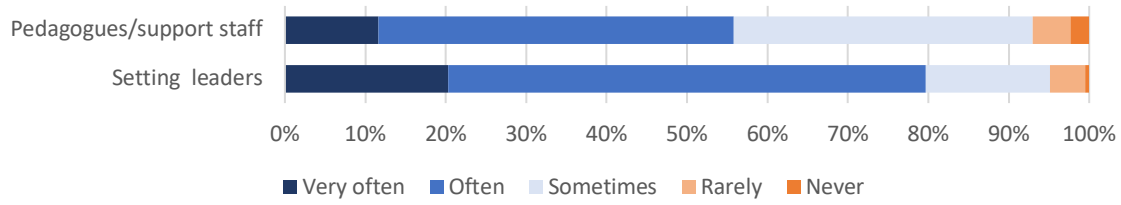
Primary data collection also sought to ascertain whether pedagogues and setting leaders use the information on children's competence development obtained through observation and documentation practices to reflect on, evaluate, and update their planning for learning. Also referred to as reflective practice or self-evaluation, this practice is fundamental to effective ECEC, and involves a cyclical process where educators consciously analyse their observations, consider the implications for their teaching strategies, and make informed adjustments to their educational planning. Reflective practice represents a bridge between

observation and action, ensuring that documentation serves not merely as a recording exercise but as a catalyst for responsive pedagogical development.

Survey data indicates that reflective practice is highly valued by both pedagogues and setting leaders, though to varying degrees. When asked to select the three most essential elements for quality ECEC in terms of pedagogical approaches, “Reflecting on the effectiveness of the pedagogy, evaluating it and adapting it if necessary” was selected by 72% of pedagogues/support staff and 88% of setting leaders—making it the most frequently selected element among both groups. This suggests widespread recognition of reflection's central role in quality provision, a strength on which the framework for outcome-oriented ECEC could build.

The gap between pedagogues (72%) and leaders (88%) aligns with findings on actual implementation, pointing to a possible disconnect between acknowledged importance and regular practice, particularly among pedagogues. While the majority of leaders (79.6% combined “often” and “very often”) reported regularly using observation information to update their planning, pedagogues indicate less consistent usage (55.8% combined “often” and “very often”), with over a third (37.2%) using this information only “sometimes.”

Figure 18: Setting leader and pedagogue/support staff reported frequency of using information on children’s competence development obtained through observation and documentation practices to reflect on, evaluate, and update their planning for learning (online survey data)



The KII/FGD data reinforces these findings while providing contextual insights into reflective practices. Setting leaders described systematic approaches to reflection, where educators analyse observations to identify needed adaptations to their teaching approaches. They emphasised the importance of focusing first on pedagogical methods rather than viewing challenges as child deficits. Pedagogues described daily reflection as essential, considering what works well and what needs adjustment based on children's responses to activities. This finding is significant when compared with the definition of outcome-oriented pedagogy outlined in the introduction chapter, as it shows that elements of this approach—particularly the cycle of observation, reflection, and adaptation—already exist in current practices.

> *At the end of the day, it is above all reflection that is on our agenda every day. Reflection, of course, in our own organisation. What did I do right? What did I do wrong? What is going well? What is not going well? How does the children's group react to certain offers? Why is it going well? Why is it not going well? (Public Setting Pedagogue, FGD)*

> *I think the reflection process is really important and should always be one of the first questions you should ask yourself as a teacher... to check whether what you have planned has been effective at all, whether you have perhaps missed the point or failed to arouse the child's interest...a very superficial question is to look at where the problem lies with the child, so to speak, but where there might be a structural problem in the first step, a problem at the pedagogical action level. (Private Setting Leader, FGD)*

However, both leaders and pedagogues consistently identified time constraints as a significant barrier to meaningful reflection. While understanding the value of reflection, many expressed frustration at the limited resources available to engage in thorough analysis of observations and subsequent planning adaptations. This tension between recognising reflection's importance and having adequate capacity to implement it effectively appears to be a crucial factor affecting how consistently observation information is used to adjust planning for learning, particularly in public settings where the survey data showed less frequent utilisation of observation information among pedagogical staff.

2.4. ECEC - primary school curriculum alignment and transition support

Both the primary school curricula and the Orientation Plan emphasise the development of democratic values, respect, tolerance, and social responsibility, and emphasise recognising and supporting individual learning needs, diversity, and multilingualism, with the aim of ensuring that children's varied backgrounds are respected and built upon as they progress.

Looking specifically at language and early literacy development, the Orientation Plan places significant emphasis on language acquisition through play, interaction, and intentional language education as a core foundation for later learning. It recognises literacy as a gradual process, incorporating storytelling, rhymes, and letter recognition. The primary school curriculum for German builds directly on this by continuing to develop speaking, listening, reading, and writing skills, with an explicit focus on spelling, grammar, and comprehension strategies. The foundational skills developed in ECEC align well with the structured competency-building in primary education. Both the Orientation Plan and primary school curriculum for German share a focus on language development as a tool for social communication and emotional growth. The ECEC's foundational emphasis on building confidence for social interaction evolves into the primary curriculum's goal of enabling effective communication and critical thinking.

With regards to early numeracy, the Orientation Plan emphasises fostering basic mathematical understanding through play, exploration, and everyday contexts. The aim is to help children recognise patterns and structures, understand quantities and numbers through sensory and hands-on activities, and engage in problem-solving using age-appropriate tools like blocks or natural objects. The primary school curriculum for Mathematics builds on these competences by formalising and deepening pattern recognition and mathematical structures (e.g., sequences, symmetry), operations, numbers, and problem-solving strategies through progressively abstract representations. As such, there is a developmental progression, with the Orientation Plan introducing real-world contexts and informal reasoning, and the primary curriculum formalising and extending these foundations into structured mathematical thinking.

Additionally, both primary school curricula include lists of prerequisites for written language acquisition (Appendix A2 in German curriculum) and for learning Maths (Appendix 3 in Maths curriculum). While the Orientation Plan covers most of these prerequisites, it approaches them through integrated learning experiences rather than as specific skills or learning outcomes and does not structure them systematically.

Asked during an in-person workshop how well actual ECEC pedagogical concepts implemented by the settings generally align with primary education requirements, Stakeholder Group members generally indicated poor alignment and coordination between

ECEC providers and primary education, highlighting several key issues. These issues included concerns about Orientation Plan awareness among ECEC staff, inconsistent implementation of Orientation Plan guidelines in daily practice, as well as the absence of systematic oversight at multiple levels - from state authorities ensuring consistent implementation across regions, to coordination between ECEC providers and primary schools, to professional support systems that ensure quality standards are maintained across different types of service providers. Stakeholders also noted a lack of a common understanding about approaches to education in ECEC settings and primary schools, and tensions around differing interpretations of "school readiness." Their discussions also highlighted the significant variation in implementation of coordination mechanisms, heavily dependent on local cooperation between institutions.

Furthermore, when asked about patterns they observed in children's socio-emotional competences, early literacy, and early numeracy upon entering primary school, the stakeholders highlighted that children enter primary school with widely varying abilities and competences. Stakeholder Group members reported development patterns as highly individualised, with variations appearing to be more strongly linked to social and educational background factors than to specific ECEC provision. A key challenge they mentioned is the need for settings to accommodate a high number of children with special needs. Nevertheless, they also noted that outcomes tend to be better when there is positive, constructive communication between ECEC providers and primary schools, though the specific nature of these improvements was not detailed by respondents.

The most recent report on the findings of school entry examinations conducted in 2022 confirms that differences correlate strongly with social milieu and educational background (NLGA, 2024). According to law, the administrative districts, independent cities and the Hannover region must ensure that every child receives an initial school examination before starting school (NGöGD, §5(2)). The most recent report on the findings of these examinations conducted in 2022 was published in February 2024 by the Lower Saxony State Health Office (NLGA). According to this report, children from educationally disadvantaged families are five times more likely to have deficits in understanding numbers/quantities, 4.5 times more likely to have behavioural problems according to parental information, and three times more likely to have problems with fine motor skills. These children are also three times more likely to be overweight or obese.

Primary data collected as part of this "as-is" analysis also sought to gather insights on alignment between ECEC and primary education from a variety of stakeholders, including state and local authorities, ECEC providers, pedagogues and setting leaders, as well as primary school teachers, and parents.

State and Municipal Youth Office representatives expressed mixed views through the online survey on how well actual ECEC pedagogical concepts align with primary education requirements. While state representatives were evenly split between "large extent" and "small extent" alignment, municipal representatives were more negative, with a majority reporting only "small extent" alignment. Both groups predominantly indicated that alignment varies by provider type. Asked to provide details about these perceived differences, their answers highlighted challenges including decentralised concept development, regional collaboration differences, quality variability, communication difficulties, systemic overwork, and educational disparities between settings.

Figure 19: Youth Office representative response to "How well do actual ECEC pedagogical concepts implemented in settings in your region generally align with primary education requirements?" (online survey data)

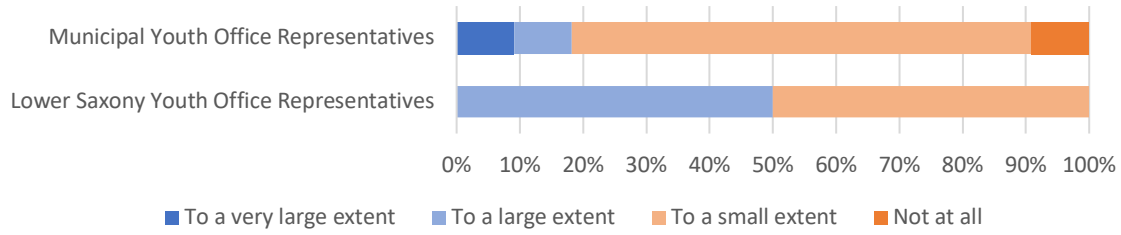
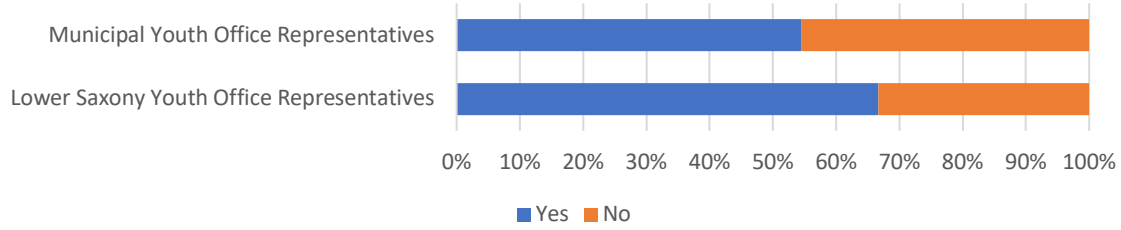
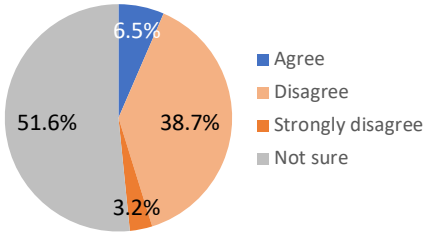


Figure 20: Youth Office representative response to "Does this vary depending on the type of ECEC service provider"? (online survey data)



Primary school teachers also expressed scepticism, as well as significant uncertainty regarding alignment between pedagogical concepts implemented in their school's catchment area and the primary education curriculum: a majority of 51.6% were "not sure," 41.9% disagreed, and just 6.5% agreed. This widespread uncertainty likely stems from the significant variety in ECEC pedagogical concepts at the setting level.

