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Teachers' and Principals' Views on Educational Technologies, Active Learning, and Social Entrepreneurship Practices in Disadvantaged Regions

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Abstract

This qualitative study explores the subjective experiences of 25 teachers and 10 principals working in socio-economically disadvantaged schools in Istanbul. Utilizing a phenomenological design, data were collected through semi-structured interviews and analyzed via interpretative content analysis. Findings indicate that while interactive whiteboards serve as a critical "digital bridge," a significant gap persists in the integration of Web 2.0 tools. Participants identified communication barriers, specifically the Turkish-Arabic linguistic divide, and structural marginalization of families as primary obstacles to effective instruction. Furthermore, high staff turnover contributes to institutional isolation, fueling a perceived need for targeted technopedagogical and relational leadership training. While providing deep contextual insights, this research is limited by its localized, qualitative nature; thus, results are not directly generalizable to broader populations. Ultimately, the study suggests that educational equity in high-needs urban regions depends on context-specific professional development and administrative advocacy rather than standardized, top-down interventions.



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Introduction

The fundamental aspiration of any modern education system is the cultivation of individuals capable of driving substantive societal change and sustainable development (Erdem, 2000). For a society to progress, its educational framework must allow individuals to maximize their inherent potential, a goal that is only attainable through the guidance of robust institutions and highly qualified personnel. Consequently, teachers and school administrators are widely recognized as the primary "driving forces" of the educational engine (Bush, 2025). However, the efficacy of these stakeholders is often dictated by the demographic and economic landscape in which they operate. The number and distribution of individuals within a system create inherent advantages or structural disadvantages regarding participation in production, resource utilization, and access to equitable

educational opportunities. When a lack of economic stability, social support, and cultural opportunities converges, it creates a state of disadvantage that stifles both student growth and institutional progress (Kereci et al., 2023).

This systemic inequality is most visible through the strong, persistent link between education and poverty (Wilson, 1991). As a global phenomenon that is acutely reflected in the contemporary Turkish context, individuals living in rural or low-socioeconomic urban areas face profound difficulties in accessing quality educational services. While education is theoretically an equalizer for regional development, the reality in disadvantaged areas is characterized by limited opportunities compared to affluent urban centers (Kereci et al., 2023). These environmental constraints often manifest in students' performance in centralized examinations; while interventions such as support courses and practice exams are utilized to mitigate these gaps, they cannot fully overcome the foundational inequalities rooted in the students' socio-economic backgrounds (Akin et al., 2023).

A significant modern dimension of this inequality is the "digital divide." Türkiye currently exhibits some of the highest levels of inequality in internet access among OECD nations (Alp & Baycan, 2023; Livingstone & Sylwander, 2025). For educators, this is not merely a technical issue but a pedagogical one. Qualitative research involving primary school teachers has consistently identified infrastructure deficiencies as a primary barrier to equality of opportunity (Akar et al., 2025). When schools lack basic hardware and stable connectivity, meaningful technology integration becomes an insurmountable challenge (Selwyn, 2021). Without strategic intervention, the rapid pace of technological advancement carries the inherent risk of deepening existing educational divides, effectively creating new forms of exclusion for students in disadvantaged residential areas (Ökten, 2024).

The burden of these structural failures falls squarely on the shoulders of school personnel. Teachers in disadvantaged regions must navigate a landscape of "professional deformation," where the struggle against remote locations, poor infrastructure, and limited socio-cultural opportunities leads to a decline in job satisfaction (Harris & Jones, 2025). Furthermore, when teachers neglect their own professional development in the face of these obstacles, the quality of instruction inevitably suffers (Kereci et al., 2023). This cycle of stagnation is often accelerated by poor communication and a perceived lack of managerial support, significantly increasing the risk of professional burnout (Erail et al., 2024).

Leadership, therefore, emerges as the critical variable in navigating these complexities. Leadership is the linchpin for improving both equal opportunity and quality in education. To transform technological and social challenges into opportunities for growth, school administrators must move beyond traditional management and toward a role of cultural and communicative mediation (Leithwood et al., 2020). This research, conducted in the socio-economically disadvantaged district of Başakşehir, Istanbul, seeks to explore these very intersections. By examining the lived experiences of teachers and administrators, the study investigates how infrastructural limits, linguistic communication barriers, and the demand for technopedagogical training coalesce to shape the educational landscape in high-needs urban environments.

Conceptual Frameworks

This study is theorized at the intersection of three constructs: Active Learning, Educational Technology, and Social Entrepreneurship. Value of these frames lies not in their separate definitions but in how they combine to explain teacher practice in high-needs schools. In such contexts, Educational Technology (EdTech), understood broadly as the ethical practice of facilitating learning and improving performance by creating, using, and managing appropriate technological processes and resources (Januszewski & Molenda, 2008), does not operate as a standalone resource but is integrated with Active Learning, that's, the implementation of student-centered techniques requiring specific technopedagogical support through Technology-Enabled Active Learning (TEAL) frameworks (Kutluca & Akran, 2025; Mayled, 2018). Within this integration, EdTech is operationalized as hardware (Interactive Whiteboards) and adaptive platforms (EBA, Morpa Kampüs) that overcome socio-economic barriers for vulnerable groups (Usubakunov, 2024), while Active Learning is operationalized as the transition to student-led engagement via cooperative and project-based pedagogies (Delikara, 2025; Steinfeld, 2020; Tosun et al., 2026). For disadvantaged students specifically, this pairing manifests in "content-neutral" spaces like makerspaces that foster inquiry-based problem solving (Sessoms, 2023), though its efficacy depends heavily on the in-person teacher role shifting toward providing seven distinct types of support to ensure equity (Pollock et al., 2019). It is this very demand on the teacher, namely, to sustain technology-enabled active learning under conditions of scarcity, that draws Social Entrepreneurship into the framework, not as a curricular add-on but as the agency and initiative educators exercise to solve systemic school-community problems using

limited local resources. Traditionally, social entrepreneurship in education has focused on curriculum integration and student intention formation (Hockerts, 2018), positioning institutions as platforms for challenge-based curricula (Bisanz et al., 2019). This study departs from that tradition: rather than examining how social entrepreneurship is taught to students, it shifts focus to how it is practiced by school staff, operationalizing social entrepreneurship as the professional agency and bricolage educators enact to make TEAL viable under resource constraint.

Research Gap

While current literature extensively documents the quantitative benefits of technology-enabled active learning such as increased gain scores in STEM and higher participation rates among marginalized youth (Mayled, 2018), a critical research gap remains regarding the pedagogical navigation and technopedagogical needs of the educators themselves (Şahin, 2026). Most studies focus on the *output* (student achievement) or the *design* of adaptive learning systems (Benjamin, 2024; Usubakunov, 2024). There is a lack of qualitative research exploring how teachers in disadvantaged urban districts like Başakşehir perceive their role as a "digital bridge" amid infrastructure deficiencies and linguistic barriers. While we understand that multimodal texts and technology are key to engagement (Benjamin, 2024), we do not yet understand the phenomenological struggle of teachers who experience "digital confusion" or administrative paralysis while trying to implement these innovations in 10 elementary and 7 middle schools. This study addresses this gap by investigating the lived professional experience of technology integration as a survival strategy rather than a standard pedagogical choice.

Despite the robust body of literature examining social entrepreneurship education (SEE) in both K-12 and university settings (Nabi et al., 2011), a significant research gap remains. Existing studies predominantly investigate the pedagogical methods used to instill entrepreneurial intentions in students or the integration of entrepreneurship into business curricula. There is a stark lack of phenomenological research exploring educators themselves as social entrepreneurs, specifically how they navigate the "pedagogy of crisis" in socio-economically disadvantaged urban districts. While we understand the benefits of experiential learning for students (Hockerts, 2018), we do not yet understand the lived experiences, motivational factors, and structural constraints of teachers and principals who must act as social innovators to ensure institutional survival in high-needs environments.

