INNOVATIVE COMMUNICATION IN EDUCATION: DIGITAL STRATEGIES IN MULTICULTURAL MONTESSORI COMMUNITIES

COMUNICAÇÃO INOVADORA NA EDUCAÇÃO: ESTRATÉGIAS DIGITAIS EM COMUNIDADES MONTESSORIANAS MULTICULTURAIS

COMUNICACIÓN INNOVADORA EN EDUCACIÓN: ESTRATEGIAS DIGITALES EN COMUNIDADES MONTESSORI MULTICULTURALES

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Abstract: Communication within the educational community is a key element of effective teaching practice. In large cities like Berlin (Germany), cultural diversity and linguistic variety add complexity to the communication process between educational institutions and families. This case study aims to document the experiences of the educational community at the *Casa de Niños* of *Kita Bilinguale Kinderhäuser*, part of the *Montessori Stiftung Berlin*, during the 2022–2023 school years. Through participant observation, informal interviews, and document analysis, both formal and informal interactions within the center were analyzed to identify communication challenges and opportunities. The phases of the project—diagnosis, planning, implementation, and evaluation—were structured following a continuous improvement approach, with systematic monitoring and the use of digital tools, checklists, and meetings. The findings highlight the importance of establishing effective communication channels, prioritizing the urgency of topics, and promoting timely responses that help prevent conflicts. The study also underscores the value of teacher training in assertive communication strategies tailored to multicultural environments. Future research could explore the scalability of this intervention model in other diverse educational contexts, incorporating digital technologies to strengthen community cohesion.
Keywords: Preschool Education; Digitization; Communication; Multiculturalism; Education Community.

Resumo: A comunicação dentro da comunidade educativa é um elemento-chave para uma prática docente eficaz. Em grandes cidades como Berlim (Alemanha), a diversidade cultural e a variedade de línguas acrescentam complexidade ao processo comunicativo entre as instituições educativas e as famílias. Este estudo de caso tem como objetivo documentar as experiências da comunidade educativa da *Casa de Niños* da *Kita Bilinguale Kinderhäuser*, pertencente à *Montessori Stiftung Berlin*, durante os anos letivos de 2022–2023. Por meio de observação participante, entrevistas informais e análise documental, foram analisadas interações formais e informais dentro do centro para identificar desafios e oportunidades na comunicação. As fases do projeto — diagnóstico, planejamento, implementação e avaliação — foram estruturadas com base numa abordagem de melhoria contínua, com monitoramento sistemático e uso de ferramentas digitais, listas de verificação e reuniões. Os resultados destacam a importância de estabelecer canais de comunicação eficazes, priorizando a urgência dos temas e promovendo respostas oportunas que previnam conflitos. O estudo também sublinha o valor da formação

docente em estratégias comunicativas assertivas, adaptadas ao ambiente multicultural. Pesquisas futuras poderiam explorar a escalabilidade deste modelo de intervenção em outros contextos educativos diversos, incorporando tecnologias digitais para fortalecer a coesão comunitária.
Palavras-chave: Educação Pré-escolar; Digitalização; Comunicação; Multiculturalismo; Comunidade educativa.

Resumen: La comunicación dentro de la comunidad educativa es un elemento clave para una práctica docente eficaz. En grandes ciudades como Berlín (Alemania), la diversidad cultural y la variedad de lenguas añaden complejidad al proceso comunicativo entre las instituciones educativas y las familias. Este estudio de caso pretende documentar las experiencias de la comunidad educativa de la *Casa de Niños* de *Kita Bilinguale Kinderhäuser*, perteneciente a la *Montessori Stiftung Berlin*, durante los cursos escolares 2022-2023. A través de observación participante, entrevistas informales y análisis documental, se analizaron interacciones formales e informales dentro del centro para identificar desafíos y oportunidades en la comunicación. Las fases del proyecto —diagnóstico, planificación, implementación y evaluación— se estructuraron siguiendo un enfoque de mejora continua, con un monitoreo sistemático y el uso de herramientas digitales, listas de control y reuniones. Los resultados destacan la importancia de establecer canales de comunicación eficaces, priorizando la urgencia de los temas y promoviendo respuestas oportunas que prevengan conflictos. Se subraya también el valor de la formación docente en estrategias comunicativas asertivas, adaptadas al entorno multicultural. Futuras investigaciones podrían explorar la escalabilidad de este modelo de intervención en otros contextos educativos diversos, incorporando tecnología digital para fortalecer la cohesión comunitaria.
Palabras claves: Educación preescolar; Digitalización; Comunicación; Multiculturalismo; Comunidad Educativa.

1.INTRODUCTION

Challenges within educational settings often stem from communication gaps or limited interactions among stakeholders, including teachers, families, and school administrators. When clear communication channels are missing as well as the content of the communication was not coherent, the consolidation of relationships between these parties was significantly hindered, leading to frequent misunderstandings and conflicts (Brandoni, 2017). In schools with a diverse population, such as *Bilinguale Kinderhäuser[1]* in Berlin's *Friedrichshain* district, these issues are further compounded by socio-cultural factors and the lack of standardized, formal communication tools. As Bordalba (2017) argues, effective communication must be approached holistically and consciously, integrating channels that reinforce its role as a vital social tool.

