Impact of Accreditation on Schools: An examination in Terms of Open System Elements

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This study aims to examine the effect of accreditation on schools in terms of open system elements. For this purpose, the research was designed as a multiple-case study. Three private primary schools accredited by International Baccalaureate Organization's Primary Years Program (PYP) were chosen as cases. The data were collected through interviews, observations, and documents. The data were analyzed using Katz and Kahn's Open System Theory with a thematic analysis method. Although the three schools have different characteristics, it has been observed that the PYP has similar and positive effects on the system elements. The formation of these positive effects and the successful implementation of the program was observed to be dependent on the attitude of the school community towards the accreditation program. The findings also suggested that the professional competence of the staff as PYP practitioners, the adaptation of change, communication, and team skills played a decisive role. Teachers and administrators working in PYP schools reported that they experienced tension in aligning the national curriculum with the PYP and balancing academic success expectations with the program's achievements. To cope with such tensions, it is argued that schools that want to be accredited need to analyze their realities in terms of the school vision, economic conditions, and parent expectations. It is suggested that schools will benefit better and manage the accreditation process successfully when relevant evaluations, before the start of accreditation studies, are performed on sustainability, cost-benefit, and readiness of the school community.

Introduction

The search for new ways and methods to harmonize education with today's needs and conditions has brought the issue of "quality in education" to the policy agenda. Underlining that "Turkey needs a 'National Education Sector Strategy", The World Bank report (2006) states: "Turkey's future depends on the educational qualifications of its employees. Quality is the key"

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(Arslan, 2008). Ensuring quality requires the establishment of certain standards for the measurement, evaluation, and improvement processes which are executed by independently structured institutions. To that end, accreditation's role in quality improvement strategies in the Turkish education system becomes an issue that requires serious research attention.

Accreditation is defined as a written and official statement that informs the quality of an institution or program as an outcome of the evaluation based on predetermined standards (Kısakurek, 2007). The relevant literature suggests accreditation as a way to improve quality in different countries; and in fact, numerous studies are reporting positive effects of accreditation on quality improvement (Blouin, Tekian, Kamin, & Harris, 2018; Dattey, Westerheijden & Hofman, 2017; Lejeune & Vas, 2009; Nguyen & Hien, 2017; Pham, 2018; Ramirez, 2014; Wood, 1999; Wozniak, 2017). These studies provide evidence of this direction in schools of different types and levels.

Accreditation works in Turkey

Accreditation, in Turkey, is considered a way of ensuring quality standards in education mainly by private schools. The financial costs of accreditation make it unattainable for public schools. Private schools, on the other hand, manage their budgets and strive to make a difference in the competitive market via accreditation. The Council of International Schools (CIS), New England Association of Schools and Colleges (NEASC), and International Baccalaureate (IB) are accreditation bodies serving schools all over the world. There are 130 private schools accredited by these institutions in Turkey. Of these schools, 22 have CIS (www.cois.org), 6 NEASC (www.neasc.org), and 102 IB (www.ibo.org) accreditations. Some schools have received accreditation from more than one institution. Particularly, this study focuses on IB-PYP which is the most common type of accreditation in Turkey.

International Baccalaureate (IB)

The IB aims to empower school-age students to take ownership of their learning and help them develop future-ready skills to make a difference in a rapidly changing world. IB is a program accreditation body in international education that emphasizes knowledgeable, self-confident, and compassionate youth. The IB offers programs to 1.950.000 K-12 students at 5.500 schools in 160 countries around the world. Between 2016 and 2020, the number of IB programs offered worldwide increased by 33.3% (www.ibo.org). To realize the IB's philosophy and mission, it offers programs to schools for different age groups. Specifically, this study concentrates on the Primary Years Program (PYP), which is the first step of a lifelong learning journey for students aged 3-12.

The PYP aims to raise individuals who research, question, think critically, solve problems, and advocate for a better and more peaceful world (IBO, 2014). According to statistics on IB-accredited schools as of December 2021 (www.ibo.org), 1097 schools in the world and 32 schools in Turkey have PYP programs. Studies aimed at understanding the various effects of IB-PYP in schools in the international arena focused on areas such as school climate (Boal & Nakamoto, 2020), school leadership (Day et al, 2015), social and emotional well as academic development of students (Dix & Gregory, 2020), philosophy of education and internationalization (Getchell, 2010), assessment of student development and learning (Toe et al, 2015), learning approaches (Savage & Drake, 2016), positive school change, quality processes, student achievement, and impact on school status/reputation (Wood, 1999), student outcomes, pedagogical practices, and school culture (Gough et al., 2014) teacher characteristics such as knowledge, skills, abilities, and dispositions (Twigg, 2010).

Accreditation depends on the establishment of a system that evaluates a school's management processes, education programs, teacher development programs, and physical and technological resources and approves schools' compliance with the standards determined worldwide. Therefore, a proper understanding of the effects of accreditation requires consideration of such a wide variety of elements for which the open system approach provides a comprehensive perspective.