This study addresses this gap by investigating the intersection of professional agency and resource management among educators in the Başakşehir district of Istanbul.

The primary aim of this study is to explore the professional experiences and navigational strategies of educators working within socio-economically disadvantaged urban schools. To achieve this, the study seeks to answer the following overarching research question:

Research Question: How do teachers and administrators in high-needs schools perceive and navigate the challenges of contemporary educational processes, technology integration, and social innovation?

In alignment with this central inquiry, the following sub-questions (SQs) were addressed:

- SQ1: What is the current status of educational technology integration, and what systemic problems characterize the teaching-learning process in these environments?
- SQ2: What are the perceived professional competencies and specific training needs of educators working within this context?
- SQ3: To what extent do these schools demonstrate a capacity for social entrepreneurship and innovation as a response to structural challenges?
- SQ4: How do school administrators perceive their roles and responsibilities in facilitating effective education within high-needs districts?

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Method

This study employed a qualitative research approach and a phenomenological design to examine in-depth the views of teachers and administrators working in disadvantaged areas. Data were collected through semi-structured interviews and analyzed using interpretative content analysis.

Researcher Positionality and Reflexivity

Consistent with the demands of phenomenological inquiry, the researcher engaged in an explicit process of reflexivity throughout the study, recognizing that the researcher functions as the primary instrument of data collection and interpretation in this design (Moustakas, 1994). In educational technology field as the professional background with over 10 years' experience in teaching, the researcher didn't meet the participants before the present study and randomly found the schools of this research's subject through the guidance of district MoNE branch. This positioning was treated as a resource to be made transparent rather than a source of bias to be eliminated (Finlay, 2002). Before data collection

began, the researcher completed a written reflexive statement identifying prior assumptions, professional experiences, and expectations regarding technology use, communication barriers, and leadership in disadvantaged schools. This statement was revisited and updated at three points during the study prior to interviewing, at the midpoint of data collection, and during initial coding to surface any assumptions that might otherwise shape question phrasing, probing choices, or code labeling.

Epoché, or bracketing, was applied procedurally rather than treated as a one-time declaration (Moustakas, 1994). Prior to each coding session, the researcher recorded a brief bracketing memo noting any expectations about what a given transcript was likely to contain; these memos were compared against the codes actually generated from that transcript as a check against confirmation bias. Where a code appeared to have been shaped more by the researcher's prior memo than by the transcript text itself, the surrounding data were re-read and the code was either revised or discarded. These bracketing memos, together with analytic decisions made during coding, were compiled into a reflexive audit trail, which was made available to the second coder and the peer debriefer described below to support dependability (Lincoln & Guba, 1985).

Trustworthiness Procedures

Trustworthiness was established through four interlocking procedures: investigator triangulation, peer debriefing, member checking, and reflexivity, following the criteria of credibility, dependability, and confirmability outlined by Lincoln and Guba (1985).

Investigator triangulation. Two researchers (the first author and a second coder with expertise in educational technology research) independently coded the full data set. Discrepancies in code labeling and theme placement were resolved through discussion until consensus was reached, and inter-rater reliability was calculated using the Miles and Huberman (1994) formula, yielding a coefficient of 78%, approaching the conventional 80% threshold for qualitative research.

Peer debriefing. Following independent coding, the preliminary code list, category structure, and draft interpretive themes were presented to a peer debriefer who was a faculty member from the School of Education not otherwise involved in the study in two structured debriefing sessions. The debriefer was asked to review whether the codes plausibly supported the categories assigned to them, whether the interpretive labels (for ex., "digital bridge," "communication wall") were adequately grounded in the underlying quotations,

and whether alternative interpretations had been overlooked. Feedback from these sessions led to the merging of two overlapping codes under "Problems in the Education Process" and a revision of the wording of one category label to more accurately reflect participants' language.

Member checking. Member checking was conducted after the preliminary themes and interpretive summaries had been drafted, but before the manuscript was finalized. A written summary of the six major themes (technology use, communication barriers, professional training needs, social entrepreneurship, administrative roles, and teacher competence/turnover), along with the specific quotations attributed to each participant, was shared individually with five participants (3 teachers, 2 administrators) selected to represent both roles and a range of tenure lengths. Participants were asked three specific questions: (1) whether the theme summaries accurately reflected what they had intended to convey; (2) whether their individual quotations were represented accurately and in context; and (3) whether anything important about their experience had been omitted from the summary. Feedback was collected through brief follow-up conversations (in person and by phone, 5–10 minutes each). All five participants confirmed that the theme summaries and their individual quotations were accurate (with minimal, negligible wording suggestions). Two participants offered clarifying elaboration: one administrator noted that the "Limited Authority in Management" category, as initially summarized, underrepresented the role of budget constraints specifically (rather than administrative authority in general), which led to a revision of the category description to distinguish budgetary limitation from decision-making authority more precisely. A second participant (teacher) confirmed the "Communication Wall" theme but added that classroom-management difficulties tied to cultural adjustment, not only language, contributed to the same experience; this elaboration was incorporated as supporting context in the discussion of that theme rather than as a new code, since it was consistent with, rather than contradictory to, the existing category. No participant disputed a theme or requested removal of a quotation.

Research Group

The study group was determined using purposive sampling, specifically the criterion sampling technique. In criterion sampling, the goal is to study all cases that meet some predetermined criterion of importance (Patton, 2014), ensuring that the participants have direct experience with the phenomenon under investigation. The inclusion criteria for the

participants were as follows: Being actively employed as either a teacher or a school administrator with a minimum of one full academic year of service. Working specifically in schools located within socio-economically disadvantaged residential areas. These areas were operationally defined as those characterized by high immigration rates, unplanned settlements (ghettos), a high reliance on government social support, and a prevalence of large or extended family structures.

Based on these criteria, the final sample consisted of 25 teachers and 10 administrators who volunteered to participate in the study, and were from elementary schools (grade 1-8) across the region (Başakşehir, İstanbul). Detailed demographic information regarding the participants' gender, professional seniority, and educational background is provided in Table 1 below.

Table 1. Information on school administrators and teachers participating in the research

		N	%
Title	Administrator	10	28,57
	Teacher	25	71,43
Gender	Female	16	45,71
	Male	19	54,29
Age	21-30	9	25,71
	31-40	12	34,28
	41-50	9	25,71
	51-60	5	14,28
Education Level	Bachelor's Degree	24	68,57
	Master's Degree	11	31,42
Amount of Time Served at the School	1-3 Years	20	57,14
	4-6 Years	7	20,00
	7-9 Years	8	22,85
Professional Seniority	1-5 Years	13	37,14
	6-10 Years	6	17,14
	10-15 Years	8	22,85
	15-20 Years	8	22,85
Courses Taught Outside of Field	Yes	8	22,85
	No	27	77,14
Total		35	100,0

According to Table 1, 28.57% of the participants are administrators and 71.43% are teachers. Sixteen of the participants are female and 19 are male. In terms of education levels, 11 have a master's degree, 24 have a bachelor's degree; there are no doctoral degrees. Most

participants are new to the profession (1–5 years / 37.14%). 77.14% teach only in their own field, while 22.85% teach in fields other than their field. Participants were labeled as “T1...T25 – Teacher”; and “P1...P10 – Principal” to show the position of the owner of the quotes/discourse.