The school's location in Berlin, a major hub for expatriates and international migrants, introduces additional complexities to the school community's communication dynamics. *Friedrichshain*, in particular, attracts families from various global regions due to the area's wide range of educational offerings and quality of life, as highlighted in the article *In Numbers: Who is coming to, and leaving, Berlin?* (The Local, 2023). Over 80% of families within *Bilinguale Kinderhäuser* are migrants from Central and Eastern Europe, Asia, Latin America, and other regions, bringing a diversity of cultural backgrounds, languages, and values into the school. Even among the German families

in the community, many are newcomers from other parts of the country, adding a layer of regional diversity to the existing international context. This unique composition of students and families offers rich cultural experiences but also presents challenges for establishing a unified, consistent approach to communication.

In educational settings, especially those characterized by such diversity, communication issues can impede the core teaching and learning processes (Gatt, 2010). The absence of clear communication pathways or tools at *Bilinguale Kinderhäuser* creates challenges for all involved, particularly in forming trustful relationships between families, teachers, and the administration. When essential information is delayed or miscommunicated, frustration, confusion, and even conflict can arise among stakeholders. For example, messages are sometimes misinterpreted, which can lead to the spread of misinformation among parent groups. When information is insufficiently clear or timely, families may experience unnecessary waiting or confusion, especially if they rely on scheduled meetings to clarify or resolve concerns (Ozmen et al., 2016), such delays can create a sense of general dissatisfaction, cultivating an atmosphere of distrust within the school community. As well as the pedagogical aspects worked in the Kita[2] are to be clear informed, as it is the case of the Montessori Method in pre-school, which requires of the work from the families and the teachers to provide of the experiences the children require during their development (Montessori, 1949).

These issues have a direct impact on the educational environment, often resulting in diminished teacher morale, lack of shared objectives, and strained relationships among staff members. Educators may begin to feel the repercussions of these unresolved communication barriers, including low morale, frustration, and unclear visions or goals for their daily work (Aleksić et al., 2024), this negative impact on staff wellbeing ultimately influences the quality of education, as teaching staff struggle with maintaining an ideal classroom atmosphere under increasingly challenging conditions. As Bordalba (2017) asserts, addressing these obstacles requires an integrated approach that acknowledges communication as a foundational tool in fostering effective, positive interactions among school community members.

This multicultural, multilingual environment demands that the institution adopt communication strategies that respect and reflect the diversity of its members. Schools like *Bilinguale Kinderhäuser* must take proactive steps to create and maintain standardized communication channels, ensuring that interactions are based on mutual respect, solidarity, and commitment. Leaders in these educational settings face the complex task of building trust within the school community, developing frameworks for interaction that cater to the specific needs of a diverse population. Furthermore, effective communication channels are essential to strengthen the bonds between families and the school, establishing a solid foundation for collective engagement.

Digital tools present a valuable opportunity to bridge these communication gaps. As Elorza (2016) highlights, school leaders should consider the integration of virtual tools that not only enhance classroom management but also introduce new, multidirectional communication pathways. According to Ramírez and Casillas (2014), traditional, vertical communication models—where there is limited information flow and feedback—is ill-suited to the demands of modern, diverse educational communities. Instead, they propose a horizontal model, enabled by digital technologies, that connects all participants in a network, fostering continuous interaction and ensuring that all

voices are heard. This approach promotes inclusivity and ensures that critical information reaches all parties involved, thereby reducing misunderstandings, and enhancing the overall school experience.

In response to the communication challenges identified within *Bilinguale Kinderhäuser*, this project seeks to implement a suite of Web 2.0 tools that facilitate real-time, multidirectional interaction between educators and families. As Lores-Gómez et al. (2018) argue, today's society demands a citizen with a comprehensive understanding of digital competence, one that extends beyond technical skills to include information literacy, peer-to-peer communication, content creation, security, and problem-solving tailored to various knowledge domains. By fostering digital competence among the teaching staff, the school can ensure that teachers are not just using digital tools but are equipped to engage meaningfully with families and address communication challenges in an increasingly digital world.

Based on the objectives of minimize conflicts stemming from communication breakdowns and the standardization of the institution's communication channels, as well the diagnostics of the setting, González (2005) outlines several digital tools that align with the needs of a school community: edublogs, which feature dated entries in reverse chronological order; wikis, which enable collaborative editing among multiple users; and social networks, which enhance personal connections among community members. By leveraging these tools, the institution aims to foster a culture of transparency and collaboration, making essential information readily accessible and streamlining the exchange of ideas. These tools also offer opportunities for teachers to develop their digital competence by engaging with parents and community members through collaborative platforms that are both efficient and inclusive.