The system approach

Senge (2006) defined a system as a set of interrelated elements that act as operating units. Organizations are socially open systems and are in continuous interaction with the environmental organizations (systems) they are related. According to the open system theory (Katz & Kahn, 1977), organizations receive inputs from their environments, which are then processed, transformed, and presented to the environment as products and outputs. Feedback is seen as essential for the nurturing and continuity of the system. Lunenburg and Ornstein (2013) propose that open systems consist of five basic elements: inputs, transformation process, outputs, feedback, and environment. Inputs involve four main types: human, financial, physical, and information resources. The transformation process in educational organizations indicates that students are transformed by the school system as educated individuals and then contribute to the environment. This transformation includes people-culture, structure, administration processes, education processes, physical infrastructure and technology, and research and development. Outputs refer to the products in the system which are represented by results or achievements. Types of outputs include student achievement, teacher performance, job satisfaction, and the teacher's or students' development level. Feedback affects future outputs by contributing to the elimination of deficiencies in the inputs or the transformation process. The environment consists of the social, political, and economic forces that surround and affect the school. Systems must manage and improve the "internal" functioning while simultaneously observing the external environment and responding to and predicting "external" demands.

Lunenburg (2010) adapted the open system theory to the school. In this adaptation, three components of the system theory, namely the inputs, processes, and outputs, are particularly influential on the functioning of schools. Figure 1 illustrates the open system adapted to schools with these elements.
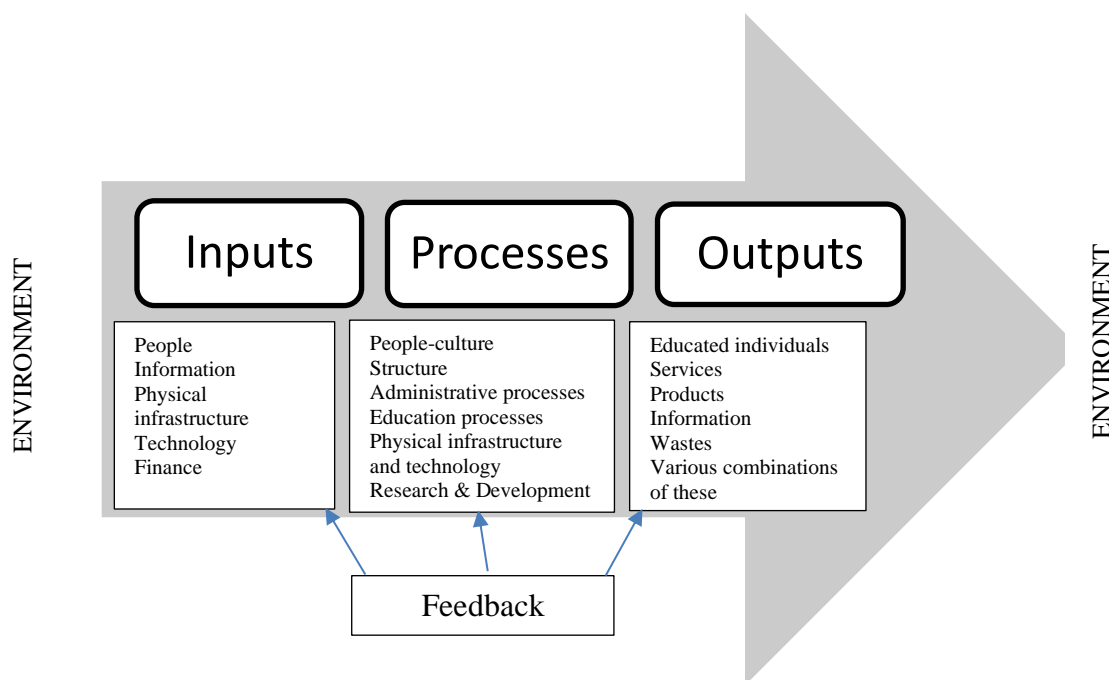
Figure 1. Adaptation of the open system model to the school (Lunenburg, 2010)

Statement of problem and research questions

Considering the rapidly changing role of the education system and schools, the development and improvement expected from these institutions become even more evident. This contributes to the importance attached to the notions of quality improvement and accreditation which have emerged as research areas for the Turkish education system. Parallel to this, in recent years, the issue of accreditation in education received considerable research attention in Turkey and research attempts in this direction are gradually increasing (Akdoğan, 2014; Arslan, 2008; Özkanoğlu, 2015; Uçman, 2019; Ülker, 2015). However, few studies appear to focus on the effects of accreditation on approved schools. The available research on the effects of accreditation focuses on different dimensions. For example, Wood (1999) examined the accreditation effect on four main areas: positive school change, quality processes, student achievement, and the status/reputation of the school. Patel (2012) investigated the effects of accreditation processes on student learning and achievement. Lejeune and Vas (2009) evaluated the impact of accreditation on organizational effectiveness and culture.

Research studies conducted in Turkey emphasized certain variables such as assessment and evaluation (Seheryeli & Gelbal, 2020), student achievement (Kocabaş & Akkök, 2007), teacher competencies (Gürkan, 2020; Uçman, 2019), learning-teaching processes (Özkanoğlu, 2015; Ülker, 2015), effective school characteristics (Koca & Ünal, 2018; Uçman, 2019) and school culture (Akdoğan, 2014). However, there does not appear any study that explicitly and thoroughly addresses the effects of accreditation on all elements of the school as proposed by the system approach.

In this study, the system approach was used as a theoretical framework to examine the effects of accreditation on schools in terms of open system components: input, process, output, feedback, and environmental elements. Schools are organizations that consist of subsystems and are also part of larger systems. Educational organizations are multi-faceted and composed of groups, and this makes it necessary to approach educational organizations based on a system

approach (Bursalıoğlu, 1978). The open system theory has provided a new perspective to administrative sciences and educational administration and has led to the consideration of educational institutions as an open social system (Yalçınkaya, 2002).