Informed Consent and Ethical Procedures

Prior to participation, all individuals were provided with a written and verbal explanation of the study covering: (1) the purpose of the research, namely to examine the experiences of teachers and administrators working in socio-economically disadvantaged schools; (2) the voluntary nature of participation, including an explicit statement that declining to participate or withdrawing at any point (before, during, or after the interview, and without providing a reason or facing any professional consequence) would not affect their standing at their school; (3) the procedures for audio recording, including that face-to-face interviews would be recorded using smartphones and dedicated recording devices, and that online interviews would be recorded via Zoom Cloud, with recordings accessible only to the research team; (4) confidentiality procedures, including that all identifying information would be removed from transcripts, that participants would be referred to only by alphanumeric codes as *Principal* and *Teacher* (P1....T1....) in any resulting publication, and that recordings would be stored securely and retained only for the duration required by the ethics protocol; and (5) their right to review, decline to answer, or request the exclusion of any specific response from the study. Written informed consent was obtained from all participants prior to the interview, and verbal consent was reconfirmed at the start of each recording. Ethics approval was received from Ibn Haldun University's Humanities and Social Sciences Ethical Review Board (approval number E-71395021-050.04-63720).

Data Collection Tool

In this study, a semi-structured interview form consisting of open-ended questions was used, allowing the researchers to engage in in-depth interaction with participants and gather information around predetermined topics. The interview questions consisted of 10 questions (see Appendix). To determine the questions, the researchers reviewed the relevant literature and obtained the opinions of faculty members with doctoral and associate professorship degrees working in educational sciences at universities, as well as expert teachers with master's degrees and 10 to 15 years of experience in schools affiliated with the Ministry of National Education. 28 questions were filtered down to 10 questions including

active learning techniques, entrepreneurial approaches, innovation, teaching, learning, and leadership.

Data Collection

The semi-structured interview form used in the study was presented to participants in two ways: face-to-face and online, and data was collected in December 2023. These two methods provided flexibility and broadened the scope of the study. Participants who could not be interviewed in person were contacted through online meetings to maximize participation. The researcher had the questions form at hand and directed the questions to the participants (interviewees). Face-to-face interviews were recorded through smartphones and recording devices, while online meetings were Zoom-recorded on Cloud.

Data Analysis

The qualitative data obtained through open-ended interview forms were analyzed using a systematic interpretive content analysis, conducted manually to maintain a close, nuanced relationship with the text. The quotes were labeled as "*Teacher*" and "*Principal*" to show to whom the discourses belonged to. This process began with initial open coding, where multiple readings of the transcripts identified distinct codes (n=25) which were subsequently organized via axial coding into conceptually similar categories and overarching themes (n=6). To ensure methodological rigor and objectivity, two independent researchers (the author and an expert in education technology research) coded the data and reached a consensus on the final structure, utilizing the Miles and Huberman (1994) formula to yield a reliability coefficient of 78% nearing the standard 80% acceptance level for qualitative research. Direct participant quotes were anonymized through alphanumeric codes (P1...P10 & T1...T25).

Frequencies and percentages were also used in the presentation of findings. This is justifiable as the frequencies and percentages are not meant for quantitative statistical analysis in this study; rather, they represent the descriptive statistics that are widely used throughout qualitative research to give an overview of the findings and support, rather than replace, the interpretive analysis described above. However, these numerical states were interpreted as wording phrases such as majority, half, few of the participants and so on to emphasize the qualitative nature of the study.

Findings

This section presents the findings obtained from the data analysis as displayed in Table 2.

Table 2. An overview of findings

Theme	Sub-themes / Categories	Core Finding (The "Meaning")
Educational Technology Use	Interactive Whiteboards (54.28%), EBA, Limited Web 2.0.	The Digital Bridge: Technology acts as the primary visual stimuli for students in resource-deprived homes.
Problems in the Education Process	Linguistic barriers (Turkish-Arabic), Lack of family support.	The Communication Wall: Language gaps create "pedagogical silence" and hinder foundational literacy.
Professional Training Needs	Technopedagogical training (48.57%), Active learning, Communication.	Contextual Survivalism: A shift from theoretical knowledge to practical "crisis-management" skills.
Social Entrepreneurship & Innovation	Professional Agency, Bricolage, Resource adaptation.	The Educator as Entrepreneur: Staff taking initiative to bridge systemic voids using limited local resources.
Role of Administrators	Communicative bridge (37.14%), Motivation, Limited Authority.	Relational Advocacy: Leaders functioning as emotional and structural buffers for their staff.
Teacher Competence Status	Digital literacy, Classroom management, High turnover impacts.	The Vulnerability Gap: High turnover (57% in 1-3 yrs) disrupts competence building and relational trust.

1. What is the Status of Educational Technology Use in Schools?

In line with the first sub-problem of the research, the participants were asked, "Do you use digital technology tools and materials in your lessons?" and "Is it possible to talk about the use of digital technology tools and materials throughout the school?". Through their responses, it was found out that all participants utilize digital technologies. Codes such as "Interactive Whiteboard," "EBA," "PowerPoint," and "Projector" emerged as displayed in Table 3. Teachers stated that they display images, videos, PDF books, and presentations on the interactive whiteboard to enrich their lessons.

Table 3. The use of educational technologies in schools

Technologies Used	f
Interactive Whiteboard	19
Web 2.0 Tools	4
Projector	3
Morpa Kampüs	4
EBA	3
Powerpoint	2
Total	35

According to the information provided in Table 3, the majority of participants preferred the Interactive Whiteboard as their educational technology, while a small number preferred Web 2.0 Tools; a similarly small number preferred a projector; a small number preferred the Morpa Kampüs; a small number preferred the EBA platform; and only a few preferred PowerPoint. Furthermore, many participants indicated in their responses that they utilize not only one educational technology but also other digital materials it supports.

Some participants' responses to the first sub-problem of the research are as follows:

P2 - Principal: "Before the smart boards, we used projectors and slides, but now we're enriching them with EBA content."

T18 - Teacher: "We can learn and use applications like animation, video, and Kahoot better."

P10 - Principal: "Smart boards are available as part of the Fatih Project, and teachers use them to make lessons visual and concrete."

The Interactive Whiteboard, used by the majority of participants, serves as a vital "digital bridge" and compensatory bridge in disadvantaged schools, shifting the teacher's role from lecturer to curator of visual enrichment. This reliance on structured platforms like Morpa Kampüs and EBA, each preferred by a small number of participants, facilitates educational standardization while reducing the individual preparation burden in high-pressure environments. Ultimately, the limited adoption of PowerPoint, used by only a few participants, reflects a strategic preference for real-time engagement over passive delivery, positioning technology's primary value as its ability to provide immediacy and visual impact within challenging classroom climates.

2. What are the Current Situation and Problems in the Education and Teaching Process?

In line with the second sub-problem of the research, participants were asked, "As teachers at school, what areas do you find most challenging when teaching?" and "What do you think are the main reasons why students at this school fail to achieve the desired academic success?" Codes such as "communication difficulties," "lack of family support," "classroom management difficulties," and "teacher inexperience" emerged from the common responses given by all participants as shown in Table 4.

Table 4. Current situation and problems in teaching processes

Current Situation and Problems	f
Communication Difficulties	11
Lack of Family Support	10
Difficulties in Classroom Management	8
Teacher Inexperience	6
Total	35

According to the information in Table 4, almost a third of participants responded that the current problem in their teaching process was "communication difficulties" with their students. Just over a quarter of participants cited "lack of family support," while a fifth cited "difficulty in classroom management," and a smaller proportion cited "teacher inexperience."

The large number of foreign students and the resulting communication difficulties are among the primary challenges teachers face. Students' lack of Turkish and teachers' lack of Arabic pose a significant obstacle, making it difficult for teachers to conduct lessons effectively. Furthermore, teachers face difficulties managing classrooms due to students' difficulties adapting to a different culture and a new school. Participants' responses to this are as follows:

T1 - Teacher: "The student doesn't speak Turkish. The teacher doesn't speak Arabic. Therefore, speaking in the same language is difficult."

T5 - Teacher: "So, a student who doesn't fully grasp Turkish can have difficulty adapting to the lesson."

P6 - Principal: "We have a large number of foreign students, and we also have students who don't speak Turkish. So, we struggle with the language barrier."