However, it is crucial to apply these digital tools with caution, as excessive or unfocused communication—referred to as hypercommunication—can detract from meaningful engagement and erode the quality of interactions. Byung-Chul Han (cited in De Elorza Feldborg, 2023) warns that hypercommunication may dilute the intended message, with content disseminated for the sake of it rather than to fulfil genuine informational needs. This approach can lead to an infocracy, where continuous connectivity replaces substantial relationships, removing the interpersonal aspects that foster genuine connections. Therefore, any use of digital communication should prioritize clarity, purpose, and relevance to avoid overwhelming families and educators with superfluous information.

The primary goal of implementing these new communication strategies is not merely to distribute information but to establish a framework that enhances trust and transparency within the educational community. The focus lies on building a shared understanding of the institution's values and objectives, with an emphasis on clear, consistent, and respectful communication. By developing an institutional communication model grounded in these principles, *Bilinguale Kinderhäuser* can foster a school environment where positive interactions are not only encouraged but become integral to the school culture. As Berthoud (2010) notes, schools serve as critical conduits for cultural transmission, equipping students and families with the skills needed to navigate the demands of contemporary society.

Considering the educational approach of the school, the Montessori education, it is of vital importance the work hand in hand from the family and the teachers to provide of coherent education values, daily routine and developmental experiences. Families

often enrol their children in Montessori schools with limited or inaccurate understanding of the method, which highlights the importance of educating parents about its principles (Lillard, 2005).

In light of these insights, it is essential for families and schools to actively engage in updating and implementing *Institutional Coexistence Agreements*. Such agreements provide a structured approach to understanding the diverse needs and perspectives within the school community. Guerrero (2011) asserts that inclusive communities prioritize strong, trust-based relationships founded on mutual respect and shared commitment. These agreements, therefore, offer a practical pathway to creating a cohesive, inclusive school environment that respects the unique backgrounds and perspectives of each family, fostering a spirit of cooperation and belonging that extends beyond the classroom.

Ultimately, enhancing communication between the school and families is fundamental to organizing and cultivating an inclusive educational culture. Such efforts aim to create a resilient community that not only supports cooperation and mutual understanding but also reinforces a sense of belonging, irrespective of the diverse cultural backgrounds of its members (Leithwood, 2009). By establishing these foundational communication practices, *Bilinguale Kinderhäuser* can serve as a model for other educational institutions striving to create inclusive, culturally sensitive, and supportive school environments.

2.METHOD

The methodological design was based on a qualitative approach, with a case study structure (Takahashi & Araujo, 2019), with the aim of enabling an analytical and interpretative description of the school community interactions. The instruments that made it possible to access the necessary information were participant observation, structured observation within the institution (focusing on how communication issues emerged in both formal and informal settings) and informal interviews to families and teachers (Swain & King, 2022). The analysis technique used to approach this work, and which allowed to respond to the question posed was the content analysis of the existing documentation—such as meeting records and interaction logs—provided a retrospective view of past communication practices and outcomes, and both for the observations recorded and for the interviews conducted. This combination of structured observation, document analysis, and direct feedback established a well-rounded understanding of the institution's communication needs and areas for targeted improvement, and as the pillars to develop the implementations with the objectives of minimizing conflicts stemming from communication breakdowns and standardize the school community's communication channels.

For the project itself, a series of phases were implemented —Figure 1—, identification of the problem, diagnosis, project planning, project execution and project closing (Rosales Posas, 2009). From the project execution until its closing, an ongoing monitoring and assessment was carried out to readjust the implementations and as a data gathering for the final evaluation (Marín Marín, 2011).