This study focuses on IB-PYP accreditation and aims to examine the effect of accreditation on schools in terms of open system elements. Within the scope of this aim, this study attempts to answer the following research questions:
1. What are the effects of accreditation in approved schools in terms of system elements?
    1.1. What are the effects of accreditation on input components (people, information, technology, finance)?
    1.2. What are the effects of accreditation on process components (human, structure, management, education and training processes, physical structure and technology, research, and development)?
    1.3. What are the effects of accreditation on output components (trained students, products, finance)?
    1.4. What are the effects of accreditation on the feedback system?
    1.5. What are the effects of accreditation on the relation of schools with the environment?
2. How do the effects of accreditation in terms of system elements differ across schools?

The findings of these research questions are expected to shed light on the role of accreditation in terms of quality improvement strategies in education.

Method

Research design

    This study adopted a qualitative approach and was designed as a multiple-case study. Within the scope of the study, three primary schools accredited by IB-PYP were selected as cases. The multiple-case method provides opportunities to identify divergent and convergent themes and also allows cross-case analysis for the corroboration of observed themes (Creswell, 2007). Three schools were selected with a criterion sampling strategy. The selection criteria for the schools were as follows:

- Different years of establishment (1985, 2005, 2008),
- Accreditation approval in different years (2012, 2014, 2020),
- Whether accreditation renewal was attempted (first and second-time accredited schools),
- Different IB accreditations (PYP, DP)
- Different institutional structures (chain, private tutoring school, and boutique school),
- Operating in different provinces (Ankara, Istanbul)

Meeting these criteria, initially, five schools were determined. Three schools accepted share data and hence were selected for the study. The characteristics of the selected schools are presented in Figure 2.
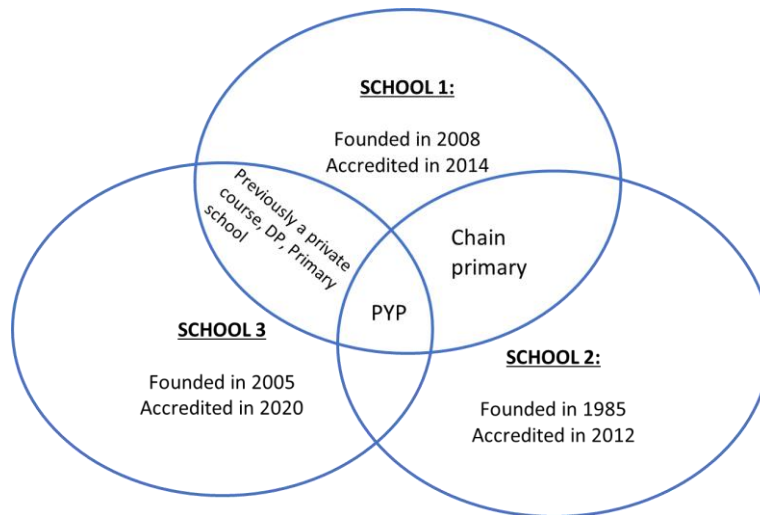
Figure 2. Characteristics of the schools included in the study

Data Collection: instruments and procedures

Data were collected through interviews, observations, and documents. Therefore, by using multiple sources instead of a single source of evidence, data triangulation was performed to reinforce the findings and it was possible to create a connection between the evidence (Yin, 2003). The data were collected in the 2020-2021 academic year, over a period of 5 months. The data collection process was detailed in Table 1.

Table 1. Data collection process

Interviews	• Semi-structured interview protocol • Literature review, field study, document analysis
Observation	• School visit observation form • School tour and classroom observations
Document Analysis	• Examining websites • Samples of documents on PYP practices

Interviews

A semi-structured interview form was utilized as a data collection tool in the interviews, and the questions were presented to the administrators and teachers participating in the study to comprehend the effects of accreditation on the elements of the open system. While preparing the interview questions, in line with the problem and purpose of the current research; a literature review, field study, and document analysis were conducted.

Throughout the literature review, accreditation in education, the relationship between quality improvement and accreditation, the effects of accreditation in different school types and levels, and the elements of the open system were investigated.

For the field study, interviews were conducted with 11 private school administrators working at different levels, two administrators who worked in accredited schools of different types and levels and took part in the accreditation process, and a faculty member who took part in the accreditation process of the curriculum implemented in a faculty of education.

Additionally, opinions were received from three different field experts for the interview

protocol developed at the end of the process, and pilot interviews were conducted with three administrators and two teachers who have accreditation experience, and afterward, the teacher and administrator interview forms were finalized. In the first part of the interview forms, three questions contain the demographic information of the participants; In the second part, there are 19 questions in the administrator form and 23 questions in the teacher form. Interviews were conducted online and lasted between 45-65 minutes.

Observation

A "School Visit Observation Form" was created by filtering the items visible during the school visit from the questions in the interview form. Considering the data obtained from the interviews, the schools were visited by the researcher. During this visit, school tours and classroom observations were carried out, and the observation form was filled by asking questions to the PYP coordinator, administrators, teachers, and students.