Participants also cite a lack of family support as another major challenge they face in their teaching process. According to participants, overprotection and a lack of responsibility in children lead to misbehavior. Furthermore, tolerating misbehavior, especially in foreign male students, poses a problem. Some participants' responses to this issue are as follows:

T3 - Teacher: "...Because children grow up in families, and we try to reshape the child here, from ages 0-6, in the hands of the family. They try to give them things they couldn't give them there. This deficiency in classroom management sometimes leads to children pushing the boundaries, and problem behaviors have reached their peak."

T4 - Teacher: "...We got the impression that male students can misbehave, harm others, and hit others. In other words, it's like they consider what their son does as normal. This makes the student feel like it's their right."

In light of other findings from the second sub-problem of the study, the participants' opinions are as follows:

T12 - Teacher: "The teacher thinks the heavy program is a problem. Will I be able to complete it by the end of the year?"

P3 - Principal: "...Well, of course, families in Başakşehir have a mixed-gender structure. Families aren't very conscious. So, because the children are mixed, their academic performance is low. Therefore, everyone is working. A parent, for example, doesn't come to school when we invite them because they're working, so that's a problem; it's hard to communicate."

T24 - Teacher: We generally struggle with classroom management. Until last week, we didn't even have an interactive whiteboard. Our classrooms are overcrowded, with 50-51 students sitting in groups of three. Sociocultural diversity, environmental factors, and family structure negatively impact the classroom climate.

P7 - Principal: Our school is overcrowded, and our region is disadvantaged. We have a high number of newly appointed teachers, and we have a shortage of materials and teachers. We also lack sufficient collaboration with parents. All of these factors cause problems.

The current situation in teaching processes, as delineated in Table 4, is characterized by a "pedagogy of crisis" where educators operate as cultural mediators rather than mere instructors. The primary challenge of communication difficulties, cited by almost a third of participants, represents a profound crisis of connection, leading to a state of "pedagogical silence" where the loss of shared language, evidenced by the Turkish-Arabic divide—paralyzes the teacher's ability to facilitate both academic and emotional guidance. This professional burden is exacerbated by a lack of family support, cited by just over a quarter of participants, which creates a sense of institutional isolation as the traditional educational triad collapses, leaving teachers solely responsible for navigating the students' socio-economic survival struggles without parental scaffolding. Furthermore, classroom management difficulties, cited by around a fifth of participants, are interpreted as symptoms of cultural friction and negotiation as students struggle to adapt to new institutional norms, while teacher inexperience, cited by a smaller proportion of participants, manifests as a

contextual mismatch or a "trial by fire" where academic training fails to align with the complexities of a disadvantaged multicultural setting. Collectively, these findings reveal a lived experience of systemic vulnerability, where the teacher's professional identity is redefined by the constant necessity of responding to external socio-economic and cultural upheavals.

3. What are Teachers' Professional Training Needs, Problems, and Recommendations?

In line with the third sub-problem of the study, participants were asked, "Do you think teachers at this school provide effective teaching?", "What active teaching techniques do teachers use or could use to support active learning at this school?", and "What skills would you like teachers to develop to better teach at this school?" General codes such as "Active Learning," "School Management," and "Education" emerged from the common responses of all participants as exemplified in Table 5.

Table 5. Teachers' needs, problems, and suggestions

Teachers' Needs, Problems, and Suggestions	f
Active Learning	8
School Administration	10
Training / Professional Development	17
Total	35

According to the information in Table 5, a few of the participants cited the lack of "active learning" in the classroom as a teacher's need and problem, while just over a quarter cited certain deficiencies stemming from "school administration." Nearly half of the participants advocated for training on needed support and recommendations.

In light of the suggestions derived from the participants' responses to this sub-problem, the majority of teachers and administrators believe that in-service training should be provided in various areas. Teachers, particularly those experiencing confusion regarding the integration of digital technologies into education, need technopedagogical training. Participants who also need support in public speaking and self-expression suggested that communication training be provided.

Some of the participant responses to the questions are as follows:

T7 - Teacher: "A class of 51 students is a serious problem. If one person is quiet, the other won't, so we generally resort to traditional methods. Still, I think we're making an effort and there are areas where we feel competent."

P8 - Principal: "Education should be both instructional and methodological. I believe seminars contribute and I direct my teachers to such training. Since we work in a region with intense parental communication, communication and experience-based training are important. Classroom management, material use, and course knowledge are already available; however, additional training should be provided for digital and social developments."

P6 - Principal: "The Ministry of National Education has projects; they always say let's train teachers, but I don't find it very realistic. Teachers must renew themselves and keep up with the times. Societies change, and technology changes even in 7-8 months. Teachers must keep up with themselves. They also have to love this job; it's impossible without love."

T14 - Teacher: "It could be more administrative. Classroom management improves over time, but it requires developing an attitude to deal with challenging students. From an instructional perspective, training can be provided on the use of new technologies and materials. Training programs such as creating your own games and websites would be more beneficial."

T11 - Teacher: "School administrators must also ensure the physical structure of the school. Our principal emphasized the importance of the library. He believed that the books should be appropriate for the student's level. Consequently, the number of books has increased from 500 to over 3,000."

P5 - Principal: "Teachers use digital platforms such as Morpa Kampüs, Okulistik, and EBA. We have eight workshops on visual arts, music, fairy tales, and robotics coding. We also have a gym. Teachers could be trained on the use of digital materials."

4. What is the Capacity for Developing Social Entrepreneurship and Innovation in Schools?

In line with the fourth sub-problem of the research, the participants were asked, "What are teachers doing to increase students' social entrepreneurship and innovation? What more can be done in your opinion?" From the common answers given by all participants, the current situation was "Active Participation in Projects" and "Student-Centered Activities", while codes were created from the participants' answers within the framework of "Technology-Focused Collaboration" in terms of suggestions as apparent in Table 6.

Table 6. The capacity for developing social entrepreneurship and innovation in schools

Current Situation and Suggestions	f
Active Participation in Projects	15
Student-Centered Activities	13
Technology-Oriented Collaboration	7
Total	35

According to the information in Table 6, regarding the current status of social entrepreneurship and innovation in schools, nearly half of the participants indicated "active participation in projects," while just over a third indicated "student-centered activities." Furthermore, a fifth of participants suggested "technology-focused collaborations" between different individuals and institutions to increase social entrepreneurship and innovation in schools.

In terms of social entrepreneurship and innovation, schools appear to prioritize raising environmental awareness in students and ensuring active participation on special occasions. Participants cited events such as Animal Rights, International Day of Persons with Disabilities, and Ramadan, emphasizing that instilling responsibility in students and fostering social participation should begin at home.

Some of the responses from participants regarding the current state of social entrepreneurship and innovation development capacity in schools are as follows:

P3 - Principal: "In the zero-waste project, students created products from waste materials, and the project won first place. The municipality provided significant support."

T13 - Teacher: "Project assignments highlight students' talents, and presentations and task assignments make children more active."

P4 - Principal: "So, you should give children responsibilities. Both at school, at home, and on the street. But unfortunately, as a family, we don't do this because we are very protective."

T17 - Teacher: "We need to take advantage of technological and socialization opportunities that appeal to students. We need to experience the world of diversity."

P9 - Principal: "Student participation in science studies and innovation competitions is facilitated by the Başakşehir Municipality. However, the Ministry's technology efforts appear to be inadequate; collaboration with relevant stakeholders is necessary for technology integration."

T15 - Teacher: "Students don't fully understand social entrepreneurship and related concepts; the basics need to be taught first. Current issues can be addressed with short discussions at the end of each lesson, and technology must be incorporated into the process."