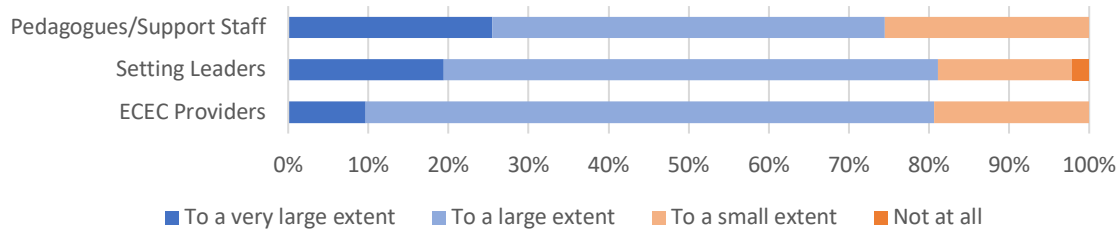
Figure 21: Primary teachers' level of agreement with the statement "The pedagogical concepts implemented in settings in my school's catchment area align well with the primary education curriculum" (online survey data)



This diversity makes it challenging for primary teachers to form a coherent assessment of alignment between pedagogical concepts and the primary school curriculum, as they are asked to evaluate a spectrum of concepts and approaches with dramatically different outcomes rather than a single curriculum.

ECEC providers, setting leaders, and pedagogues on the other hand generally reported positive assessments of how their pedagogical concepts support children's transition to primary school. Across all categories, around three quarters of survey respondents reported transition is supported "to a large extent" or "to a very large extent," with no significant differences between provider types. Overall, these stakeholder groups expressed more positive perceptions about transition support than both state/municipal authorities and primary school teachers, suggesting a potential disconnect in perceptions across educational sectors.

Figure 22: To what extent does the pedagogical concept of your setting support children's transition to primary school?



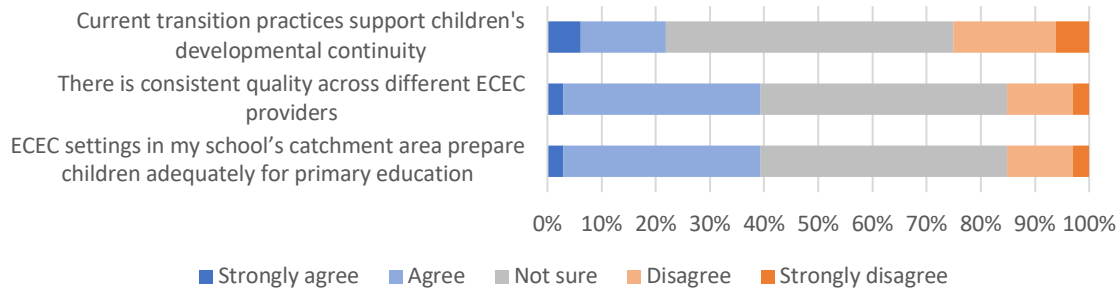
The perception gap between ECEC professionals and primary school teachers likely stems from their different perspectives on what constitutes "preparedness." While ECEC staff might prioritise socio-emotional development and independence as indicators of school readiness, primary teachers may focus more on specific academic precursor skills and classroom behaviours needed in their environment. Their positions in the educational journey also create different viewpoints – primary teachers directly experience and must address transition challenges, whereas ECEC professionals rarely see how children ultimately adapt to school settings after leaving their care, creating an information asymmetry where each group only observes for their part of the transition process.

The survey also asked ECEC providers, setting leaders, and pedagogues about transition support methods used in their settings. The vast majority of providers (93.1%), setting leaders (90.8%), and pedagogues (87.2%) reported using specific tools and approaches to support children's transition to primary school. However, most responses described approaches focused primarily on familiarising children with school environments rather than building specific competences needed for academic readiness. Preparation activities within ECEC settings were nevertheless mentioned in KIIs and FGDs with pedagogues and setting leaders. These commonly include special groups or clubs for children in their final year, designed to develop school readiness through playful activities. As another pedagogue explained:

> *The issue is group skills, social emotional interaction, being able to empathise with another child, to take a step back... These are the skills that children need to be successful at school. (Public setting pedagogue, KII)*

Despite the various approaches reportedly used at setting level to support children's transition to primary school, primary teachers expressed significant uncertainty about ECEC preparation quality and effectiveness. When asked if ECEC settings in their school's catchment area adequately prepare children, 45.5% were “Not sure,” with 39.4% agreeing and 15.1% disagreeing. Teachers were more negative about consistency across providers, with 62.6% disagreeing that quality is consistent. This aligns with the observations from state and municipal authorities regarding variability in quality among providers but contrasts with the generally positive self-assessments from ECEC settings themselves. When asked whether transition practices support developmental continuity, 53.1% were “Not sure,” with remaining responses split between agreement (21.8%) and disagreement (25.0%). This high level of uncertainty likely reflects a lack of transparency regarding pedagogical goals and outcomes in ECEC, and a disconnection between how ECEC settings and primary schools conceptualise 'readiness,' with each educational sector potentially operating with different, unstated assumptions about developmental priorities.

Figure 23: Primary school teachers' answers to the question "To what extent do you agree with the following statements about curriculum alignment?" (online survey data)



Teachers also reported mixed assessments of children's preparedness in relation to specific competences. While a slight majority (54.5%) considered children prepared in socio-emotional competences, early literacy skills showed concerning results with 43.8% "prepared," 43.8% "unprepared," and 12.5% "very unprepared." Early numeracy skills fared better with 59.4% considering children prepared. However, given the small sample of primary school teachers (n=33) who responded to the survey, these differences should be interpreted cautiously. The FGD with primary school teachers expanded on these concerns, with teachers noting increasing disparities in children's readiness. One FGD respondent emphasised:

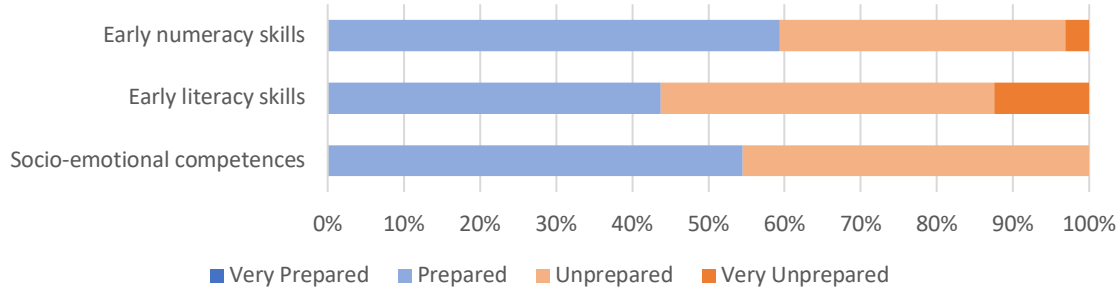
> *The discrepancy is extreme... It's getting bigger and bigger. In fact, the difference is between families that are close to education and those that aren't... It's really difficult. While some children really do come to school reading, other children don't know what colour red, yellow, green or blue is (Primary Schools Subject Specialist, RLSB Hannover, FGD)*

This echoes the findings of the 2022 report on school entry examinations referenced above, which confirm that variations in children's development patterns are strongly linked to social and educational background factors (NLGA, 2024), suggesting that the current ECEC system fails to bridge the gap between children from privileged and underprivileged backgrounds.

Another primary school teacher identified different areas of concern, including fine motorskills:

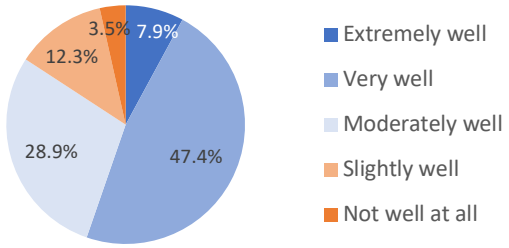
> *A few years ago, I noticed the language more strongly overall. At the moment, we are very concerned with counting and fine motor skills. There's been something of a slump... It's somehow more extreme in all directions. (Primary school teacher, FGD)*

Figure 24:Primary school teachers' answers to the question 'In your experience, how prepared are children typically in the following areas when entering primary school?' (online survey data)



Parents of children currently attending ECEC settings were also surveyed and generally expressed positive views about their child's preparation for primary school by their ECEC setting, with 84.2% providing a positive assessment. This parental confidence contrasts with the more mixed assessments from primary teachers regarding children's preparedness and the scepticism from authorities about systemic alignment. In open text responses about effective pedagogical practices, parents emphasised the focus on independence and life skills, social skills and group work, concentration and discipline, academic readiness, enjoyment of learning, and parental involvement. Areas identified for improvement included better communication and information sharing, enhanced cooperation with primary schools, more focus on social learning and skills development, increased extracurricular and physical activities, and greater parental involvement.