Figure 1
Project phases and assessment process
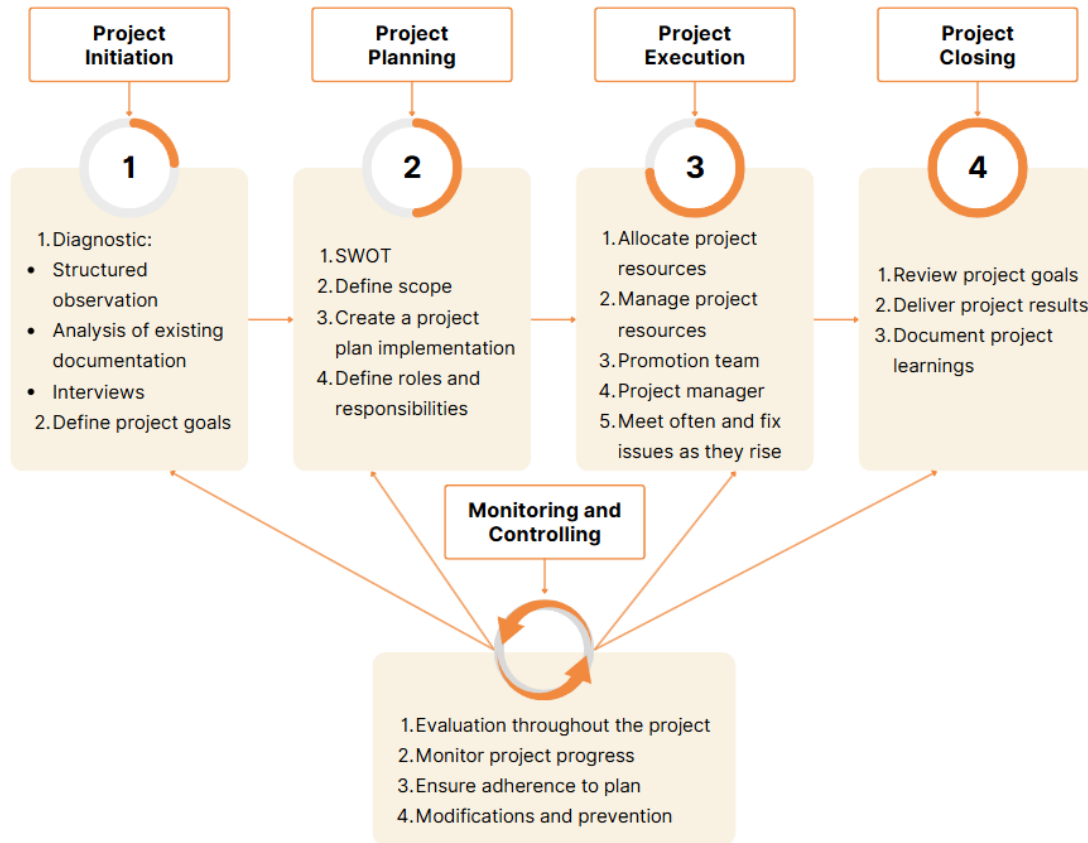
Source: Image retrieved from Project phases and assessment process, by Köchig, 2024, Zenodo (https://doi.org/10.5281/zenodo.14228528). CC BY 4.0.

2.1. Assessment Tools

Throughout the various phases of the project, both one-time and recurring evaluation instruments were implemented. In the initial diagnostic phase, quantitative data were collected on the frequency of communication issues, while qualitative data were gathered through descriptive logs detailing observed situations within the group. Each record included the participants and a detailed account of the conflict from start to resolution (or lack thereof), outlining steps and interventions toward resolution. Concurrently, a problem and needs map was developed based on the diagnostic phase to support the selection of interview topics and questions, which clarified preliminary objectives. During this phase, individual interviews were conducted with the teaching staff (administrators and teachers across the institution) and a representative of the families. The interviews with educators focused on the identified issues, delving into their professional competencies in challenging situations and their communication proficiency with both parents and colleagues. The family representative provided a record of general incidents as well as specific problematic situations shared anonymously by different families.

At the same time, a **strengths, weaknesses, opportunities, and threats (SWOT)** analysis was conducted to determine the project's feasibility by examining

resources and internal and external factors that could influence its sustainability over time, an essential consideration for the project's long-term viability (Gurel & Merba, 2017). It was crucial to ensure that any changes in resources, such as funding or staffing, did not negatively impact the project's sustainability. Consequently, in planning professional development and community initiatives, it was vital that these activities were realistic and capable of ongoing implementation, provided they were deemed necessary.

The project evaluated the activities across the different phases. Global checklist criteria provided a clear understanding of how communication tools (e.g., communication notebooks, Google Docs, Jamboard, Notion, Google Meet, meeting logs, emails) were used, considering the levels of participation as well as the frequency and nature of any issues encountered —Figure 2—.

Figure 2
Checklist of communication tools

Checklist for the use of different channels of communication				
Month/Year: Teacher:				
	Yes	Frequency	No	Observations
Digital tools				
E-mail				
Video-call (Zoom/Meet/etc.)				
WhatsApp				
S.M.S. (cellphone message)				
Classic approaches				
Communications Notebook				
Talks at the entrance				
Talks at the pick-up				
Spontaneous meetings				
Task tools				
Jamboard/Notion				
Edublogs/Wiki				
Google Docs				
Google Forms				
Yes: number of families that use it. / No: number of families that do not use it. / Frequency: total quantity of uses.				

Source: Checklist adapted from *Checklist for tracking activities during project implementation* by Köchig, 2024, Zenodo (https://doi.org/10.5281/zenodo.14230042). CC BY 4.0.

Based on these checklist indicators —Figure 3—, reports were prepared to support the management team in making adjustments throughout each phase. These reports also promoted transparency regarding the project's implementation across the institution, facilitating formative evaluation by both management and the teaching team.

Figure 3
Checklist of proposals and activities

Checklist for activity attendance				
School year:				
Criteria	Indicator	Yes	No	Observations
Assistance	Workshops for families #1			
	Workshops for families #2			
	Workshops for families #3			
	Workshops for families #4			
	Community workshops #1*[1]			
	Community workshops #2*[2]			
	Family meetings September			
	Family meetings December			
	Family meetings May			
	Community celebrations*[3]			
	Open week			
	Week of activities/families			
*1&2: Assistance based on needs. *3: six celebrations in total, indicate observations.		Yes: total number of attending families No: total number of absent families.		