The findings regarding professional training needs and recommendations reveal a workforce actively seeking professional empowerment as a strategic response to the complexities of disadvantaged schools. The strong demand for training and professional development, cited by nearly half of participants, reflects a deep-seated pedagogical insecurity, specifically a "technopedagogical confusion" where educators feel ill-equipped to

translate digital tools into meaningful learning outcomes. For these participants, specialized training is perceived not as an elective benefit but as a vital survival mechanism necessary to overcome the specific communicative and technological hurdles identified in their daily practice. Simultaneously, the focus on school administration, noted by just over a quarter of participants, suggests a structural disconnect, indicating that teachers feel their individual efforts are hindered by a perceived lack of supportive institutional scaffolding or leadership vision tailored to high-needs environments. Furthermore, the identified need for active learning, cited by a small proportion of participants, represents an aspirational shift away from traditional, teacher-centered methods; however, its classification as a persistent "problem" highlights a lived experience of frustration, where the desire for student-centered engagement is stifled by systemic constraints. Collectively, these results emphasize that the participants view educational success as being contingent upon contextualized competence, requiring an urgent synthesis of enhanced personal skills ranging from digital literacy to self-expression, and a more responsive, administratively supportive school culture.

5. What is the Role and Current Situation of Administrators in Education?

In the fifth sub-problem, the question *"What roles and responsibilities do you think school administrators should have to ensure students learn well?"* was addressed, and codes such as "Providing Motivation," "Effective Communication," "Organizing the Work Environment," and "Limited Authority in Management" were generated based on the common responses of all participants as presented in Table 7.

Table 7. The role of administrators in education and the current situation

Administrator Role and Current Situation	f
Providing Motivation	6
Effective Communication	13
Organizing the Work Environment	9
Limited Authority in Management	7
Total	35

According to the information in Table 7, regarding the role and current status of administrators in education, a small proportion of participants stated that administrators should provide more motivation at school; just over a third stated that more attention should be paid to effective communication; and a quarter stated that the physical work environment at school should be organized and improved. On the other hand, a fifth of participants

argued that administrators have limited authority in various areas, and therefore, education, training, and management can be improved through higher-level authorities.

Teachers expect the administration to listen to their needs and address the school's physical situation. However, it was stated that teaching materials cannot be provided due to budget constraints. The administration's roles in creating a positive learning environment, leadership, effective communication, and information sharing are emphasized.

Some of the responses to questions posed to participants to examine the role of administrators in the education process and their current situation are as follows:

P1 - Principal: "Ensuring that our teacher colleagues are as psychologically comfortable and able to express themselves freely as possible is crucial. In other words, effective communication is crucial."

T11 - Teacher: "Guidance should be more active. Changing classes with different teachers is good, but the curriculum is very strict, and flexibility is difficult."

T23 - Teacher: "Good communication between students, parents, and teachers is essential. Parents should support the teacher, and the administration should support the teacher."

P9 - Principal: "As an administrator, I try to set a good example. I collect garbage in the garden, prevent bullying, and sometimes even go into the classroom and teach."

The findings regarding the role of administrators reveal a significant shift from bureaucratic management toward relational advocacy, where Effective Communication, cited by just over a third of participants, serves as the primary psychological buffer against the professional burnout inherent in high-needs schools. Participants emphasize that the administrator's most crucial responsibility is ensuring that teachers remain "psychologically comfortable" (P1), acting as a communicative bridge to mitigate the isolation caused by linguistic and socio-economic barriers. However, this leadership potential is frequently hampered by Limited Authority in Management, noted by a fifth of participants, where strict curricular requirements and severe budget constraints (P11) create a structural trap. Consequently, in districts like Başakşehir, school leadership is defined by a paradoxical struggle: administrators are expected to be innovative social entrepreneurs and emotional anchors for their staff, yet they lack the decentralized autonomy necessary to bypass the systemic hurdles that prevent the provision of essential teaching materials and flexible pedagogical environments.

6. What is the Competency Status of Teachers?

The average responses to the question, "Generally, how competent do you consider yourself and other teachers in the classroom regarding the following subjects?" (Please explain using a score of 1-5) are shown in Table 8 below. This question was posed to participants in line with the final sub-problem of the study.

Table 8. Mean of responses

Evaluation Items	$\bar{x}$
Assessment and Evaluation Processes During the Term	3,91
In-Class Feedback System	3,97
Organizing Out-of-School Educational Activities	3,71
Providing One-to-One Guidance to Students	3,88
Teaching Students Independent Learning Skills	3,80
Average	3,85

The average score for competencies where the participants evaluated themselves and other colleagues out of 5 was moderately high, close to 4. In their opinions about the measurement and evaluation processes within the semester, roughly a third of participants gave 5 points, a quarter gave 4 points, just over a third gave 3 points, and only a few gave 2 points. For the in-class feedback system, close to a third gave 5 points, the largest share (two-fifths) gave 4 points, just under a quarter gave 3 points, and only a few gave 2 points. Regarding out-of-school educational activities, just under a third gave 5 points, about a third gave 4 points, just under a quarter gave 3 points, and a small number gave 2 points. Regarding providing one-on-one guidance to students, just under a third gave 5 points, the majority (over two-fifths) gave 4 points, only a few gave 2 points, and a very small number gave 1 point. In terms of transferring independent learning skills to students, a quarter gave 5 points, two-fifths gave 4 points, a quarter gave 3 points, only a few gave 2 points, and a very small number gave 1 point.

Overall, the interpretation of administrator roles and the current situation highlights a critical reliance on interpersonal and structural mediation within high-pressure educational settings. The prominence of effective communication suggests that in environments already plagued by linguistic and cultural barriers, the administrator is primarily viewed as a "communicative bridge" essential for harmonizing the disparate voices of the school community. This need for transparency is intrinsically linked to the desire for an organized work environment, where the lived experience of teachers is often defined by material

deprivation and the frustration of budget-driven constraints. For the participants, the administrator's role is characterized by the tension between the ideal of leadership and a perceived systemic paralysis, evidenced by the limited authority in management, which suggests that even leadership is viewed as being constrained by higher-level bureaucratic rigidities. Furthermore, the call for providing motivation underscores the psychological necessity of affective leadership; in a context of persistent socio-economic challenges, the administrator must serve as a buffer against professional burnout. Collectively, these findings portray school administration not as a top-down exercise in power, but as a struggle for resourceful advocacy, where leaders must constantly negotiate the immediate physical and emotional needs of the staff against the restrictive boundaries of institutional authority.

Discussion, Conclusion and Recommendations

This study attempts to provide a comprehensive phenomenological exploration into the professional existence of educators within the socio-economically disadvantaged landscape of the Başakşehir district in Istanbul. Interpretation in this study did not begin at the writing stage; each interpretive label discussed below was generated through an iterative process of moving from open codes (e.g., "Interactive Whiteboard," "communication difficulties," "lack of family support," "limited authority") to clustered categories, and finally to a condensed statement of experiential meaning as what Van Manen (1990) terms the "essence" of the lived experience underlying a category. Table 2 documents this code-to-meaning derivation for each theme; the discussion below returns to those specific codes and participant quotations to show, theme by theme, how the interpretive label was earned rather than imposed. The synthesis that follows also moves beyond treating these six themes as a list of parallel findings: the final section explicitly models how technology use, communication barriers, family support, administrative capacity, teacher turnover, and professional development needs function as an interlocking system rather than six independent problems.

The Digital Bridge: Technology at School as a Compensation to its Absence at Home

The label "digital bridge" was not attached to the Interactive Whiteboard (IWB) findings arbitrarily; it was derived from the pattern across codes in Table 3, where IWB use over half the participants consistently co-occurred with participant language describing technology as a substitute for absent physical and cultural resources rather than as a supplementary tool. P10's description of smart boards making lessons "visual and concrete,"

combined with P2's account of moving from projectors to EBA-enriched boards, and T18's emphasis on applications like animation and Kahoot, together point to a recurring function: technology as compensation for what students lack outside school. This pattern is what grounds the interpretive claim. In the context of schools serving unplanned settlements and resource-deprived homes, technology therefore ceases to be an elective enhancement and becomes a vital compensatory bridge by the school. As Selwyn (2021) observe, in socio-economically challenged regions digital tools act as a "window to the world," providing the diverse visual and cultural stimuli that students may otherwise lack in their immediate physical environments.