Figure 25: Parents' perception of how well their child's ECEC setting is preparing them for primary school (online survey data)



Interestingly, this expressed desire from parents for greater involvement appears to contradict earlier findings where ECEC staff reported that parents often seem reluctant to engage in supporting their children's learning. However, this apparent contradiction may reflect a methodological limitation: the parents who responded to the voluntary survey likely represent a self-selected group that is already more engaged with their children's education compared to the broader parent population. ECEC staff, who interact with all parents including those who might not respond to surveys, may be observing a different pattern of engagement across the full spectrum of families they serve. This potential sampling bias should therefore be considered when interpreting these results.

3. Workforce culture

3.1. ECEC sector capacity-strengthening approaches

In line with the study's objectives, this section presents an overview of the key professional roles within the ECEC system and how Lower Saxony addresses issues of capacity-strengthening across these roles. Further details about the main pre-service training qualifications and pathways for ECEC pedagogues, as well as an assessment of training content and perceived effectiveness in relation to outcome-oriented pedagogy presented in section 3.3.

This foundational understanding of the workforce landscape serves as an essential orientation for readers unfamiliar with Lower Saxony's ECEC sector, providing clarity on who the main actors are and what mechanisms exist for their professional growth. Before exploring specific competencies related to outcome-oriented pedagogy, it's crucial to establish this broader context of how the system functions and supports its workforce. This overview creates a framework for understanding subsequent findings about staff capacity for implementing outcome-oriented approaches, allowing readers to situate specific challenges and opportunities within the larger professional development ecosystem of Lower Saxony's ECEC sector.

Pedagogical Staff

§ 9 NKitaG defines pedagogical staff as pedagogical specialists (*pädagogische Fachkräfte*) and pedagogical assistants (*pädagogische Assistenzkräfte*). The majority of ECEC staff are state-recognised educators (*Erzieher/-innen*), a vocational training on tertiary level conducted by vocational schools (*Fachschulen/Berufsbildenden Schulen*) (Destatis, 2024). In the context of Germany, Lower Saxony is the Federal State with the second smallest proportion of ECEC staff with academic degree. Only 3,93% of the workforce has a higher education degree, and only 0.73% of the workforce has a BA/MA in ECEC (Ibid.).

According to a report published by the Lower Saxony Institute for Early Childhood Education and Development (nifbe) (Schmidt, Hofmann, & Schmidt-Hood, 2023), several interconnected factors are contributing to current staff shortages. This includes an increased demand for services at the same time as the sector faces substantial training and retention challenges. Training capacity in vocational and technical schools has proven insufficient to meet the growing demand. Additionally, while universities produce graduates in childhood education, these professionals do not necessarily choose to work in direct care roles in daycare centres, or they leave these positions relatively quickly to pursue other roles within the broader ECEC field. The report also identifies several other contributing factors, including the impact of the COVID-19 pandemic on ECEC professionals, natural attrition through retirements, as well as dealing with high rates of illness, including burnout cases. Furthermore, the field suffers from significant turnover and staff fluctuation, compounding the shortage problem.

Training institution representatives within the Stakeholder Group also noted that the lack of attractiveness of the field is a critical concern, with declining interest in further qualifications and career development opportunities. They highlighted how the training structure - primarily school-based without pay, as opposed to apprenticeship models that combine workplace learning with wages - creates barriers to entry, while the absence of clear career advancement paths reduces long-term retention.

Notes from the in-person workshops with Stakeholder Group members particularly emphasise that working conditions contribute to increased staff absences due to illness, suggesting workplace stress is affecting both recruitment and retention. Stakeholder Group members also expressed concern that the shortage has led to institutions accepting individuals with lower educational qualifications into training programs and positions of responsibility, potentially affecting quality standards. Some stakeholders specifically called for a transition to a different training model and improvements in collective agreements to make the profession more appealing to qualified candidates.

Recent research by nifbe has also highlighted the severe impact of these staffing challenges (nifbe, 2025). According to their January 2025 survey of ECEC setting leaders, approximately two-thirds of teams are experiencing heavy to very heavy workload burdens due to staff shortages, with 71% reporting a strong to very strong increase in this stress factor in recent years. The situation is further complicated by a significant increase in children with challenging behaviour, as reported by 60% of surveyed setting leaders. Most facilities estimate that between 11% and 25% of their children display challenging behaviour, with some reporting rates as high as 50%. In practical terms, this translates to approximately five children with social or emotional challenges in a typical 20-person kindergarten group.

Discussions with Stakeholder Group Members during in-person workshops in Hanover in January 2025 suggest that while various capacity-strengthening support mechanisms for pedagogical staff exist, they are fragmented and lack systematic coordination, with providers developing their own approaches to professional development and support.

In order to support pedagogue professional development, the Lower Saxony Ministry of Education established a practice mentoring (*Praxismentoring*) initiative (Bildungsportal Niedersachsen, n.d.). This professional qualification trains educational specialists to effectively guide, counsel, and support trainees during their practical phases in day-care centres. Participants must already be qualified educational specialists according to NKiTaG regulations or have an exemption while working as group leaders (Kultusministerium, 2023). The initiative seeks to strengthen the bridge between theory and practice by providing professional guidance, conducting observations, offering feedback, facilitating reflection sessions, and participating in assessment - all while collaborating with training schools to maintain educational quality standards and enhance the professional development of future early childhood educators.

Setting leaders

In response to the growing importance of early childhood education and the recognition that ECEC setting leaders play a crucial role in implementing educational quality and childcare missions, a Curriculum for the Qualification of Day-Care Centre Managers (2023) was developed by the Lower Saxony Ministry of Culture in collaboration with various stakeholders. The basic qualification is designed to be taken alongside work, and participants must meet specific requirements, including working in the function of a leader for at least one hour per week. However, although recommended, the qualification is not legally required.

In general, the continuing professional development for setting leaders is pursued through the provider and mostly according to standards set at the level of the provider or the providers' association.

Higher education training institution representatives in the Stakeholder Group pointed out during Stakeholder Group workshops that the curriculum had been developed and implemented without the involvement of universities or childhood education degree programmes, and that it does not count towards a university qualification, which opens up further career prospects. They also raised the question of the necessity if a university qualification was not in general needed for management positions noting that the current qualification pathway limits professional advancement opportunities compared to university-linked credentials. This represents a missed opportunity to strengthen ECEC provision through leadership development, as international research consistently suggests that higher qualifications for ECEC practitioners correlate with improved pedagogical quality and child outcomes (OECD, 2018).

Specialist Consultants (*Fachberatung*)

A key category of professionals in the ECEC system is represented by specialist consultants (*Fachberatung*), who provide quality development and assurance support to ECEC providers and setting leaders. A specialised area within *Fachberatung* is that of *Sprachberatung*, or specialist consultants in the field of language development and support. Despite counsellors playing a very important role in quality development of early childhood education, there has

been a lack of standardised training, clear legal anchoring of the profession, and consistent understanding of counsellors' roles and responsibilities.

In 2015, the Lower Saxony Ministry of Education initiated the development of a comprehensive curriculum for specialist counsellors. The resulting curriculum provides a structured qualification programme which combines theoretical knowledge with practical application, requiring participants to demonstrate both professional competences (knowledge and skills) and personal competences (social and personal skills) (Niedersächsisches Kultusministerium, 2023). This curriculum represents a significant step toward standardising specialist counsellor training in Lower Saxony.

However, similar to the setting leader curriculum developed by the Ministry, higher education trainer institution representatives noted during Stakeholder Group workshops that the specialist counsellor curriculum is not linked to a university qualification, and therefore fails to open up further career prospects for graduates. This represents a missed opportunity to strengthen ECEC provision through specialist consultant development, as international research consistently suggests that higher qualifications for ECEC practitioners correlate with improved pedagogical quality and child outcomes (OECD, 2018).

ECEC Providers

ECEC provider training is also available, but limited. Examples of such training were found in the Caritas training catalogue or course programme for the year 2024-2025, specifically designed for employees working in Catholic ECEC settings in the Diocese of Osnabrück, Germany (Caritasverband für die Diözese Osnabrück, 2024). The training programme offers relatively few courses specifically for providers, with a clear focus on quality management and administrative responsibilities.

3.2. Workforce culture: coordination mechanisms and pedagogical knowledge transfer

The primary data collected for this study sought to elicit insights into the prevalence and types of coordination and knowledge sharing practices within and between settings. Collaboration and knowledge sharing can facilitate the exchange of effective practices among professionals, helping to establish a consistent approach to supporting children's competence development within and across settings. They can also create opportunities for collective reflection and problem-solving that can enhance pedagogical quality, and enable the dissemination of ideas and innovations (Liu, Hedges, & Cooper, 2023). In a decentralised system like Lower Saxony's, where settings have considerable autonomy, effective knowledge sharing mechanisms are particularly important for maintaining coherence and quality across the sector.

Analysis of survey responses across different respondent categories indicates that knowledge sharing within ECEC settings is prevalent, with a majority of both providers and pedagogical staff reporting established mechanisms. Provider responses indicate that 82.1% have knowledge sharing mechanisms within settings, while setting leaders and pedagogical staff reported a similarly substantial rates (72.4% and 79.6%, respectively). The qualitative analysis of open-text responses indicates that staff meetings are the predominant method for internal knowledge exchange across all respondent categories.

The KII/FGD data reinforces these findings, with one public pedagogue noting:

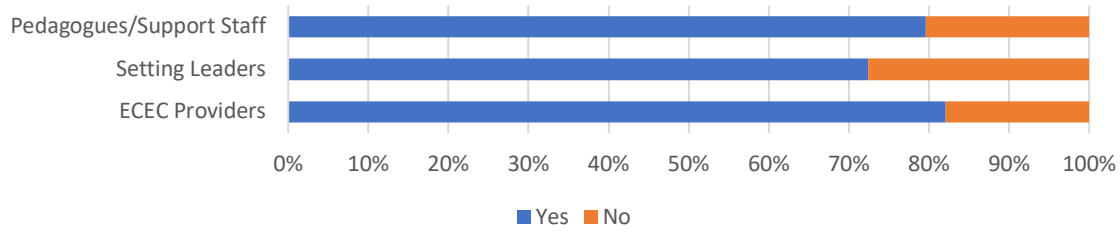
> *We have regular departmental and staff meetings every fortnight. The departmental meeting is only for the crèche area and only for the kindergarten area. The staff meeting is then for the whole building where we discuss educational concepts and organisational matters. (Public setting pedagogue, KII)*

Pedagogical staff specifically mentioned time constraints as a challenge to effective knowledge sharing in the survey, with one respondent noting "FAR TOO LITTLE TIME" for adequate exchange. This concern is further elaborated in the KII/FGD data by a public provider, who observed that:

> *what often happens in the staff meetings, even when I've been there, is that there's a lot of organisational space... and what suffers as a result is the pedagogy. (Public provider representative, FGD)*

This suggests that while structured knowledge-sharing mechanisms exist, their ability to facilitate meaningful pedagogical discussions may be compromised by competing operational pressures and priorities.