Source: Checklist adapted from *Checklist for tracking activities during project implementation* by Köchig, 2024, Zenodo (https://doi.org/10.5281/zenodo.14230042). CC BY 4.0.

In the final phase of project implementation, following reflective meetings on outcomes and experiences gained throughout the academic year, a final report was prepared. This report aimed to provide transparency regarding the project's overall progress for both families and educators, ensuring the language was appropriate for each audience. Based on the initial documentation, diagnosis, and systematically gathered evaluation data from each phase, a semi-formalized evaluation model was proposed. Specifically, a non-experimental model was chosen, allowing for a comparison of the data.

2.2. Context

This improvement proposal, aimed at strengthening the relationships between families and teachers, was implemented at *Bilinguale Kinderhäuser*, a part of the Montessori Stiftung Berlin, located in the cosmopolitan *Friedrichshain* neighbourhood. Many parents at *Bilinguale Kinderhäuser* had been drawn to Berlin for professional opportunities, and their demanding work schedules often necessitated that their children spend extended hours at school (Statistisches Bundesamt: Destatis, 2023). These families frequently lacked extended family or social networks locally, placing greater reliance on the school for their children's care and education. This situation elevated the school's role in supporting families, yet it also required additional communication to manage expectations and maintain a supportive school-family relationship.

With high levels of educational attainment among parents—many holding undergraduate or graduate degrees—the school community was characterized by a blend of linguistic abilities, as all parents communicated fluently in English, with

varying degrees of proficiency in German, Spanish, and other languages, including Russian, Portuguese, Italian, Slovak, and Hebrew.

The Montessori pedagogy at *Bilinguale Kinderhäuser* is deeply rooted in the philosophy of fostering independence, curiosity, and holistic development in children. Following Montessori's principles, the educational environment is prepared to encourage self-directed learning, with materials designed to stimulate exploration and hands-on engagement. Teachers act as guides, observing each child's unique interests and developmental needs to provide personalized support. Collaboration between families and educators is emphasized, ensuring that the principles practised at school are reinforced at home. This alignment is critical for creating a consistent and supportive framework for the child's growth. Additionally, the multicultural and multilingual composition of the Kita community enriches the Montessori approach, as children are exposed to diverse cultural practices and languages, enhancing their social and cognitive development. The institution's commitment to blending Montessori methods with the specific needs of its diverse population ensures a comprehensive and inclusive educational experience.

Within the school, institutional communication among teachers was structured around regular monthly meetings, which served as a forum for collaboration and the exchange of ideas. For daily interactions, teachers and the principal primarily utilized WhatsApp groups for quick updates and coordination, supplemented by the institutional email platform (Outlook) for more formal communications.

Parents received a weekly newsletter from the principal via email, which provided updates on school activities and announcements. Additionally, summaries of teachers' meetings were distributed to staff through email to ensure consistency and transparency, with printed copies requiring teacher signatures for acknowledgment. Teachers responsible for each group were authorized to contact parents directly via email. For sensitive matters, it was recommended that the principal be included as a carbon copy (CC) recipient to maintain oversight and facilitate effective resolution when needed.

2.3. Participants

To achieve the aims of the project, the interventions targeted the preschool group *Casa de Niños* group (ages 3-6) with 23 families and 6 adults. An important aspect to consider was the level of proficiency of each member of the education staff to appropriately allocate work and responsibilities throughout the project. At the time of the project's implementation, there was one volunteer and two pre-service teachers. These pre-service teachers required support from the in-service teachers for certain tasks due to the varying levels of responsibility they could assume. The group of teachers included an *Association Montessori Internationale*[3] (AMI) 3-6 guide (the lead teacher), a pre-service teacher from the *Deutschen Montessori Gesellschaft*[4] (DMG), and a teacher trained to work in a Montessori environment.

2.4. Project Planning and Development

The initial phase of the diagnostic process involved structured observation within the institution, focusing on how communication issues emerged in both formal and informal settings (Ullrich et al., 2024). This included analysing exchanges during meetings, spontaneous interactions, and family involvement in classroom activities,

highlighting points where miscommunication or ambiguity arose. Observing verbal exchanges, non-verbal cues, response timing, and overall interactional tone offered insights into patterns that could lead to misunderstandings or tension between families and staff.

Concurrently, an analysis of existing documentation—such as meeting records and interaction logs—provided a retrospective view of past communication practices and outcomes. Reviewing these records revealed recurrent issues, particularly delays in disseminating important information, which often left families feeling frustrated or confused. This analysis underscored the need for a systematic, efficient communication framework that prioritizes timely information-sharing.

During the project planning phase, a SWOT analysis was implemented to provide a clear and structured examination of internal (strengths and weaknesses) and external (opportunities and threats) elements. This tool enables the project team to leverage strengths and opportunities while mitigating the effects of weaknesses and threats. It also facilitates a comprehensive assessment of available resources—human, material, technical, and financial—to support effective planning and ensure a dynamic approach across different phases, ultimately aiming for a sustainable project.