At the same time, the co-occurrence of Morpa Kampüs and EBA use with teacher accounts of large class sizes and limited preparation time (see also the classroom-management burden discussed below) suggests a second, more cautionary layer of meaning: a "platform-dependency." Educators managing 50-plus-student classrooms with minimal external support appear to rely on these pre-developed platforms as a strategic survival mechanism, reducing the cognitive load of material preparation. While this ensures a degree of educational standardization, Haleem et al. (2022) warn that such reliance can stifle "pedagogical imagination," as teachers may prioritize pre-vetted content over culturally responsive, locally adapted, individually-needed instruction. For these participants, then, technology is experienced simultaneously as an empowering window onto a wider world and as a protective shield against the exhaustion of constant professional improvisation. These are two meanings that are only visible when read together with the accompanying quotations rather than in isolation in Table 3 alone.

The Communication Wall and Marginalization

The communication difficulties captured in Table 4 within a third of the participants, particularly the Turkish–Arabic linguistic divide voiced by P10 ("The student doesn't speak Turkish. The teacher doesn't speak Arabic") and P6 ("we struggle with the language barrier"), could be representing more than a logistical obstacle; the recurring language of struggle, failure to "grasp" instruction (T5), and difficulty "conducting lessons effectively" across these accounts is what supports reading this category as a fundamental crisis of human connection rather than a simple skills gap. From a phenomenological perspective, this is feasible to be called a state of "pedagogical freeze": when the primary tool of instructional dialogue is paralyzed, the teacher's professional identity as a communicator, arguably the core of the

role, is directly threatened. This reading aligns with Cummins (2017) and García et al. (2025), who emphasize that the absence of "translanguaging" strategies in multicultural settings prevents students from making an "identity investment" in their learning.

This barrier is compounded by, and analytically distinct from, the lack of family support also coded under Table 4 with almost a third of the participants. T3's account of trying to "reshape the child" for behaviors rooted in the 0–6 home years, and P3's observation that working parents do not attend school invitations, together might point not to parental disinterest but to what could be interpreted here as a "weakening triple", also interpretable as the shrinking of the traditional teacher–student–family structure. An analytically deeper reading of this same code set might suggest the weakening is better understood as "structural displacement" (Souto-Manning & Epley, 2024) rather than parental indifference: families in disadvantaged, high-migration areas as in this research are marginalized from school culture by the pressures of migration and informal labor, not by a lack of investment in their children. For teachers, the practical meaning of this absence is institutional isolation; they describe feeling solely responsible for a student's academic and socio-emotional trajectory, carrying a weight that the home-school scaffolding described by Khalifa (2020) is designed to share.

The School as a "Revolving Door" and High Teacher Turnover

The demographic pattern in Table 1, an experienced workforce in aggregate, yet more than half of the participants with only 1–3 years of tenure at their current school, is safe to be read here through Ingersoll and May's (2011) "revolving door" concept, and this reading seems to be directly supported by participant accounts elsewhere in the data of newly appointed staff (P7: "a high number of newly appointed teachers") coexisting with material shortages. High turnover of this kind prevents the accumulation of "institutional memory" and the long-term relational trust between school and community that T13 and P7 describe as essential to managing communication and behavior. Recent meta-analytic work by Carver-Thomas et al. (2024) terms this pattern a "vulnerability gap," in which the most challenged students are consistently served by the most transient staff which is a description that could map directly onto the co-occurrence, in this dataset, of high turnover with the classroom-management and communication difficulties discussed above.

This instability appears not as a separate problem from the demand for professional development documented in Table 5, where almost half of participants cited training needs. Read alongside P8's request for "communication and experience-based training" and P6's observation that teachers "must renew themselves" as technology changes every "7–8 months," the training-needs category is likely to be interpreted as "contextual survivalism": a shift from theoretical, generalist teacher preparation toward practical, situation-specific "crisis-management" skills. As Darling-Hammond et al. (2025) argue, educators in high-needs settings require specialized training in trauma-informed practice and multicultural communication precisely because their initial academic training did not anticipate the density of challenges such as linguistic, behavioral, and material ones documented across Tables 3 through 7. In other words, the training-needs theme is not a freestanding request for more knowledge; it is kind of a mandatory gap opened up by the profession's challenging conditions particularly observed in disadvantaged areas such as turnover, communication barriers, and resource scarcity acting together.

Supportive Leadership and Dependency on Central Education Authority

The perception of administrators as "communicative bridges," cited by just over a third of participants (Table 7), is grounded in P10's explicit framing of the administrator's core task as keeping teachers "psychologically comfortable and able to express themselves freely," and in P7's account of leading by example (collecting garbage, preventing bullying, teaching classes personally). Together, these accounts support reading this category not as routine management but as relational and affective leadership. In crisis contexts of the kind documented throughout these findings, the administrator's role is interpreted as a buffer against staff burnout: Bush (2025) suggests that in such schools, effective leadership is defined by "emotional labor", that's, the capacity to listen, advocate, and provide psychological safety for teachers navigating the communication wall and family-support gaps described above.

However, the same interview accounts that establish administrators as emotional anchors also reveal the limits of that role. The "Limited Authority in Management" code (Table 7), together with T11's comment on rigid, inflexible curricula and P8 and P7's references to budget constraints preventing the provision of basic teaching materials, points to a second and conflicting meaning: administrators are held accountable for outcomes that normally central education authorities are responsible for. This is interpreted here as a

dependency on central education authority (Harris & Jones, 2025), in which school leaders are expected to be both innovative social entrepreneurs and emotional anchors for their staff, while budget, staffing, and curriculum remains centralized at a higher bureaucratic level. The result, read across both codes together, is a lived experience of leadership defined by resourceful advocacy operating within and constrained by bureaucratic boundaries it cannot itself renegotiate (Leithwood et al., 2020).

Integrated and Interacting Themes

Read together, the interview data suggests they function as a single, self-reinforcing system rather than six independent findings, and it is this system but not any one theme in isolation that constitutes the study's central interpretive claim: a school-level "pedagogy of crisis."

The linguistic and family-support gaps captured in the communication wall (Table 4) place a disproportionate instructional and emotional burden directly on individual teachers, since the traditional home-school partnership described by Khalifa (2020) is largely unavailable to absorb it. Lacking that support, teachers turn to the interactive whiteboard and standardized digital platforms (Table 3) not merely for enrichment but as a compensatory mechanism that allows a single teacher to sustain visual engagement and instructional pace in an overcrowded, linguistically divided classroom without relying on dialogue that language barriers make difficult. This dependency on technology as compensation, in turn, generates the "technopedagogical confusion" visible in the professional-development data (Table 5): teachers who use digital platforms out of necessity, rather than through pedagogical training, report feeling under-equipped to translate that tool use into deeper learning outcomes, hence the demand for technopedagogical and communication training.

Teacher turnover (Table 1) intensifies every link in this chain rather than operating as a separate issue. New teachers arrive without the accumulated, informal knowledge of how to manage the language barrier or compensate for family-support gaps that longer-tenured colleagues have built through experience; the "vulnerability gap" (Carver-Thomas et al., 2024) is therefore not simply about staffing continuity but about the loss, with each departing teacher, of exactly the contextual coping strategies that the training-needs data shows the remaining workforce is actively trying to formalize into professional development. Administrators, finally, sit at the point where all of these pressures converge: participants

describe leaders who must simultaneously motivate a transient and linguistically strained teaching staff, advocate for physical resources that would ease the technology and communication burdens, and absorb the emotional cost of turnover while lacking the centralized authority (Harris & Jones, 2025) to resolve the budgetary and structural root causes of any of these problems directly.