Figure 26: Provider, setting leader, and pedagogue/support staff responses to "Do any mechanisms exist for knowledge sharing within your setting(s)?" (online survey data)

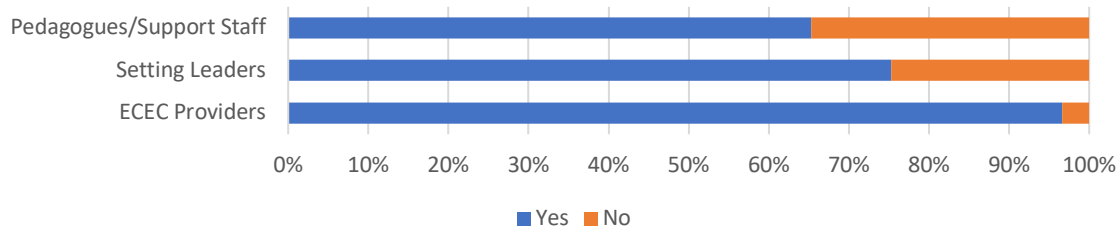


The survey data also indicated robust mechanisms for knowledge sharing between ECEC settings across respondent categories, though with some variation. Among providers, 96.6% reported mechanisms for knowledge sharing between settings, while 75.3% of leaders and 65.3% of pedagogical staff reported the same. The lower percentage among pedagogical staff may reflect their limited involvement in cross-institutional initiatives compared to leadership roles.

The KII/FGD data offers valuable insights into the structure of these cross-setting exchanges. A private leader described a comprehensive approach:

> *Externally, we have various working groups... we have the kindergarten-school working group and we have district-based working groups for both nurseries and kindergartens... And at management level, we also have collegial exchange meetings that we organise regularly to benefit from what other facilities are doing. (Private setting leader, FGD)*

Figure 27: Provider, setting leader, and pedagogue/support staff responses to "Do any mechanisms exist for knowledge sharing between settings?" (online survey data)



Asked whether they regularly receive information on research and scientific findings on socio-emotional competences, early numeracy, early literacy, setting leaders reported varying levels of engagement with current research. While regular access to research appears limited across key areas (42.8% for socio-emotional competences, 36.2% for early numeracy, and 28.1% for early literacy), it is important to note that settings with specialist advisor (i.e. *Fachberatung*) support may still effectively integrate research-informed practices without leaders directly accessing this knowledge. Furthermore, where research information does reach leaders, 73.3% reported successful knowledge transfer to their settings. The most common mechanisms for knowledge transfer appear to be staff and team meetings, followed by training courses, and educational days.

Similarly, 93.1% of leaders reported that they manage the transfer of knowledge from trained employees to others, primarily through staff meetings and presentations. However, data from an FGD with private setting leaders suggests that the sustainability of knowledge acquired through project-based approaches may in some cases be undermined by resource and sustainability challenges. A private leader noted:

> *We have to scramble from project to project... and as soon as this project is discontinued... the money is lost and then this really good quality work... collapses like a house of cards, because we simply can't do magic. (Private setting leader, FGD)*

Several FGD participants emphasised that even when knowledge has been transferred, the implementation capacity is significantly diminished when dedicated positions are eliminated. They explained that regular staff work within extremely tight time constraints, and when project funding ends, the remaining staff must absorb additional responsibilities without corresponding increases in preparation time, making it difficult to sustain new practices regardless of how well they have been trained. This indicates that the issue extends beyond knowledge retention to implementation capacity.

Figure 28: Setting leader responses to 'Do you regularly receive information on research and scientific findings on the following topics'

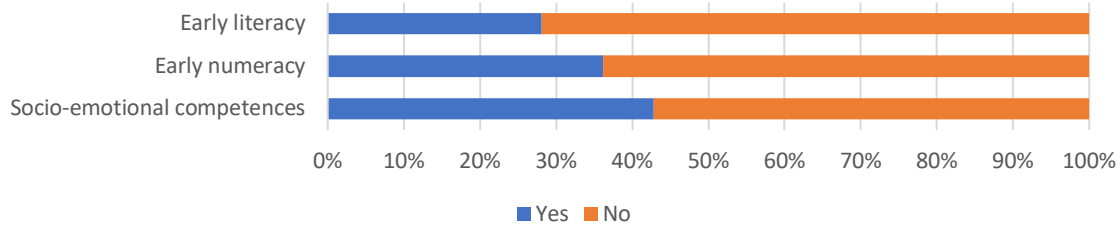


Figure 29: Setting leader responses to “If yes, do you succeed in transferring this knowledge to your setting?” (online survey data)

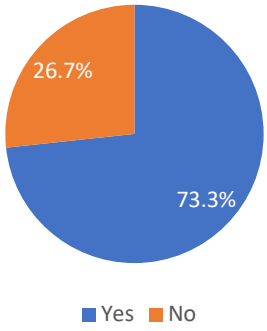
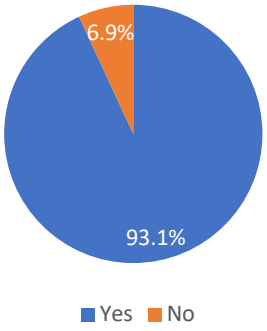
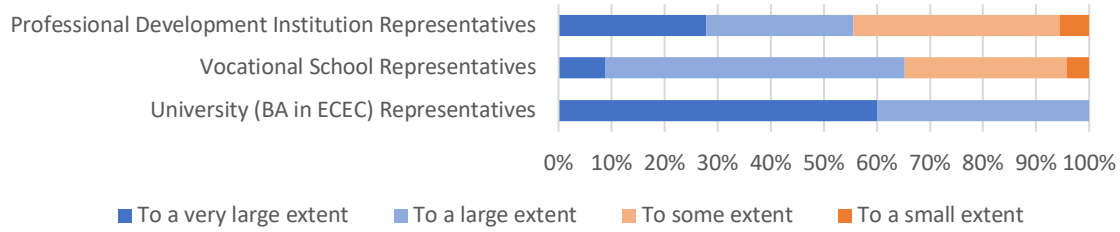


Figure 30: Setting leader responses to “Do you steer/manage the transfer of knowledge from employees who have taken part in training programmes to other employees in your remit?” (online survey data)



Trainer responses indicate generally positive assessments of how training programs prepare staff for collaborative work in ECEC settings. The largest proportion of trainers (43.5%) reported that their programs provide “substantial coverage of collaboration strategies and practices”. A further 21.7% claimed their training “fully equips staff with comprehensive knowledge and practical skills for effective collaboration.” However, 30.4% acknowledged that collaboration is covered only “to some extent” in their programs, and 4.3% reported covering collaboration only “to a small extent.”

Figure 31: To what extent do your training programmes prepare staff to work collaboratively within ECEC settings?



Despite the existence of various knowledge sharing mechanisms, stakeholder feedback from a January 2025 workshop in Hanover identified several systemic challenges to effective coordination. Stakeholders noted the significant variation between institutions in communication approaches, stemming from the fact that implementation of knowledge sharing practices largely depends on individual facility management and providers. They highlighted that certain important meeting types, such as reflection days and management meetings, lack formal recognition within established workload calculations or funding structures, which affects their sustainability and prioritisation within already demanding schedules. This results in uneven adoption of knowledge-sharing activities across different settings, with some facilities prioritising regular reflection meetings and professional exchanges while others are unable to maintain these practices consistently, which is particularly concerning given the importance of these forums for professional development. A separate but equally significant challenge is that knowledge transfer is increasingly difficult due to staff frustration, retirement, and a lack of structured knowledge retention

systems. This concern was also mentioned in FGDs, where a private provider representative noted that:

> *staff retire and leave the organisation ... I think it's always good if you organise in-house seminars and train the whole team on certain topics it's important to keep the knowledge, even with specialist counselling. (Private provider representative, FGD)*

These challenges collectively suggest that while knowledge exchange mechanisms exist, their effectiveness is constrained by operational factors at multiple levels. Despite the formal allocation of time resources (7.5 hours weekly per group), participants consistently reported time constraints as a significant barrier. This suggests a disconnect between allocated time, possibly also their effective use and the actual availability for substantive pedagogical discussions and knowledge exchange, which may require addressing at both the setting management level (to prioritise pedagogical content in meetings) and potentially at higher organisational levels to better align resource allocation with operational realities.

3.3. Training provider capacity

Training for early childhood education staff is available through both pre-service and continuing professional development pathways. Pre-service education pathways include academic preparation at universities offering childhood education degree programs, as well as vocational training at vocational schools. Currently, three universities in Lower Saxony offer relevant programmes, with two more currently in the authorisation process. In terms of vocational schools, 175 institutions are currently operating in Lower Saxony, offering either pedagogical assistant training (103 schools) or pedagogical specialist training (72 schools).

Continuing professional development is provided through state level initiatives organised by the Agency for Adult and Continuing Education (AEWB), the Regional Authority for Schools and Education Providers (RLSB) the Lower Saxony Institute for Early Childhood Education and Development (nifbe) as well as training institutes run by free providers. There are 107 Professional Development Institutions in Further Education in Lower Saxony certified with the Seal of Quality for Qualification Programmes in Early Childhood Education.

In terms of training content, the curricula of all three universities offering childhood education degree programs have been informed by the core curriculum (*Kerncurriculum*) for BA programmes in ECEC, published in 2022 by the Council for Academic Programs in ECEC (*Studiengangstag Pädagogik der Kindheit*). The core curriculum was developed as a guideline for curriculum development and accreditation and defines ten essential study units that should comprise approximately two-thirds of a bachelor's degree program. The curriculum emphasises the importance of academic orientation and research-based attitudes among childhood educators, while allowing flexibility for individual programme profiles at different universities (Studiengangstag Pädagogik der Kindheit, 2022).