Document Analysis

The documents related to the implementation of the PYP such as the web pages of the schools, inquiry programs, unit plan samples, parent bulletin samples, samples from the assessment-evaluation practices at the school, samples of student work, form samples related to parent satisfaction and communication were examined and compared with the interview and observation data. Furthermore, the web pages of the accreditation institutions (IB, CIS, NEASC) serving schools worldwide and accredited schools in Turkey (www.ibo.org, www.cois.org, www.neasc.org) were examined. In addition, the documents containing the conditions, accreditation process, and standards that schools must fulfill in the process of accreditation were scrutinized. In addition, the 2023 Education Vision document by MoNE was examined and the objectives and actions in the document on quality and accreditation in education were noted.

Participants

Participants from the schools were selected based on the maximum variation sampling technique from the three schools to examine the effects of accreditation. While selecting the administrators and teachers, care was taken to achieve a variation in terms of professional seniority, year of service at school, branch, and level of position. Following these criteria, a total of twenty-one participants were interviewed including twelve teachers, one department head, two principals, three vice principals, and three PYP coordinators, all of whom were working in three primary schools. In this study teachers are shown as T1, T2, and T3; administrators are shown as A1, A2, and A3. Also, schools are shown as S1, S2, and S3.

Data Analysis

In this study, thematic analysis was utilized. As a data analysis framework, open systems theory (Katz & Kahn, 1977) and its adaptation to schools (Lunenburg, 2010; Lunenburg & Ornstein, 2013) were employed. The input, process, output, feedback, and environmental elements of the open system constituted the framework to explore the impact of accreditation at school and the effects of accreditation on the elements of the school system. With the cross-case analyses, the similarities and differences were established through the comparison of the schools. The phases of data analysis are illustrated in Figure 3.
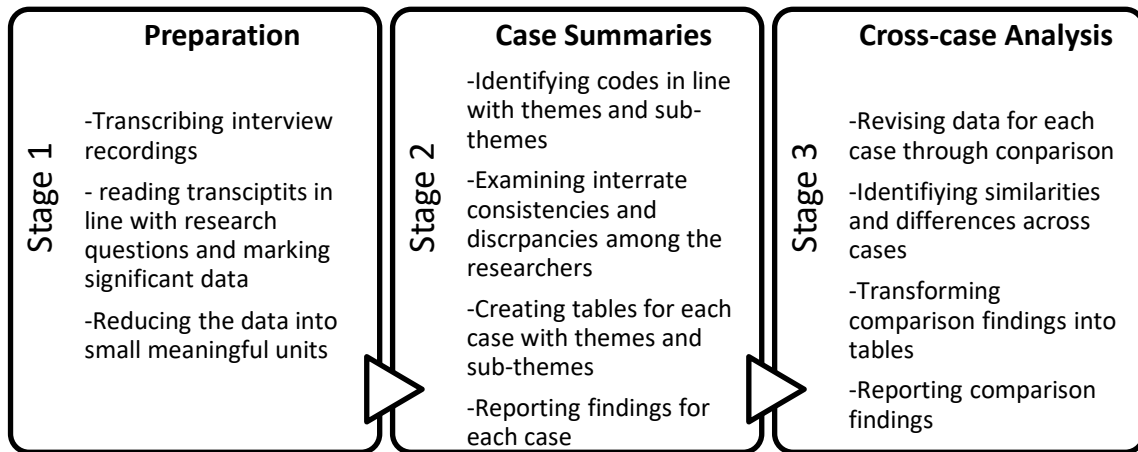
Stage 1	**Preparation**	Stage 2	**Case Summaries**	Stage 3	**Cross-case Analysis**
	-Transcribing interview recordings		-Identifying codes in line with themes and sub-themes		-Revising data for each case through conparison
	- reading transciptits in line with research questions and marking significant data		-Examining interrate consistencies and discrpancies among the researchers		-Identifiying similarities and differences across cases
	-Reducing the data into small meaningful units		-Creating tables for each case with themes and sub-themes		-Transforming comparison findings into tables
			-Reporting findings for each case		-Reporting comparison findings

Figure 3. Stages in data analysis

Credibility and trustworthiness measures

In the current study, the data triangulation technique was used to increase credibility. Data were collected through multiple sources including interviews with the participants, observations made by the researcher by visiting schools, and document analysis. Yin (2003) suggests that whatever a researcher's purpose is, multiple case studies are generally considered more credible and more robust. Data obtained from interviews, observations, and documents with 21 people from three different schools with different perspectives on their duties were compared and cross-examined benefiting from multiple data sources. Another widely used strategy to ensure trustworthiness is member-checking (Merriam, 2009). To that end, six of the interviewed participants (two from each school) were reached again; their opinions were asked about the findings that started to emerge, and adjustments were made considering their feedback.

To ensure the reliability of coding, the data were analyzed by two experts, and the findings were compared. An agreement was sought out for the codes and themes at every stage in the process of achieving consensus among coders. In addition, after the interviews, observation findings, and document analysis were reported, three different field experts were asked for their opinions, and essential modifications were made after receiving their verbal and written feedback.

Findings

In this section, schools were compared through cross-case analysis. Findings on the effects of accreditation on system elements are elaborated under separate headings

Input elements

As a result of the interviews with 21 different participants from three different schools, the themes, sub-themes, and codes are presented in Table 2.