This integrated reading reframes the study's contribution: the disadvantaged school is not experienced by participants as a set of discrete deficits to be remediated one at a time, but as a single interdependent system in which technological compensation, communicative rupture, family disengagement rooted in structural displacement, administrative constraint, and staff turnover continuously reproduce one another. Addressing any one theme in isolation, for example, providing technopedagogical training without addressing turnover, or improving communication training without expanding administrative authority over resource allocation, is therefore unlikely to interrupt the cycle. The findings instead point toward interventions that target the connective tissue between themes: retention-focused policy that preserves the informal, contextual expertise turnover currently erodes; decentralized authority that would allow administrators to convert their relational advocacy into material change; and professional development explicitly designed around the linguistic and family-support realities of the local context, rather than generic technopedagogical content.

Conclusion

Taken together, these findings depict Başakşehir's disadvantaged schools as sites of a lived "pedagogy of crisis," in which teachers and administrators continuously improvise responses to systemic deprivation, linguistic division, and institutional instability using the limited tools available to them, chief among them the edtech tools such as interactive whiteboard, and informal relational leadership with self-initiated professional learning of teachers and principals. Future research and policy attention should therefore treat these mechanisms as interconnected: retention, resource decentralization, and contextually grounded training are unlikely to succeed as isolated reforms, but may be mutually reinforcing when pursued together.

The findings reveal a critical "vulnerability gap" created by high staff transience and a "broken triple" between the school, the student, and the home. The linguistic divide (Turkish-Arabic) creates a state of pedagogical inaction state that isolates both the teacher

and the learner. Furthermore, the identified demand for contextualized professional development indicates that current teacher preparation models may not sufficiently equip educators for the gritty, multicultural realities of disadvantaged urban settings. While administrators are viewed as essential "communicative bridges," their impact is often restricted by a lack of localized autonomy.

Limitations

Despite the depth provided by the phenomenological design, this study possesses several inherent limitations that must be acknowledged. Primarily, as a qualitative inquiry involving a purposive sample of 35 educators (principals and teachers) across 17 schools in the Başakşehir district of Istanbul, the findings are intended for "transferability" to similar socio-economic contexts rather than statistical generalization to the broader Turkish educational system. The cross-sectional nature of the research provides a temporal "snapshot" of professional perceptions; therefore, it does not account for the longitudinal shifts in adaptation or the long-term impact of the "vulnerability gap" on teacher competence. Furthermore, while rigorous methodological safeguards including bracketing, reflexivity, and peer debriefing were employed to ensure analytical rigor, the interpretative content analysis process inherently carries a degree of researcher subjectivity. Finally, the scope of this research is limited to 17 schools in grades 1-8; consequently, the specific navigational strategies identified may differ in vocational or high school settings where curricular pressures and student developmental stages present distinct technopedagogical challenges.

Recommendations for Policy and Practice

The recommendations below are offered as tentative implications drawn from a localized, qualitative study of 35 principals and teachers in Başakşehir, Istanbul. Given the phenomenological design, the small and geographically bounded sample, and the reliance on self-reported experience rather than outcome data, these implications are not intended as generalizable policy prescriptions. They are best read as context-specific possibilities that may be relevant to schools facing a similar constellation of conditions such as high linguistic diversity, unplanned settlement patterns, and staff turnover and that would benefit from further investigation, including confirmation in other disadvantaged districts, before being treated as a basis for broader policy change.

- *Context-Specific Training:* The communication difficulties described by participants in this study, particularly the Turkish-Arabic language divide, suggest that in-service training addressing multicultural communication and trauma-informed practice could be beneficial in schools with a comparable student population. Whether such training would meaningfully reduce the "communication wall" identified here, however, would need to be assessed directly; this study describes the need as experienced by participants but did not evaluate any specific training intervention.
- *Workforce Stabilization:* The high turnover reported by this sample (57% with 1–3 years of tenure at their current school) is consistent with participants' accounts of disrupted institutional memory and relational trust. This pattern may warrant attention from school-level or district-level administrators in similarly disadvantaged settings, though the present data cannot establish which incentives, if any, would be effective in reducing turnover, nor whether turnover in this district reflects conditions specific to Başakşehir or a broader regional pattern.
- *Administrative Flexibility:* Participants' accounts of "limited authority" alongside budget constraints suggest that, in this specific context, administrators may benefit from somewhat greater local flexibility in allocating resources to address immediate physical and social needs. We offer this as a possibility for local consideration rather than a general call for structural decentralization, since the appropriate degree and form of administrative autonomy would depend heavily on the governance context of a given school system and was not itself examined in this study.
- *Locally Adapted Digital Content:* Participants' reliance on standardized digital platforms (e.g., EBA, Morpa Kampüs) suggests that, at least within this sample, teachers may find culturally and linguistically adapted digital content more useful than additional hardware alone. This observation is specific to the technology environment described by these participants and should not be read as a general claim about educational technology policy beyond this context.

These points are intended to inform local practice and to suggest directions for further research, rather than to prescribe policy at a system or national level. Given the qualitative and localized nature of the study, we see their primary value in generating hypotheses that could be tested through larger-scale or comparative research across other

disadvantaged districts, rather than as evidence sufficient to guide broad policy reform on its own.

Within these limits, the educators in this study describe a role that extends well beyond conventional civil-service duties: in their own accounts, they often function as first responders to the socio-economic pressures affecting their students. For this particular group of participants, the meaning of their work appeared closely tied to their ability to sustain a degree of hope and visual engagement for students despite considerable structural constraints. While we are cautious about generalizing this characterization beyond the present sample, it suggests that supporting educators in comparable settings may require attention not only to individual teacher capacity, but to the broader relationship between the school and the socio-economic conditions of the community it serves. This is a relationship that this study describes but does not, on its own, provide sufficient basis to redesign at scale.

Author Contribution Statement

Mehmet Akın BULUT: Conceptualization, data collection, control, review-writing and editing

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Name of the board that carries out ethical assessment: Ibn Haldun University Humanities and Social Sciences Ethical Board

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References

- Akar, C., Demir, R., & Ulutaş, M. (2025). Problems of Turkish education and recommendations for solutions according to primary school teachers. *Turkish Journal of Education*, 14(1), 47–66. <https://doi.org/10.19128/turje.1466046>
- Akın, M. A., Karadaş, H., & Gövtaş, Y. Y. (2023). Dezavantajlı bölgelerdeki aday öğretmenlerin adaylık sürecine ilişkin görüşleri [Opinions of prospective teachers in disadvantaged regions regarding their probationary period]. *İnönü Üniversitesi Eğitim Fakültesi Dergisi*, 24(1), 124–147.
- Alp, G. O., & Baycan, T. (2023). Assessment of regional digital divide in Türkiye. *Quaestiones Geographicae*, 42(4), 43–61.
- Benjamin, R. (2024). *Enhancing engagement and achievement: Culturally responsive teaching methods for marginalized k-12 students* [Master's thesis] University of Groningen.