The training content at vocational schools in Lower Saxony is governed by binding Framework Guidelines (*Rahmenrichtlinien*) developed by the Lower Saxony Ministry of Education. Published in 2016, these guidelines establish standards for two distinct educational pathways: pre-service social pedagogue training (*Fachschule Sozialpädagogik*) (Niedersächsisches Kultusministerium, 2016a); and pre-service social pedagogical assistant training (*Berufsfachschule Sozialpädagogische Assistentin/Sozialpädagogischer Assistent*) (Niedersächsisches Kultusministerium, 2016b). These regulatory frameworks set clear

minimum requirements and specify the professional competences that must be developed during pre-service education. By standardising the essential qualifications and skills required for early childhood practice, the guidelines aim to ensure consistent training quality across all vocational institutions throughout the state.

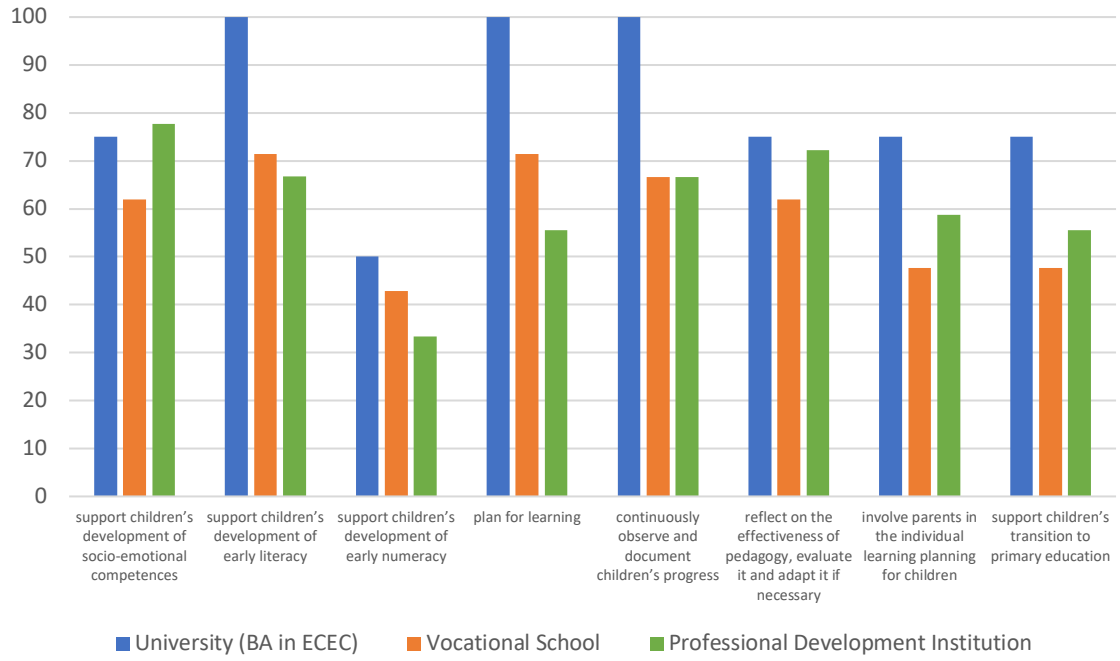
To ensure the quality of continuing professional development for ECEC staff, the state government maintains quality standards by requiring a Seal of Quality for Qualification Programmes in Early Childhood Education for providers who offer state-funded programmes for ECEC staff. The certification was jointly developed by the Agency for Adult and Continuing Education and the Lower Saxony Ministry of Education and establishes minimum standards for state funding eligibility based on three quality areas (Educational Institution, Training Programs, and Teachers) and ensures alignment with the Lower Saxony Orientation Plan.

The following analysis presents self-reported perspectives from multiple stakeholder groups, comparing how training providers, pedagogues, and setting leaders assess both training coverage and practical abilities across key competence areas. It is important to note that such self-reported measures may be subject to positive assessment bias and should be interpreted with appropriate caution. Without external validation through objective assessments or observational methods, these self-evaluations may reflect perceived rather than actual abilities, institutional pride, or social desirability effects rather than empirically verified competence levels. Despite these limitations, such comparative perspectives provide valuable insights into perceived strengths, gaps, and variations across the ECEC training landscape in Lower Saxony.

The online survey asked training providers to indicate whether the training provided by their institutions addresses the capacity of ECEC staff to support children's development of key competences, implement key pedagogical practices, and support children's transition to primary education. The survey also asked them to rate the extent to which they agree that staff trained at their institutions are able to effectively implement these skills. The following figures present a comparison of training capacity perceptions across three different ECEC staff trainer types (university representatives, vocational school representatives, and professional development institution representatives).

Figure 32: Percentages of different types of ECEC staff trainers who "agree" or "strongly agree" that training provided by their institution adequately addresses the capacity of ECEC staff to support children's

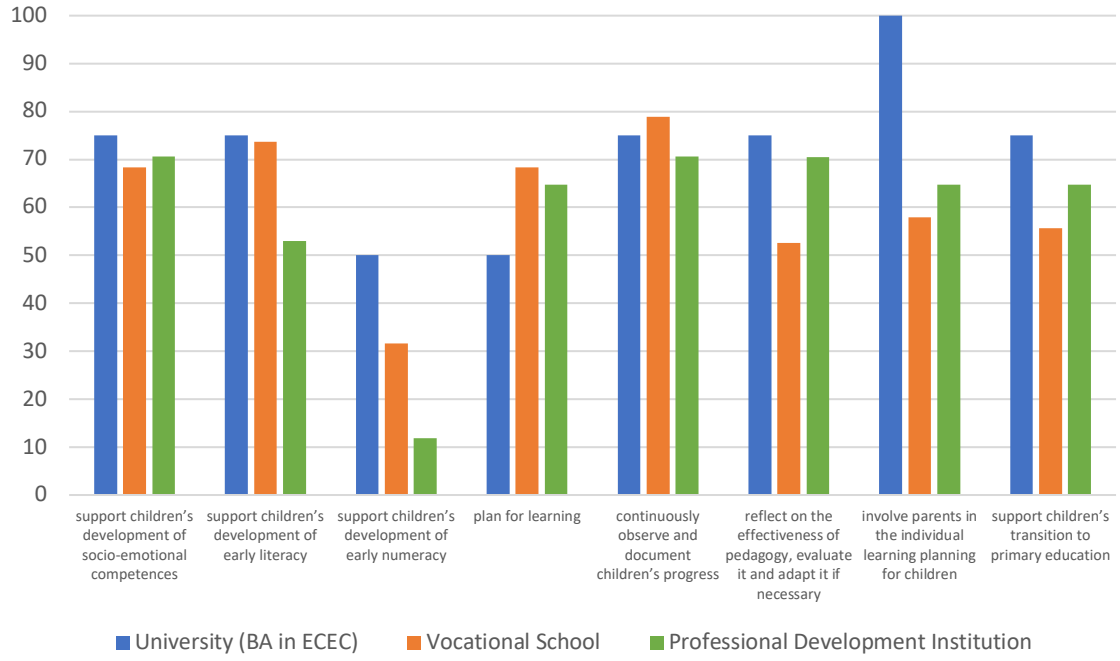
development of key competences, implement key pedagogical practices, and support children's transition to primary education



This data shows that responding university representatives generally expressed the highest confidence in their training coverage, particularly in early literacy, planning for learning, and observation/documentation (all at 100%). Respondents from vocational schools show moderate confidence overall, with the highest ratings for early literacy and planning for learning (both 71.4%). Professional development institution trainers expressed the highest confidence in socio-emotional competences (77.7%) and reflection/adaptation skills (72.2%). Across all provider types, early numeracy is consistently identified as the area with the lowest confidence in training coverage (33.4-50%).

These differences in training coverage may partly reflect different training philosophies and approaches. As explained by a nifbe representative in an interview, professional development institutions often employ a needs-based approach where they "start from the needs of the ECEC settings" rather than delivering standardised curricula, focusing on "the triad of knowledge, skills and attitude... always geared towards the individual problems and needs of the ECEC setting." Such a responsive, process-oriented approach may lead to greater emphasis on areas like socio-emotional competences and reflection skills that practitioners actively identified as priorities, while more structured competences like early numeracy may receive less attention if not specifically requested by settings.

Figure 33: Percentages of different types of ECEC staff trainers who “agree” or “strongly agree” that ECEC staff trained at their institution can effectively support children’s development of key competences, implement key pedagogical practices, and support children’s transition to primary education



In terms of graduate skills, university-level trainers expressed the highest confidence in graduates' ability to involve parents (100%), with strong ratings across other areas (75% for most). Respondents from vocational School trainers show the strongest confidence in graduates' observation and documentation skills (78.9%) and early literacy skills (73.7%). Professional Development Institution trainers expressed the highest confidence in socio-emotional competences, observation/documentation, and reflection skills (all around 70%). Again, early numeracy emerged as the area with the lowest confidence across all provider types, with Professional Development Institution trainers expressing particularly low confidence (11.8%).