Table 2. Comparison of accreditation effects by input elements

Theme	Sub-themes	School-1 Codes	School-2 Codes	School-3 Codes
Input	People (Employee and parent profile who prefer the school)	Reason for preference	Reason for preference	Reason for preference
	Information (Mission and goals, plans, curricula)	Harmony with philosophy, development orientation in planning, alignment with the national curriculum, differences between grade levels	Harmony with philosophy, development orientation in planning, alignment with the national curriculum	Harmony with philosophy, development orientation in planning, alignment with the national curriculum
	Technology	Having the required qualifications and learning how to use them	Having the required qualifications and improving them	Having the required qualifications and learning how to use them
	Finance	Resource utilization, financial sustainability	Resource utilization, financial sustainability	Resource utilization, financial sustainability

Regarding the people sub-theme, the participants associated the PYP effect on the school preference of parents and employees with the perspective of the people and their expectations from the school. They stated that parents and employees whose perspectives and expectations match the philosophy offered by the PYP prefer the school and that increasingly more parents prefer the school knowing the program. However, they also noted that when schools decided to become accredited; some parents and employees left the school as their perspectives and expectations did not match with this new philosophy and practices.

In the information sub-theme, the participants stated that the vision and mission of all three schools were in line with the philosophy of the PYP before accreditation, and this harmony played an important role in taking the accreditation decision. At the same time, this finding was corroborated by the vision and mission statements of the schools in the document analysis: "adopting universal values, learning by doing-experience, being productive, creative and responsible, finding solutions to problems, respecting other cultures and having international awareness, environmental awareness, research, and communication". During the accreditation process, the mission and aims of the schools were updated and developed in line with the expectations of the IB. Participants accentuated that their schools had long-term plans focusing on the PYP. School 1 expounded that the information that accreditation provided to the school about its strengths and areas for improvement contributed to the school's focus on development plans. School 3, on the other hand, affirmed that the focus of their schools in their plans evolved from academic success to raising sophisticated individuals and developing teachers in this direction.

Regarding the education programs, it was observed that all three schools designed their curriculum by aligning the PYP and the national curriculum. Participants stated that this curriculum design process in their schools was a challenging process for teachers, but it improved their professional skills. While participants from School 1 stated to have easily aligned the PYP with the national curriculum at lower levels (3rd and 4th grades), they had difficulties as the objectives and content in the national curriculum intensified with the increasing grade levels. Participants accounts made it clear that this challenge was mostly

experienced in the alignment of the mathematics course with the PYP objectives.

As far as the sub-theme of technology is concerned, all three schools reported having the physical and technological resources required by the PYP. While School 2 expressed that the physical-technological equipment was renewed in case of need, Schools 1 and 3 explained the effect of the PYP on the physical-technological equipment by defining it as learning how to use the hardware in a way serving to achieve learning objectives. The observations carried out at the schools uncovered that all three schools were rich in technological types of equipment which were actively used and were at students' disposal in line with the aims of the program.

In the sub-theme of finance, all three schools stated that the cost of accreditation includes large and challenging expense items for the school and that financial sustainability was one of the most critical issues to be considered while applying for accreditation. An administrator (School 1/A3) made the following statements about that matter:

"... the program is paid in foreign currency since it originates abroad, and I mean large sums of money. So, that part is challenging, yes, it is not easy for schools to pay such an amount every year. I suppose it is very important for the school to carry out this work within the framework of a plan and a rationale and to make its expenditures here."

Process elements

The findings in the process elements of the open system concern people-culture, structure, management, education training, infrastructure, and research and development sub-themes which were presented along with the codes in Table 3.

Table 3. Comparison of accreditation effects in terms of process elements

Theme	Sub-themes	School-1 Codes	School-2 Codes	School-3 Codes
Process	People-Culture: (Student communication, parent communication, teacher group work, communication and cooperation between units, organizational culture)	Cooperation in communication and relationships, interaction, shared decision-making, contribution, change in organizational culture	Cooperation in communication and relationships, interaction, shared decision-making, contribution, change in organizational culture	Cooperation in communication and relationships, interaction, shared decision-making, contribution, change in organizational culture
	Organizational structure	Less hierarchical structure	Creating job openings	Creating job openings with, a less hierarchical structure
	Administration	Managerial communication and relationships, cooperation, participation in decision-making, administrative support	Managerial communication and relationships, cooperation, participation in decision-making, administrative support	Managerial communication and relationships, cooperation, participation in decision-making, administrative support

Education	Joint planning, making students active, methodological-technical-material richness, the discrepancy in harmony between teachers, facilitating classroom management, variety in assessment and evaluation	Joint planning, making students active, methodological-technical-material richness, the discrepancy in harmony between teachers, facilitating classroom management, variety in assessment and evaluation	Joint planning, making students active, methodological-technical-material richness, the discrepancy in harmony between teachers, facilitating classroom management, variety in assessment and evaluation
Physical infrastructure and technology	School atmosphere and its impact on learning	School atmosphere and its impact on learning	School atmosphere and its impact on learning
Research&Development	Continuous improvement	Catching up with new technologies, integration of new technologies	Continuous improvement

In the sub-theme of people-culture, participants voiced that the PYP has positive effects on teachers' communication with their students. Examples of teacher descriptions of their communications include the following terms: more democratic, more sharing, more sincere, and more partnership-based. They uttered that their roles have also changed in teacher-student relationships, that the teacher has changed from being a knowledge transmitter to a guide, and the role of the students has turned into taking responsibility for their learning. A teacher's (School 3/T3) account nicely illustrates this observation:

"I can say that the child's self-discipline is the key point that improves me the most in this process. I realized that I needed to support the development of the child's self-regulation. Now, I care more about the children doing things themselves".