In the execution phase, a promotion team and a project management team were established. A group of teachers was designated for training specific to each stage of the project. The promotion team comprises certified Montessori guides (who bring observation and data analysis skills), the director (who possesses effective communication and mediation skills), and classroom representatives (who serve as essential links to each teaching team).

To maintain momentum and ensure transparency across different teams and with the entire teaching staff, regular meetings were scheduled throughout the project phases, allowing for shared learning and collaboration. To maximize information sharing and keep a record of interactions, the collaborative platform Notion was used for cooperative content development, while Google Meet facilitated virtual meetings for efficient planning.

The project manager was the teacher overseeing the Pedagogy Department and the teacher in charge of the *Casa de Niños* group. In February 2023, an additional team member joined to streamline systematic data collection and enhance ongoing evaluation throughout the project. Recognizing the need to strengthen the project management skills of this new team member, a professional development plan was devised, providing access to relevant courses in educational project management. Weekly two-hour training sessions, both in-person and online, were organized by the Pedagogy Department head to focus on activities and tasks that support skill development in this area.

3.RESULTS

Alongside the previously mentioned activities, efforts were being made to improve communication with families, guided by insights from the initial diagnosis. The key issues identified include a lack of trust from many families, a high incidence of conflicts, cultural and social differences between families and teachers, and the diversity of experiences and practices among the teaching staff.

An immediate action plan addressing these observations began in August 2022. This plan assigns a set number of families to each teacher, considering the complexity

of each family's situation. Teachers with stronger mediation and communication skills were assigned more challenging cases, managing documentation and follow-up. Meanwhile, less experienced teachers were paired with families who were satisfied with the institution and respectful in their communications. This approach ensures a faster response rate and fosters deeper teacher involvement in the realities faced by families.

The primary communication strategy involves the use of physical communication notebooks, which families can send home and back to school. While email remains an option, the notebook offers a more personalized and accessible means of communication, allowing families to leave messages even during brief encounters, such as drop-off and pick-up, without requiring teachers to check their emails during work hours.

To ensure the effective use of these communication notebooks, routines were established for daily management. Each day, a designated teacher collects, reviews, and responds in the notebooks, placing them back in the children's bags. Consistency in checking and replying to the notebooks was crucial, as this is the institution's primary communication channel, designed to minimize misunderstandings and foster a positive response to the initiative.

Moreover, a record-keeping logbook was used to document and track conflict situations systematically. This tool allows the team to monitor the frequency and nature of daily communication-related conflicts. Beyond documenting problem-resolution processes, it enhances transparency in the teachers' work, providing a clear record of ongoing challenges and solutions.

Following the initial general meeting in September 2022, which welcomed families and helped them transition smoothly into the institution, a series of community-focused actions were planned. Families were informed about various workshops and activity proposals that encourage their active involvement in the school community.

Special emphasis was placed on the introductory workshop on Montessori pedagogy, which coincides with activities aimed at fostering positive relationships within student groups —Figure 4—.

Figure 4
Activities along the implementation time

Activities for the improvement of communication and coexistence	
Family meetings	**3 general meetings:** 1. September 2022: start of classes, guidelines, expectations 2. December 2022: processes and observations 3. May 2023: reflections and planning towards closure **2 compulsory personal meetings:** 1. August-September 2022: first observations 2. Once a year: *Elterngesprächen* (EG)*[1]
Spontaneous meetings	In response to needs and conflicts, based on the urgency
Workshops for families	**Montessori Workshop in 4 meetings:** 1. Introduction to the Method - September 2022 2. Theory in practice - November 2022 3. The adult in the development process - February 2023 4. The Montessori community, preparing for observations - March 2023
Community workshops	**ICT literacy meetings:** 1. Communication tools (emails/chats/video-call) 2. Tools for group work (Notion/Jamboard/Google Docs)
Community celebrations	• Day of the Dead - October 2022 • St. Martin's Day - November 2022 • Christmas and New Year - December 2022 • Magi - January 2023 • Carnival - February 2023 • Easter - April 2023 • End of school year party (put together by the community, families and teachers) - July 2023
Open week	• One hour of observations on the environment per adult - February 2023 • Sharing reflections
Week of activities proposed by families	• Planning with the help of teachers • Offering the activity in the environment - April 2023 • Sharing and reflection

Source: *1. Elterngespräche*, commonly called EG, is the process of observation and documentation of the educational process in the kindergarten educational space based on the Berlin Education Programme. Checklist adapted from *Checklist for tracking activities during project implementation* by Köchig, 2024, Zenodo (https://doi.org/10.5281/zenodo.14230042). CC BY 4.0.

A series of community-wide workshops was scheduled to take place from September 2022 through March 2023, totalling four sessions. These workshops were being led by the head of the Pedagogy Department (Note that in Germany, the preschool academic year starts in August and ends in July).

The workshops serve to clarify the institution's pedagogical approach, including daily routines, the annual structure, developmental frameworks for children, materials used, the adult's role within the Montessori Method, and observation practices within learning environments. These sessions also create a synchronous space for discussing the various communication tools and channels being introduced between teachers and families. They provide opportunities for questions, highlight differences in implementation, and clarify the institution's goals regarding communication.