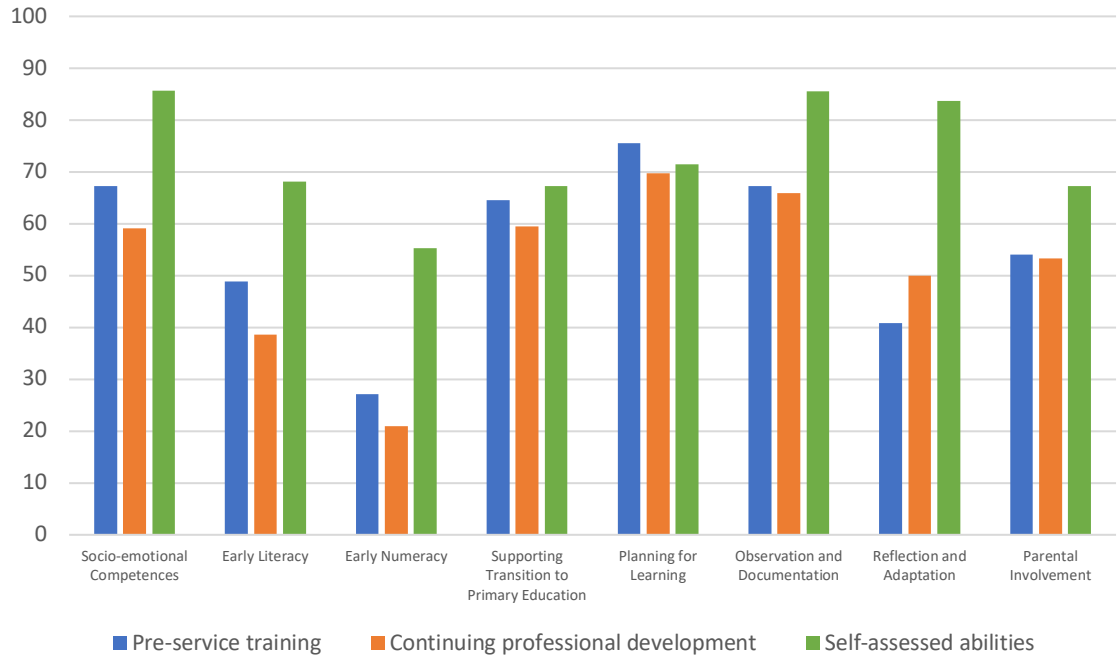
Despite similar confidence ratings in training content coverage and graduate skills abilities, training representatives in the Stakeholder Group noted that the overall effectiveness of training is often constrained by student preparedness, with training programs increasingly accepting individuals with lower educational qualifications:

> *Depending on their level of qualification, our participants and graduates are able to fulfil the above requirements to varying degrees. All of the topics mentioned are (to varying degrees) the subject of vocational school and university qualifications as well as further education programmes. Not all students fulfil the requirements to be able to acquire the necessary skills. This is due to the fact that, in view of the shortage of skilled workers, more and more people with low educational qualifications are being accepted onto training programmes and less qualified people are taking on responsibility in the field of work (especially social assistants). (Stakeholder Group workshop notes – training institutions representatives)*

Pedagogues were also asked about the coverage of the training they had received, as well as to self-assess their abilities to effectively support children’s development of key competences, implement key pedagogical practices, and support children’s transition to primary education. The following figure presents a comparison of pedagogues' perspectives

on their pre-service training, continuing professional development, and self-assessed abilities.

Figure 34: Percentages of pedagogues who “agree” or “strongly agree” that they had received training (pre-service or continuing professional development) to effectively support children’s development of key competences, implement key pedagogical practices, and support children’s transition to primary education, as well as who “agree” or “strongly agree” that they can effectively implement these skills

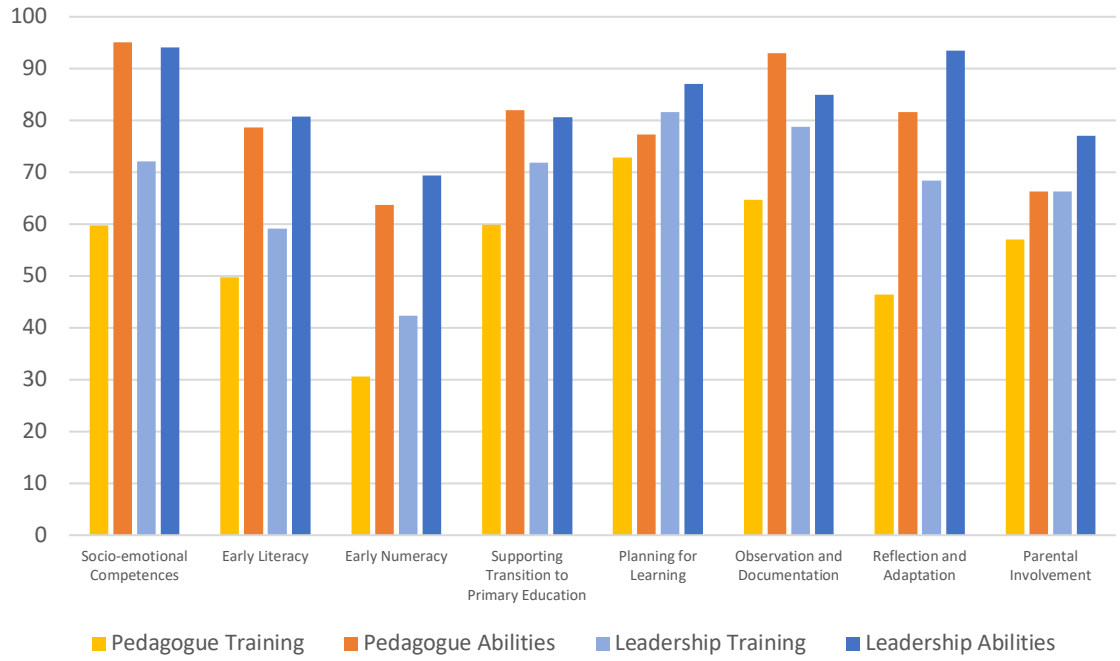


This data reveals several important patterns:

1. **Self-Assessment vs. Training**: Across skill areas, pedagogues' self-assessed abilities substantially exceeded their reported training levels, both pre-service and continuing professional development. This suggests significant skill development through practical experience and other non-formal learning mechanisms.
2. **Pre-service training vs. continuing professional development**: For most skill areas, pedagogues reported higher levels of pre-service training than continuing professional development, suggesting potential gaps in continuing professional development.
3. **Strongest Skill Areas**: Pedagogues reported the highest self-assessed abilities in socio-emotional competences (85.7%), observation and documentation (85.5%), and reflection and adaptation (83.7%).
4. **Weakest Skill Areas**: Early numeracy showed the lowest ratings across all three categories, with only 27.1% reporting substantial pre-service training, 20.9% reporting substantial continuing professional development, and 55.3% reporting substantial ability.
5. **Greatest Gaps**: The largest gaps between training and self-assessed ability are in reflection and adaptation (40.8% pre-service, 50.0% continuing professional development, 83.7% ability) and early numeracy (27.1% pre-service, 20.9% continuing professional development, 55.3% ability), suggesting these skills are developed primarily through practical experience.

The online survey also asked setting leaders about the coverage of the training received by both pedagogues and leaders in their settings, as well as to assess the abilities of pedagogues and leaders in their settings to effectively support children's development of key competences, to implement key pedagogical practices, and to support children's transition to primary education. The following figure presents a comparison of setting leaders' perspectives on pedagogue training, pedagogue abilities, leadership training, and leadership abilities.

Figure 35: Percentages of setting leaders who "agree" or "strongly agree" that pedagogues/leadership staff in their setting had received training to effectively support children's development of key competences, implement key pedagogical practices, and support children's transition to primary education, as well as who "agree" or "strongly agree" that pedagogues/leadership staff can effectively implement these skills



This data reveals several key insights:

1. **Training vs. abilities gap**: Similar to pedagogues' self-assessments, setting leaders perceived a substantial gap between training (both for pedagogues and leaders) and actual abilities. This reinforces the theme that significant skill development occurs through means other than formal training.
2. **Leadership vs. pedagogue training**: Leaders consistently reported higher levels of training for leadership roles than for pedagogue roles across all skill areas, with the largest discrepancies in reflection and adaptation (46.4% vs. 68.4%) and socio-emotional competences (59.8% vs. 72.1%).
3. **High ability ratings**: Setting leaders reported remarkably high ability levels for both pedagogues and leaders, particularly in socio-emotional competences (95.1% for pedagogues, 94.1% for leaders) and observation and documentation (93.0% for pedagogues, 84.9% for leaders).

4. **Consistent challenges**: Early numeracy again emerged as the weakest area across all four categories, though the ratings are substantially higher than those reported by pedagogues and trainers.
5. **Planning for learning**: This area showed the smallest gap between training and abilities for both pedagogues (72.8% vs. 77.3%) and leaders (81.6% vs. 87.0%), suggesting that formal training in this area may be more effectively aligned with practice requirements.

The following key patterns have been identified across all stakeholder groups:

1. **Early numeracy gap**: All stakeholder groups consistently identified early numeracy as the area with the weakest training coverage and abilities. The consistency of this finding across diverse stakeholders strongly suggests a systemic gap in ECEC training programs. This finding presents an interesting contrast with primary school teachers' assessments of children's preparedness, where 59.4% considered children prepared in numeracy skills—slightly higher than the 54.5% who considered children prepared in socio-emotional competences, and notably better than early literacy preparedness ratings (43.8%). While these differences should be interpreted cautiously given the small sample of primary school teachers (n=33), this apparent contradiction between perceived training gaps and relatively positive outcome assessments raises important questions about the relationships between formal training, pedagogical emphasis, and children's competence development. It also raises questions over potential barriers to learning with regard to socio-emotional, early literacy, and numeracy skills, as all reported skills levels remain relatively low.
2. **Training-practice gap**: All groups reported substantial gaps between training and perceived abilities, suggesting that formal training programs may not be sufficiently aligned with practice requirements. This gap appears particularly pronounced in reflection and adaptation, early numeracy, and socio-emotional competences.
3. **High self-assessments**: Both pedagogues and leaders reported notably high ability levels across most skill areas, despite more moderate training levels. KII/FGD data provides a potential explanation, with respondents consistently highlighting the training-practice gap, and multiple pedagogues and leaders emphasising that practical experience, not formal training, is where true professional competence develops. As one private leader noted, “they become the professionals they are now through practice and that means learning by doing“.
4. **Consistent strengths**: Planning for learning, observation and documentation, and socio-emotional competences emerged as relative strengths across most stakeholder assessments, suggesting these areas may be more effectively addressed in current training programs.

The following notable discrepancies have been identified between stakeholder perspectives:

1. **Trainer-practitioner gap**: Staff trainers generally expressed higher confidence in their training coverage than practitioners reported receiving, particularly in early literacy. This suggests potential misalignment between training provision and training reception or implementation.

2. **Leader-pedagogue perceptions**: Setting leaders reported substantially higher ability levels for pedagogues than pedagogues self-report, particularly in socio-emotional competences (95.1% vs. 85.7%) and early numeracy (63.7% vs. 55.3%). This suggests potential differences in assessment criteria or expectations. Alternatively, these perception gaps could indicate communication challenges between leadership and staff, possibly reflecting teamwork issues where leaders may have an overly optimistic view of staff capabilities that isn't shared by the pedagogues themselves, or where staff lack confidence that is recognised by their leaders.
3. Continuing professional development **training gaps**: Pedagogues reported lower levels of continuing professional development than pre-service training for most skill areas, which contrasts with the emphasis many setting leaders place on continuous professional development.