This positive communication environment was also observed in the visits made to schools. Participants from all three schools emphasized that these positive effects of the PYP could vary from teacher to teacher depending on teachers' adaptability to change and their professional skills, and some teachers needed more time and support for this.

Regarding the effects of PYP on communication with parents, participants from three schools stated that PYP increased communication with parents through their involvement in the learning process. They also indicated that they tried to establish new communication channels for the parents to understand the program objectives properly and to ensure healthy communication; and that they explained the schools' practices for this purpose.

Participants' accounts also revealed that communications and collaborations among teachers increased and this, in turn, improved and enriched teachers' practices and teamwork skills.

The findings obtained from all three schools regarding the effect of PYP on the organizational culture of the school indicated that the PYP influenced the school culture as well. While Schools 1 and 2 explained this impact as a softer school climate in which common language and values come to the fore, School 3 mentioned the systematization and clarity that the standards,

directives, and policies brought by PYP have added to the school culture. In School 1, unlike other schools, it was reported that when the PYP was considered at the K-12 level, it did not match with the organizational culture in that there emerged a contradiction between the exam-oriented system after primary school and what the PYP offered to students. A teacher (School 1/T4) made the following remarks in this regard:

"...these children are educated very well, starting from kindergarten, they discover and learn everything to the fullest. When they start secondary school, none of those processes they went through in primary school remain. It works completely exam-oriented. That's why I don't think it's very appropriate for the school culture."

Considering the sub-theme of organizational structure, it is seen that PYP coordinators have been added to the organizational chart of three schools. While Schools 1 and 3 stated that the PYP reduced the hierarchical structure in the school and thus cooperation and communication increased in the organizational structure, School 2 pronounced that the only change was the addition of the PYP coordinator.

Regarding the administration sub-theme, the findings indicated that PYP increased information sharing, transparency, and participation in decision-making in administrative processes. Participants emphasized that the stance and approach of the administration were key to the successful implementation of the PYP. In all three schools, teachers stated that the school administration believed in the program and provided all the essential support for its successful implementation.

In the sub-theme of education, the participants stated that the joint planning meetings, which were held regularly and with the participation of all branches, were planned together with all teachers, that they had challenging aspects such as effort, creating an appropriate schedule for all, and reaching a common decision; but they enriched the learning process and increased the quality. Participants of three schools noted that students' choice of learning methods, techniques, and materials was an important innovation brought by the PYP to the learning process. Findings from all three schools revealed that the PYP facilitated classroom management. The teacher explained that they moved from a classroom environment where the teacher dominated and managed, to a more democratic classroom environment where students participated in decisions and took responsibility for their implementation. However, they stated that the adaptation of teachers to this change varied from teacher to teacher, in other words; some teachers needed more time and support to adapt, and some others even resist this change.

Participants from all three schools stated that one of the most salient effects of the PYP on the learning process was the assessment-evaluation process. They stated that assessment and evaluation changed from outcome-oriented to process-oriented and that assessment tools and methods were diversified, thus leading to the accumulation of a richer data set about student learning. Examination of the process evaluation samples demonstrated the importance given by the PYP to the process evaluation adopted in all three schools. Teachers from all three schools stated that they monitored students' progress in the process with strategies such as self-assessment, peer assessment, learning diaries, and portfolios. Exit cards, self-assessment, peer-assessment rubrics, and portfolio files were positioned in a way that students could easily access, which were observed on the boards in the classrooms during school observations. Teachers also mentioned the differentiation of teaching from the beginning and that the variety of methods and techniques provided by the PYP and the student's right to choose contributed to the success of differentiated instruction.

Considering the physical structure and technological resources, it was observed that PYP encouraged teachers to integrate technology into their instructions. In school observations, it was realized that schools had technological equipment suitable for implementing the program, and this equipment was utilized to serve learning purposes.

In the research-development sub-theme; while School 1 and 3 affirmed that the program required constant reflection and revision to improve the education processes, School 3 noted that they followed new technologies such as augmented reality applications, distance education tools, digital learning applications, and integrated innovations that was beneficial to the school and instructional processes.

Output elements

The findings in the output elements of the open system concern student education, products, finance, and employees which are presented along with the codes in Table 4.

Table 4. Comparison of accreditation effects in terms of output elements

Theme	Sub-theme	School-1 Codes	School-2 Codes	School-3 Codes
Outputs	Well-educated students: (academic performance, social development)	Achievement criteria, exam success, success in life	Achievement criteria, exam success, success in life	Achievement criteria, exam success, success in life
	Products (Products students make)	Originality, making learning visible	Originality, diversity	Originality
	Finance (Cost-benefit analysis)	Value of investment, indirect impact on financial gains	Value of investment, indirect impact on financial gains	Value of investment, indirect impact on financial gains
	Employees (job satisfaction, organizational commitment)	Contribution to professional development, satisfaction	Contribution to professional development, satisfaction	Contribution to professional development, satisfaction

Regarding the sub-theme of well-educated students, all the participants stated that they experienced the positive effects of the PYP on the academic performance of the students. They stated that taking an active role and responsibility in their learning process provided students with self-control, and diversity in learning techniques, and learning through inquiry contributed to the permanency of learning. They accentuated that in the long term, the program helped students gain awareness about their learning and develop creative and reflective thinking skills.