Initially, the workshops were held in person and the two last ones transitioned to virtual synchronous sessions. To facilitate this shift, it was essential to assess the number of potential participants, allowing for any necessary adjustments. Digital tools, such as Google Meet, were introduced as needed for families and teachers.

In addition to workshops, a series of activities have been proposed to enrich the educational experiences of the school community throughout the year. These included events that reflect the cultural diversity of the community, such as Día de Muertos, Sankt Martin, Christmas, Kings' Day, Carnival, Easter, end-of-year celebrations, and cultural outings. For instance, during Sankt Martin, families and children participate in various crafts related to the celebration (such as lanterns and candle arrangements). A specific date was set for families, teachers, and students to gather at the school, beginning with a lantern-lit walk and traditional songs. The event then transitions to an outdoor celebration with bonfires, featuring *Glühwein* (spiced wine), *Kinderpunsch* (non-alcoholic punch), and traditional bread cooked over the fire.

These events were communicated through two primary channels—communication notebooks and emails—to ensure timely and accurate information delivery. After this initial communication, Jamboard was used to gather general ideas. Based on this input, virtual surveys via Google Forms were created to confirm participation and finalize event organization. This process streamlines interactions between families and teachers and provides a clear overview of involvement across participants.

During the open house period, two types of activities were planned. The first, following the second general meeting in January, was a two-week observation period where parents can visit the classroom environments. This experience offers families a learning space where they can observe how children engage in the classroom and gain insight into the pedagogical and didactic strategies employed by teachers.
The second phase, following the observation period, invites families to directly participate in the learning process. This initiative, scheduled for April 2023, promotes collaboration between teachers and families to create educational experiences based on the skills and interests of participating adults. For example, a paediatrician mother might offer a *Stuffed Animal Doctor* workshop, where each student brings a plush toy for a simulated check-up. Through guided questions, she helps students identify symptoms, understand possible conditions, and discuss potential solutions. These interactions and planning sessions were conducted through virtual meetings on Google Meet, with shared Google Docs for collaborative notes and planning.
Throughout these phases, adults were encouraged to engage actively, which not only strengthens communication and relationships but also helps align home and classroom strategies within the Montessori framework.

During the open house phase, records and rubrics were created to document family experiences, attendance, suggestions, and feedback on various activities. Families were also guided on how to observe using a tailored rubric, allowing for evaluation and coordination of necessary improvements for future activities.
As the school year comes to a close, the final phase of the project begins after the last general meeting in May 2023. This meeting was dedicated to sharing organizational insights, and it also includes a reflective session with families to review the evaluation results to date. It provides a space for sharing insights on the changes that have, or have not, been observed since the project's implementation.

It was essential during this phase to document the experiences of all participants. For this purpose, informal interviews were carried out after the participation focusing on the individual perspectives and experiences, their feelings, observations, and opinions.

4.DISCUSSION

The findings highlight the importance of structured and effective communication in fostering positive relationships and reducing conflicts within diverse educational communities. At *Bilinguale Kinderhäuser*, the multicultural composition of families and staff adds complexity to communication, underscoring the need for tailored strategies that respect cultural and linguistic diversity while aligning with the school's Montessori philosophy.

The introduction of physical communication notebooks as a primary channel demonstrates the school's effort to address the communication gaps. This approach prioritizes accessibility and personalization, ensuring families can easily connect with teachers during daily routines. By integrating systematic routines for managing these notebooks, the school minimizes misunderstandings and establishes a reliable mechanism for communication. This strategy aligns with Bordalba's (2017) assertion that communication tools must be both coherent and practical to serve as effective social tools.

In addition to physical communication channels, the integration of digital tools like Google Meet and Jamboard enables the school to bridge the gap between traditional and modern communication practices. These tools provide flexibility, allowing families to participate despite geographical or scheduling constraints. However, as Lores-Gómez et al. (2018) suggest, the successful use of these technologies depends not only on teachers' ability to navigate the tools themselves but also on their broader digital competence. Teachers must understand the importance of information literacy, communication, peer-to-peer collaboration, content creation, security, and problem-solving, ensuring that digital tools are used effectively to promote inclusive, timely, and clear communication. This holistic digital competence is essential for maximizing the potential of these tools and ensuring they serve as meaningful channels for engagement.

The action plan further reflects a differentiated approach to family engagement. Assigning teachers based on their communication skills and the complexity of family needs fosters trust and ensures that even challenging cases receive appropriate attention (Brandoni, 2017). This approach not only addresses the existing conflicts but also supports the professional development of teachers by gradually exposing less experienced staff to more intricate cases.

Workshops and activities aimed at educating families about Montessori pedagogy address a critical gap identified in the results. Lillard (2005) emphasizes that a clear understanding of Montessori principles among families is essential for coherent educational practices. The inclusion of both in-person and virtual workshops ensures accessibility for all families, further enhancing their understanding of the institution's pedagogical approach. By engaging families in structured observations and collaborative activities, the school builds a shared vision for education, fostering alignment between home and classroom practices.