Survey respondents were also asked about the skills which they consider pedagogues require in order to effectively promote socio-emotional competences, early literacy, and early numeracy in children. Responses from different categories (including providers, setting leaders, pedagogues, and trainers) regarding socio-emotional competences consistently highlighted empathy as the foundational skill required by pedagogues. Self-reflection abilities and theoretical knowledge of child development also featured prominently across respondent categories. Leaders frequently mentioned the importance of pedagogues' own emotional stability, with one stating pedagogues need a:

> *strong personality that implements agreements without being rigid (always appropriate to the child's level of development)/ empathy, good observation skills and responsiveness. (Private setting leader - online survey)*

For early literacy skills, respondents emphasised the importance of language proficiency and pedagogues serving as language role models. The need for methodological knowledge and personal enthusiasm for reading was frequently mentioned. One pedagogue succinctly stated pedagogues need "Good language comprehension, grammar, methods," while another mentioned "Motivational ability, self-motivation, fun, enjoyment of speaking." Trainers offered more detailed responses about specific techniques, with one noting pedagogues need:

> *Their own language skills, understanding of multilingual development, acceptance of different learning approaches and personalities...Integrating gestures and language into everyday activities is essential. (ECEC Staff Trainer - Professional Development Institution, online survey)*

Regarding early numeracy skills, responses centred on pedagogues having basic mathematical understanding and the ability to integrate mathematical concepts into everyday activities. There were notably fewer detailed responses in this category compared to socio-emotional and literacy skills, suggesting a possibly less developed understanding of early numeracy promotion. One pedagogue simply stated pedagogues need "Basic mathematical knowledge, logic," while a trainer provided more insight:

> *Understanding the basics of arithmetic: collecting, sorting, and then counting; being able to tolerate the misuse of play materials for sorting and counting; knowing and being able to accept that children complete a learning task at their own pace and need a lot of repetition to understand it. (ECEC Staff Trainer - Professional Development Institution, online survey)*

The data from FGDs/KIIs reinforces these findings, with participants consistently highlighting the central importance of empathy, observation skills, motivation, self-reflection, and theoretical knowledge of child development across all three domains:

> *So above all, I would say first of all an ability to observe and recognise what the child needs. Where you ultimately have to start in order to be able to support the child well, then of course creative ideas. Then also to react spontaneously when the child ultimately reacts quite differently to what you actually expect. Then, of course, the educational professional must also be able to motivate and plan well. (Public setting pedagogue, KII)*
>
> *What I also sometimes miss is developmental psychology in the classic sense: what can a child do at what age? and, very importantly, how do I deal with it when a child doesn't behave according to the norm? What is the child trying to tell me? What is it? What is the educational intervention? What is the measure for this (Public setting leader, KII)*
>
> *I think that teachers should be good at observation. They should be good at documenting what they observe. (Private setting leader, FGD)*
>
> *The ability to motivate has to be incredibly high, because reading, writing and arithmetic, none of these things are, so to speak, automatic in ECEC … You have to come up with something to tickle the children's fancy and if you can hear what they're interested in and realise that, that's good, … especially with these so-called precursor skills. … it has to be about motivation and I think that's a very important key skill. (Public setting pedagogue, KII)*
>
> *I believe that we need educators ... who have a basic knowledge and understanding in the field of childhood education … then of course you also need the ability against this background to analyse and evaluate a situation. Analysing and evaluating individual development trajectories. Analysing and evaluating the educational setting - in other words, you need to be analytical in order to be able to do everything you ask… I believe they also need the ability to reflect, i.e. a high level of reflection and also the ability to systematically evaluate their own actions and what they do. (University representative, KII)*

4. Quality assurance

4.1. Available monitoring and assessment mechanisms

The primary responsibility for quality assurance in Lower Saxony's ECEC sector lies with Department 2 of Youth Office of the Federal State of Lower Saxony (NLJA), which operates under the technical supervision of the Ministry of Education. This department is responsible for the supervision and licensing of all childcare facilities across Lower Saxony.

The quality assurance process begins with the process of applying for an operating license. Providers submit their applications through a web-based system called “Kita-Web,” which includes checklists and standardised tables to verify compliance with requirements. The basic requirements and minimum standards are regulated in the NKITAG and its implementing ordinance, and focus on staff qualifications, spatial requirements, safety regulations, and the availability of a pedagogical concept aligned with the Orientation Plan. However, as noted by Stakeholder Group members during workshop discussions, while pedagogical concepts at the setting level are a prerequisite for the operating licence, they are not checked uniformly in terms of content and quality.

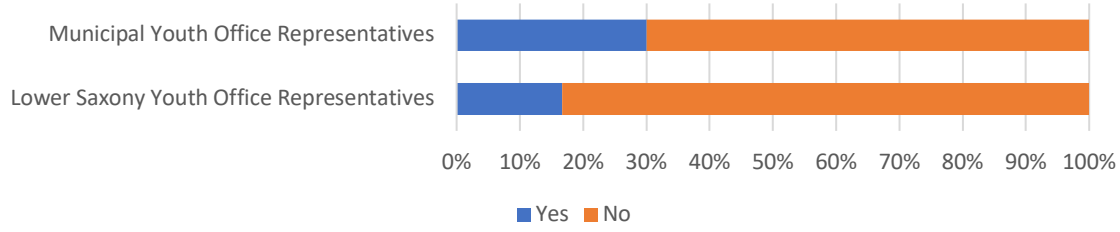
Inspections are conducted by the Youth Office of the Federal State of Lower Saxony (NLJA). However, these are not undertaken routinely. Compliance is inspected with the goal of ensuring the minimum standards for structural quality as regulated in the NKiTaG. As noted

by NLJA representatives in KIIs, specific reasons to undertake inspections can include structural changes to facilities, reports noting child protection concerns, applications for changes to operating licenses, or other complex cases requiring advice. When deficiencies are identified during inspections, the State Youth Office takes formal corrective action, and the ECEC provider is required to address the identified deficiencies within a specific timeframe. This process may involve attaching formal conditions to the operating permit that specify both the required remediation and the deadline for completion.

The monitoring of pedagogical quality appears to be less systematic than the inspection of structural requirements. While providers must submit pedagogical concepts as part of the licensing process, there is considerable autonomy in how these concepts are implemented. Each provider is responsible for their own quality management systems. According to an NLJA representative, larger provider organisations have well-established quality management systems, while smaller providers may have less robust systems.

In the online survey, representatives from both State and Municipal Youth Offices expressed significant concerns about the current quality assurance practices. When asked whether current quality assurance practices at the ECEC setting level are fit for purpose, a strong majority responded negatively:

Figure 36: Youth Office representative response to "Do you consider the current quality assurance practices at the ECEC setting level to be fit for purpose"? (online survey data)



The open text responses from Youth Office of the Federal State of Lower Saxony representatives highlight several key issues, including a lack of standardisation, significant variation in provider capability, and challenges with compliance in everyday settings. One respondent noted that:

> *The quality assurance systems, which are often based on DIN standards, do provide a framework... but in my opinion, they do not adequately address the requirements that dominate day-to-day setting life. (Youth Office of the Federal State of Lower Saxony representative, online survey)*

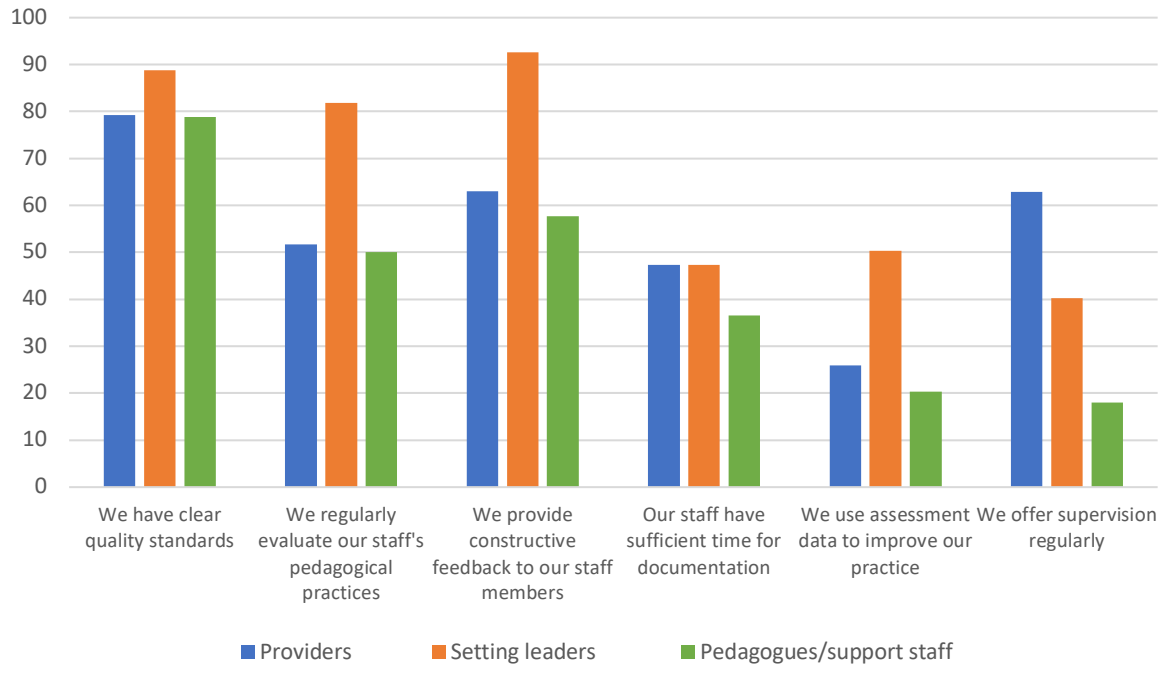
Municipal Youth Office representatives identified different but complementary challenges, particularly around resource constraints. According to one respondent "ECEC teams have too little time to adequately reflect on and further develop pedagogical quality." Another emphasised that "Due to the severe staff shortage, many quality assurance practices cannot be implemented." There was also criticism of the practical application of quality assurance: "The processes vary widely and are usually merely templates that are adapted and filed according to the institution."