The schools agreed on the positive effects of the PYP on academic performance, but they also underlined various disadvantages they experienced in this regard. Participants from School 1 mentioned that while PYP was freely applied in kindergarten and early primary levels (i.e. 1st and 2nd grades), academic success pressure started to be felt from the 3rd grade upwards. This was particularly because students were selected for prestigious schools at secondary levels via high-stakes central exams. In addition, scholarship exams administered by private schools were also conducted using tests. Schools 1 and 2 stated that this examination system, which was used to measure the academic performance of students, was not suitable for measuring the achievements of PYP students. Thus, they underscored that PYP schools were exposed to the dilemma of parents and teachers who had test anxiety and national exam pressure. Participants from School 1 asserted that students' skills acquired in the PYP got worsened starting from the transition to secondary school, where they faced the examination process. School 3, on the other

hand, perceived the new generation questions used in the national exams in Turkey in recent years as a positive change in this regard. They stated that new-generation questions require thinking skills, so they were more suitable for PYP students to demonstrate their academic performance.

All the participants mentioned the visible positive effects of PYP on students' social development. They stated that students' communication skills and self-confidence improved, and they gained the ability to take responsibility and solve problems. They also emphasized that the program aimed at the holistic development of students by combining their social skills with their academic skills, thus improving their life skills and preparing them for the future.

When it comes to the products sub-theme, participants stated that learning outcomes and student products gained originality, diversity, and meaning. These features were also observed during school visits in student products displayed in classrooms, corridors, and school halls. Participants related this situation to how learning took place in the PYP and to the student's choice of the path to be followed in their learning. School 1 emphasized the significance of making the learning process visible in the PYP, underscoring that the learning process is revealed holistically so that students find opportunities to learn from each other's work. Participants from all three schools stated that the learning outcomes were exhibited by the students as products and performances through projects, portfolios, and boards. These findings coincided with the findings related to student projects and performance presentations obtained through the examination of the web pages of the schools.

Considering the sub-theme of finance, the participants stated that the budget spent by the school for the PYP was not made with the expectation of financial gains or more enrolment, and it was not reflected in the financial outputs in this way. They stated that the effect of accreditation was reflected in the teaching philosophy, the quality of the processes, and the quality rather than the financial gains, and indirectly affects the choice of the school in the longer term. Since all three schools did not agree to share their financial statements before and after the PYP, these findings were reached only through the statements they made during the interviews.

In the sub-theme of employees, all participants mentioned the positive effects of PYP on their job satisfaction despite its tiring and challenging aspects. They highlighted the contribution it provided to their professional development and the motivation provided by the development of students and seeing their achievements. According to the participants, teachers who were accustomed to the traditional system and had no desire for development could be unhappy in the accreditation process. The participants expressed that they would want to work in a PYP school again if they had to leave this workplace.

Feedback elements

Accreditation effects on feedback are given comparatively in Table 5.

Table 5. Comparison of accreditation effects in terms of feedback components

Theme	Sub-theme	School-1 Codes	School-2 Codes	School-3 Codes
Feedback	Satisfaction	School-parent relationships	School-parent relationships	School-parent relationships
		Parent expectations	Parent expectations	Parent expectations
		Employee expectations	Employee expectations	Employee expectations

Regarding the satisfaction sub-theme, the findings revealed that the effect of PYP on parent satisfaction depended on the parents' perspective on education and their expectations from the school. The participants stated that the satisfaction of parents who wanted to raise their children with various skills was high. However, parents only focusing on the exam results and expecting the school to prepare their child for the exam were likely to be unhappy and even some left the school. Some participants expressed that when the parents were properly informed, their satisfaction could increase. Yet when parents had fixed expectations of high exam performance, then they were not convinced and hence expressed low satisfaction. This also applies to employee satisfaction. participants also emphasized that the satisfaction of the employees depended on their perspective on their profession and their expectations from their job and that some employees had difficulties in adapting to the program. An administrator (School 2/A2) made the following remarks on this issue:

"...doing the non-traditional thing is directly related to getting used to it, so after a while, when you get used to it, it goes very well. But a transition is needed, and I see some teachers resisting it. Because the teacher's current comfort zone is different."

Environment elements

The findings related to the environment are given in Table 6.

Table 6. Comparison of accreditation effects in terms of environmental elements

Theme	Sub-theme	School-1 Codes	Scool-2 Codes	School-3 Codes
Environment	Recognition	Recognition	Collaborations	Collaborations
	School-environment relationships	Using surrounding resources	Using surrounding resources	Using surrounding resources

In the sub-theme of recognition, the findings suggest that being included in an international program increased the recognition of the school. Participants from Schools 2 and 3 stated that accreditation increased their connection and sharing with other schools; School 1 also stated that being on the IB platform made the school known to more people in the national and international arena. Examination of webpages and social media posts of the schools showed that all three schools participated in national and international IB conferences and their teachers made presentations at these conferences. Moreover, School 1 also hosted a national conference.