Cultural events and community activities, such as Sankt Martin and Día de Muertos, further strengthen the bond between families and the school. These initiatives celebrate diversity while creating opportunities for meaningful interactions, reinforcing

the institution's commitment to inclusivity. Utilizing digital tools like Google Meet and Jamboard effectively bridges the gap between traditional and modern communication practices, enabling families to participate actively despite geographical or scheduling constraints.

The systematic documentation of conflicts and the evaluation of family participation highlight the institution's focus on transparency and continuous improvement. By collecting feedback and adapting strategies accordingly, *Bilinguale Kinderhäuser* ensures that its communication practices remain responsive to the needs of its community. This iterative approach resonates with Guerrero's (2011) perspective on inclusive communities, emphasizing trust-based relationships and mutual respect.

Ultimately, these efforts contribute to a stronger sense of belonging and cooperation within the school community. By integrating clear communication channels, fostering family engagement, and promoting cultural understanding, *Bilinguale Kinderhäuser* serves as a model for other institutions navigating the challenges of multicultural and multilingual environments. As Leithwood (2009) suggests, such inclusive practices not only enhance the educational experience but also equip families and children with the tools to thrive in a diverse and interconnected world.

This initiative underscores the critical role of communication in educational settings, particularly those embracing the Montessori philosophy, where collaboration between families and teachers is essential to provide children with meaningful developmental experiences. Through these strategies, *Bilinguale Kinderhäuser* exemplifies how thoughtful communication practices can transform challenges into opportunities for community growth and cohesion.

5.CONCLUSION

The implementation of the school community communication plan aims to promote strategies that enhance harmony within the school environment, establishing consistent communication tools among teaching and non-teaching staff. Additionally, it seeks to reduce conflicts arising from communication breakdowns by deploying targeted communication strategies and fostering a stronger sense of community involvement in school life, ultimately improving overall school relationships.

Throughout the project, outcomes were expected from the outset, allowing for necessary adjustments before each new phase. This approach is supported by various evaluation tools and ongoing training and reflection with the teaching staff. Teachers will have the opportunity to develop professional skills related to project management while also integrating self-reflective practices into their daily work.

Educators will be equipped to identify and evaluate key elements during the execution of tasks and activities, becoming active contributors throughout the process. This progressive development will lay the foundation for potential complementary projects aligned with the current plan and underscore the project's sustainability over time.

To address conflicts related to communication and information effectively, collaboration between teachers and families is essential. Emphasis is placed on mediation strategies to resolve issues and reach mutual agreements. Training and practice in assertive and effective communication, supported by workshops and

opportunities for family participation, are also highlighted as crucial for building a truly cohesive educational community.

In the final phase of the plan, it is envisioned that current families will be prepared and motivated to take on mentorship roles, guiding new families as they join. This approach encourages parents who wish to participate to support newcomers through the integration process, sharing their own experiences and conveying the school's educational culture.

In conclusion, the conflicts identified during the diagnostic phase—with their varied causes, impacts, and contexts within school relationships—serve as the foundation for developing and implementing innovative strategies. These initiatives aim to strengthen bonds within the educational community, positioning the school as a guiding light for its members in challenging times and offering the model of an educational institution that all members deserve.

Future studies and projects could explore the long-term impact of the communication strategies implemented in this project. Longitudinal research could assess how these measures influence family-teacher relationships, student outcomes, and the overall school environment over time. Additionally, further exploration of teacher professional development is warranted, particularly in conflict resolution, cultural sensitivity, and project management. Programs that integrate self-reflective practices could enhance educators' adaptability and resilience, ensuring sustainable improvements. Investigating parent mentorship initiatives, where experienced families guide newcomers, could provide insights into fostering community cohesion and reducing integration challenges. Moreover, exploring scalable models for parent engagement tailored to diverse cultural and socio-economic backgrounds would offer practical solutions for similar educational settings.

Another promising area involves the integration of digital communication in school communication systems, research could focus on the effectiveness of digital tools in creating equitable and meaningful interactions. Studies on cultural alignment with Montessori-based strategies would help evaluate how well families adopt and support the method after participation in workshops and school activities. Additionally, frameworks for conflict resolution in multicultural schools, including student training in basic communication skills, could strengthen school culture. Expanding collaborative projects between parents and teachers to co-create learning experiences may also yield valuable insights, enhancing both student development and community ties. These initiatives would not only deepen understanding of the current communication plan's effectiveness but also provide adaptable models for diverse educational institutions.

NOTES
1. https://montessori-stiftung.de/einrichtungen/bilinguale-kinderhaeuser
2. *Kita* is the colloquially used word that replaces the use of the word *Kindertagesstätte*. It is a type of pre-school or kindergarten for children under the age of 6, to which, in Germany, all children are entitled to a place from the age of 3.
3. https://montessori-ami.org/
4. https://www.montessori-gesellschaft.de/

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