- Bisanz, A., Hueber, S., Lindner, J., & Jambor, E. (2019). Social entrepreneurship education in primary school: Empowering each child with the YouthStart entrepreneurial challenges programme. *Discourse and Communication for Sustainable Education*, 10(2), 142–156.
- Bush, T. (2025). Instructional leadership in the 21st century: Building on the Hallinger and Murphy PIMRS model. *Educational Management Administration & Leadership*, 53(3), 481–483.
- Carver-Thomas, D., Leung-Gagné, M., & Jeannite, D. (2024). *Tackling teacher shortages: What we know about California's teacher workforce investments*. Learning Policy Institute.
- Cummins, J. (2017). Teaching for transfer in multilingual school contexts. *Bilingual and Multilingual Education*, 3, 103–115.
- Darling-Hammond, L., Hyler, M. E., Wojcikiewicz, S., & Rushing, J. (2025). *Design principles for teacher preparation: Enacting the science of learning and development*. Learning Policy Ins
- Delikara, A. (2025). Technological transformation in music education: Opportunities, challenges, and future perspectives. *International e-Journal of Educational Studies*, 9(21), 338–349. <https://doi.org/10.31458/iejes.1756746>
- Erail, S., Erail, D., Çiçek, B., & Yıldırım, T. (2024). Öğretmenlerin tükenmişlik yaşamalarına neden olan okul içi unsurlar [School-based factors that cause teachers to experience burnout]. *Ulal Eğitim Dergisi*, 4(2), 679–693.
- Erdem, A. R. (2000). Eğitim sistemini geliştirme planı. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, 7(7), 153–161. <https://izlik.org/JA77BP52PZ>
- Finlay, L. (2002). Negotiating the swamp: The opportunity and challenge of reflexivity in research practice. *Qualitative research*, 2(2), 209–230.
- García, O., Kleifgen, J. A., & Cervantes-Soon, C. (2025). *Educating emergent bilinguals: Policies, programs, and practices for multilingual learners*. Teachers College Press.
- Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, 3, 275–285.
- Harris, A., & Jones, M. (2025). School leadership and professional learning: A symbiotic relationship? *School Leadership & Management*, 45(5), 367–370.
- Hockerts, K. (2018). The effect of experiential social entrepreneurship education on intention formation in students. *Journal of Social Entrepreneurship*, 9(3), 234–256.
- Ingersoll, R., & May, H. (2011). Recruitment, retention and the minority teacher shortage. Consortium for Policy Research in Education. CPRE Research Report #RR-69.
- Januszewski, A., & Molenda, M. (Eds.). (2013). *Educational technology: A definition with commentary*. Routledge.
- Kereci, N., Kereci, H., & Gök, T. O. (2023). Dezavantajlı bölgelerde görev yapan sınıf öğretmenlerinin karşılaştığı güçlükler: Ordu ili örneği [Challenges faced by classroom teachers working in disadvantaged areas: The case of Ordu province]. *Fen Matematik Girişimcilik ve Teknoloji Eğitimi Dergisi*, 6(2), 145–159. <https://izlik.org/JA88WW62KZ>
- Khalifa, M. (2020). *Culturally responsive school leadership*. Harvard Education Press.
- Kutluca, T., & Akran, K. (2025). Realistic mathematics education and integration of digital tools: a model development study for secondary school mathematics education. *International e-Journal of Educational Studies*, 9(20), 169–185. 5. <https://doi.org/10.31458/iejes.1604874>
- Leithwood, K., Harris, A., & Hopkins, D. (2020). Seven strong claims about successful school leadership revisited. *School Leadership & Management*, 40(1), 5–22.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.

- Mayled, L. H. (2018). *Low SES student achievement: A quantitative study of technology-enabled active learning in secondary STEM courses* [Doctoral dissertation, Grand Canyon Uni.].
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Sage Publications.
- Moustakas, C. (1994). *Phenomenological research methods*. Sage Publications.
- Nabi, G., Liñán, F., Kirby, D. A., & Ibrahim, N. (2011). The case for (social) entrepreneurship education in Egyptian universities. *Education+ Training*, 53(5), 403–415.
- Ökten, M. S. (2024). Türkiye’de dijital dönüşümün eğitimdeki fırsat eşit(siz)liği üzerindeki etkileri [The effects of digital transformation on equality (or inequality) of opportunity in education in Turkey]. *Sosyolojik Bağlam Dergisi*, 5(3), 531–556.
- Patton, M. Q. (2014). *Nitel araştırma ve değerlendirme yöntemleri* (Çev. M. Bütün ve S. B. Demir) [Qualitative research and evaluation methods (Translated by M. Bütün and S. B. Demir)]. Pegem Akademi.
- Pollock, M., Yonezawa, S., Gay, H., & Rodriguez, L. (2019). Pursuing deep equity in “blended” classrooms: Exploring the in-person teacher role in supporting low-income youth through computer-based learning. *Teachers College Record*, 121(5), 1–40.
- Selwyn, N. (2021). *Education and technology: Key issues and debates*. Bloomsbury Publishing.
- Sessoms, D. (2023). Content-neutral technologies as a pedagogical response in high-needs schools and communities: Design thinking, making, and learning. In *Digital learning in high-needs schools* (pp. 99–117). Routledge.
- Souto-Manning, M., & Epley, P. H. (2024). Equity and justice: Imperatives for early childhood teaching and teacher education. *Contemporary Issues in Early Childhood*, 25(2), 158–161. <https://doi.org/10.1177/14639491241260933>
- Steinfeld, A. (2020). *Best practices in student education: Inspiring teachers to make a difference with students living in poverty* [Doctoral dissertation, Pepperdine University]. ProQuest.
- Şahin, M. (2026). Content analysis of the Ministry of National Education’s strategic plans: The 2015–2024 Period. *International e-Journal of Educational Studies*, 10. <https://doi.org/10.31458/iejes.1782936>
- Tosun, Ş., Bozkurt, A., & Özmantar, M. F. (2026). The effect of professional development-supported instructional practices on students’ algebra achievement. *International e-Journal of Educational Studies*, 10. <https://doi.org/10.31458/iejes.1810576>
- Usubakunov, E. (2024). Effective strategies for managing the learning process in schools: adapting educational technologies to support children from disadvantaged families. *Trends in the Development of Science and Education*, 116(2), 166.
- Van Manen, M. (1990). Beyond assumptions: Shifting the limits of action research. *Theory into Practice*, 29(3), 152–157.
- Wilson, W. J. (1991). Studying inner-city social dislocations: The challenge of public agenda research: 1990 presidential address. *American Sociological Review*, 56(1), 1–14.

Appendix. Interview Questions

1. Do you use digital technology tools and materials in your lessons?

a) Which technology do you use and how? (What materials are used, and with what methods, techniques, content, and evaluations?)

2. Is it possible to talk about the use of digital technology tools and teaching materials throughout the school?

a) What are frequently used as teaching materials?

b) What do teachers do?

c) What should they not do?

3. In which areas do you, as teachers, find it most challenging when teaching at school?

a) Which of the following topics is the most challenging?

b) Apart from these topics, which topic is the most challenging?

4. In your opinion, what are the most fundamental reasons why students in this school cannot achieve the desired success in their lessons?

a) What could be related to teachers?

b) What could be related to families?

c) What could be related to the environment?

d) What could be related to the administration?

5. Do you think the teachers at this school provide effective teaching?

a) If yes - How do they achieve this?

b) If no - Why, what do you think are the most fundamental teaching errors?

6. What active teaching techniques do the teachers at this school use or could use to support active learning?

7.

⊗ Social entrepreneurship is the creation of innovative solutions to social and environmental problems.

⊗ Innovation is the development of a new or improved product, process, or method.

⊗ Social entrepreneurs leverage innovation for social innovation.

In this context, what are the teachers doing to increase the social entrepreneurship and innovation of their students? What more do you think can be done?

8. What skills would you like the teachers at this school to develop in order to implement better teaching processes?

a) If training were to be given to teachers in this school, what kind of training do you think should be given? (Explain in terms of instruction and methodology)

9. What roles and responsibilities do school administrators have for students to learn well?

a) Do you think school administrators fulfill these roles and responsibilities? (Why or how? Explain with examples.)

b) Are there other things that school administrators can or should do to support students' good learning? (If so, what are they?)

Please provide a general assessment.

10. In general, how adequate do you and other teachers see yourselves in the classroom in the following areas? (Explain by rating from 1-5)

1. In-term measurement and evaluation processes

2. In-class feedback system

3. Organizing extracurricular educational activities

4. Providing one-on-one guidance to students

5. Transferring independent learning skills to students.