All State Youth Office representatives (100%) and 70% of Municipal Youth Office representatives reported challenges in the current inspection and supervision process, relating to both structural compliance monitoring and pedagogical quality assessment. The

key challenges identified include a lack of standardisation and guidelines, resource constraints, and the difficulty of balancing quantity with quality. As one State Youth Office representative explained: “There are few to no binding standards or concrete markers for guidance, the application of which could be evaluated accordingly.” Another noted: “The biggest challenge is the number of facilities for which one person is responsible. Therefore, an audit can usually only be conducted on an ad hoc basis.”

Survey responses from providers, setting leaders, and pedagogues reveal a pattern: while participants reported high confidence in the existence of quality standards, they reported less certainty about specific quality assurance practices. A strong majority of respondents across these groups reported having clear quality standards. However, when asked about specific practices such as regular evaluation of pedagogical work, use of assessment data, and provision of supervision, there is considerably less agreement. While 50.3% of setting leaders agree or strongly agree they use assessment data to improve practice, only 20.4% of pedagogues and support staff agree. This may indicate a communication disconnect where assessment activities occur at the leadership level without sufficient involvement of pedagogical teams. Alternatively, it could reflect role-based response biases, where leaders—who bear formal responsibility for quality assurance—may overreport implementation of expected practices, while pedagogues have less incentive to present practices in a favourable light. Regarding supervision, both setting leaders and pedagogues reported limited regular supervision.

Figure 37: Percentage of respondents agreeing or strongly agreeing with statements about quality assurance practices in ECEC settings, by stakeholder group (online survey data)



When asked about specific tools for evaluating and improving work, a large proportion of both setting leaders and pedagogues reported not using these (41.6% and 54.2% respectively). Open text responses reveal that those who responded positively use tools such as team meetings, reflection and evaluation tools, feedback mechanisms, quality management systems, and documentation methods. One setting leader mentioned using “Parent satisfaction survey, team analysis forms and discussions,” while another described

"Complaint forms, quality conference, evaluation forms 'plan-do-act-check' from the Quality Management system of the ECEC setting." A pedagogue noted their use of "Feedback discussions, discussions with management, self-reflection."

However, a common thread across all respondent groups is concern about resource constraints. For instance, regarding sufficient time for documentation. Open text responses frequently mention staffing shortages, with one provider noting: "due to the lack of skilled workers and high sickness rates, care is predominantly provided vs. education." Another setting leader shared: "I'm glad I have two very competent and dedicated employees. Unfortunately, I don't have the time or money for structured reflection. Currently, due to changes in the provider, there's no clear common thread."

Parents' perspectives were also sought in the online survey. Parents reported receiving predominantly annual updates about their child's participation (58.1%), with limited more frequent communication (16.9% quarterly, 2.2% monthly, and 7.4% weekly). Furthermore, while 62.2% of parents are satisfied or very satisfied with feedback opportunities, many reported providing feedback only when there are specific concerns:

Figure 38: Parent responses to "How often does your child's ECEC setting provide updates about your child's participation in ECEC?" (online survey data)

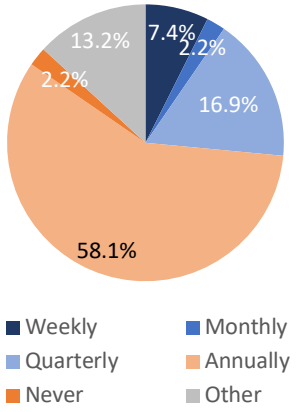
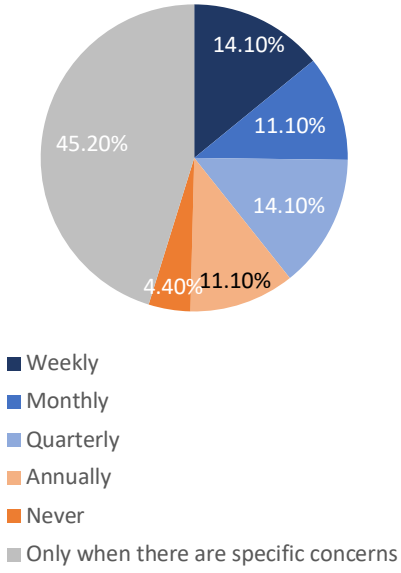
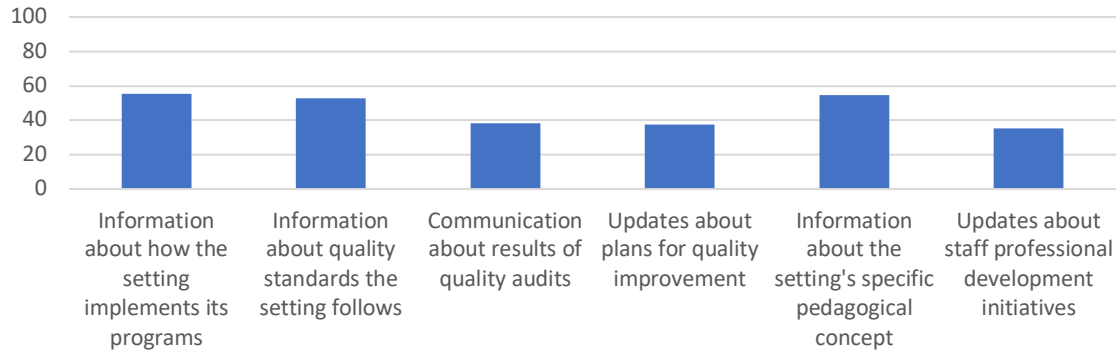


Figure 39: Parent responses to "How often do you use these opportunities to provide feedback?" (online survey data)



Parents also reported receiving varying levels of information about different aspects of quality assurance. While pedagogical concepts had the highest information level (54.7% well informed or very well informed), it is notable that nearly half of parents (45.3%) do not feel well informed about even this fundamental aspect of their child's ECEC experience. Information levels were even lower regarding quality audits (38.4%) and improvement plans (37.6%), indicating significant gaps in communication with families about quality assurance processes:

Figure 40: Percentage of parents who reported being well-informed or very well-informed about different aspects of their child's ECEC setting



The open text responses emphasised the need for better communication, greater transparency, and more effective use of digital platforms for information dissemination. One parent requested “More information that could easily be made available via the ECEC app,” while another called for “More transparency about how things are being done and why.” Parents also expressed interest in understanding quality standards better: “Communication of quality standards in general, communication of the pedagogical concept.” Some parents noted the challenges facing settings: “It's no longer possible to achieve what's written there because there simply isn't enough staff to implement it with quality.”

4.2. Pedagogical concept reviews

According to NKiTaG §3(1), pedagogical concepts must be regularly updated. Nevertheless, there appears to be no systematic procedure to check whether providers actually fulfil this obligation.

Survey data reveals variation in review frequencies across the three main stakeholder groups involved in ECEC settings. Interview data further suggests that actual practice may be even more variable than what survey responses indicate, with several participants noting the absence of systematic review procedures.

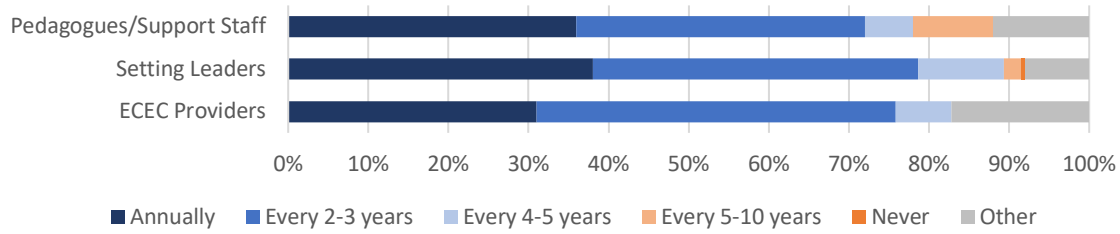
Provider representatives most commonly reported reviewing their pedagogical concepts every 2-3 years (44.8%), followed by annual reviews (31.0%). Among those selecting “Other” (primarily free provider representatives), responses revealed highly variable timeframes “from annually to every 10 years,” often influenced by staffing challenges, particularly at the management level. As one respondent noted, “The goal is once a year - however, the position of management was vacant for a very long time.”

Setting leaders show a fairly balanced distribution between every 2-3 years (40.6%) and annual reviews (38.0%), with nearly 80% of leaders reviewing concepts at least every 2-3 years. The open text responses from those selecting “Other” highlighted practical challenges impacting review frequency, including time constraints, staffing shortages, and leadership transitions. One leader noted their concept is “constantly updated,” while another mentioned, “In practice regularly, in written form far too rarely due to lack of time.”

Pedagogues showed an even split between “annual” reviews and “every 2-3 years” (36.0% each). However, they reported a higher percentage of less frequent reviews, with 16.0% indicating reviews happen every 4-10 years, suggesting potentially less involvement in

regular review processes. The limited open text responses from this group revealed varied experiences, with one pedagogue stating, “I have been working in the ECEC setting for 8 years and we once worked on the concept,” suggesting infrequent comprehensive reviews in some settings.

Figure 41: Provider, setting leader, and pedagogue/support staff reported frequency of updating pedagogical concept (online survey data)



ECEC settings appear to review and update their pedagogical concepts primarily in response to various types of change rather than through systematic scheduled reviews. Across all stakeholder groups, the main drivers include legal and regulatory changes (particularly for public providers), staff turnover and structural reorganisation, societal and demographic shifts affecting families, and the perceived need to align with current pedagogical developments. Interview data confirms that many reviews occur reactively, with one public provider representative noting that “a centre concept is only adapted when a change occurs.”

The mechanisms for conducting these reviews vary considerably, from formal quality management systems and certification processes (more common in private settings) to less structured approaches based on reflection and stakeholder feedback. While most stakeholders recognise the importance of regular concept reviews, practical constraints such as time limitations, staffing shortages, and competing priorities often prevent consistent implementation. These practical challenges appear to create tension between recognising the importance of regular reviews and the capacity to implement them effectively. As one public setting pedagogue explained: “You need so much time for that. And actually peace and tranquillity... You can't just do it on the side when the facility is full of children.”

Conclusion and next steps

The present report provides an assessment of Lower Saxony's current ECEC landscape, establishing a foundation for developing a framework for outcome-oriented pedagogy and ECEC provision. The forthcoming report on relevant good practice from other European countries will identify effective approaches across the key areas explored in this report. These international examples will serve as adaptable models to be considered within Lower Saxony's unique context and feed into consolidated recommendations from the As-Is-Analysis and the Good Practice Report.

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