Considering the school-environment relationships, the participants noted that the interaction of the school with its environment increased, and the environment served for learning purposes. They stated that they organized a variety of extracurricular activities to promote learning, including trips, speaker invitations, school visits, and projects in cooperation with NGOs. When the unit plans of the schools were examined, it was seen that such activities were frequently included in the plans. In addition, there was news about these events on the social media posts and web pages of the schools.

Discussion and Conclusion

In this section, we discuss the effects of accreditation on system elements about system elements of input, process, output, feedback, and environment.

The effects of the PYP on the input elements were similar in all three schools. The effect of the

PYP on the preference of the school by the parents is shaped by the parents' perspectives on education, raising their child in a sophisticated way, or caring about exam-oriented success. According to Büyükgenç (2014), the reason why parents prefer PYP is their desire to receive "quality education". Therefore, parents tend to choose schools that they think are of good quality (Hesapçıoğlu & Nohutçu, 1999). Studies (Akhan, 2009; Dikbaş, 2008) show that the reasons why parents prefer private schools in Turkey and PYP criteria overlap.

While there is no problem at the kindergarten level in aligning the national curriculum with the PYP in terms of curricula, it seems that this task becomes more difficult in primary school, especially from 3rd grade upwards. The MoNE curriculum is an intense and congested one, so there are challenges in implementing the flexible, inquiry-based, and discovery-based processes of the IB PYP program (Halıcıoğlu, 2008). The process of designing, implementing, and evaluating the curriculum from teachers in PYP schools is difficult and time-consuming (Gough et al., 2014). It is seen that the administrators and teachers who participated in the study also experienced the tensions of finding solutions to the incompatibility between the programs and harmonizing the national curriculum with the PYP.

It can be also said that accreditation is a serious financial investment and a permanent expense item. In 2020, a school with 50 teachers had to pay approximately 31.500 Euros in the PYP accreditation process, excluding expenses such as updating the school's physical and technological resources. Furthermore, new teachers who join the staff every year are required to receive training. Educational expenses and annual dues are permanent expense items that continue after accreditation. According to Frawley (2014), the budget spent on accreditation is spent on quality and well-functioning educational experience. However, a linear relationship between accreditation and financial gains cannot be established. Because indicators related to schools and students include a wide range of variables (Mathews & Johnson 1995). Schools that desire to be accredited need to analyze their context very well regarding sustainability and cost-benefit when making this decision. This financial burden might be among the most important reasons why accreditation is not widespread among public schools in Turkey.

When focusing on the effects of accreditation on the process elements, it is seen that the communication of PYP teachers with their students has become more democratic, their classroom management skills have improved, and the role of the teacher has evolved to be a learner with their students. These results coincide with the conclusion of Twigg (2010) that teachers participate in the process as learners (students), struggle, support, and have positive characteristics. However, according to Oraz (2019), the most important resistance to the emergence of these positive effects of the PYP stems from being unfamiliar with the program and changing the teaching habits of teachers. In addition, teachers think that the PYP changes and enriches their teaching approaches (Gough et al., 2014). It is known that IB programs offer students more opportunities to know and express themselves in terms of methods and techniques and support social and personal development (Kocabaş & Akkök, 2007). It can be concluded that the variety of methods offered by teachers enriches the learning environment for students and provides a choice in creating their own learning experiences.

The findings of the study show that the PYP requires strong communication and cooperation between administrators and teachers in their relationships with each other and in group work. It is believed that the PYP has a share in this effect, which we might call a positive school climate (Dix & Gregory, 2020; Gough et al, 2014; Gürkan, 2020; Seheryeli & Gelbal, 2020). Here, it should be mentioned that unless administrators understand the concepts, values, and practices of the PYP, it is difficult for the program to be accepted within the school and

accelerate its development (Day et al., 2015). It can also be concluded that the attitudes of the school administration on accreditation and the leadership styles in the accreditation process have a crucial role in teachers' ownership of the program and the success of the school in accreditation.

When it comes to the output element of the systems approach, it is seen that the PYP has positive effects on students' academic performance and social development. Dix and Gregory (2020) provide evidence that the PYP promotes student well-being beyond the well-being activities conducted in other schools. The school and learning environments created by the PYP, and the methods used in the education process support the social and personality development of students as well as their academic skills (Kocabaş & Akkök, 2007). Gough et al. (2014) state that the PYP has a positive effect on the academic success and social development of the student. IB schools differ from others, particularly in process-oriented assessments, recording, and reporting of results. Although this brings a smaller tension at the primary school level, it causes a higher tension for schools and parents at the secondary school (MYP) and high school (DP) levels (Oraz, 2019; Toe et al., 2015) and the parties are in a dilemma between exam success and PYP achievements.

The recognition and quality achieved with the PYP could provide financial recovery in the long run. In addition, the PYP creates a democratic and tolerant environment at school. This environment also supports the development of employees; increases their job satisfaction and organizational commitment (Gough et al, 2014; Uçman, 2019). However, some teachers may also be unable to adapt to the PYP and leave.

As for the feedback aspect, it is seen that the PYP generally has a positive impact on the satisfaction of parents, students, and employees. In PYP schools, parents are more involved in the learning process as a part of the learner community, so school-parent cooperation is more active (Gough et.al, 2014). However, for this cooperation to be established and for the parents to trust the school's system, they should be informed in detail about all the processes (philosophy, goals, achievements, implementation, results) of the PYP. The same goes for employee satisfaction, too. It should be known that employees need support and motivation to adapt to the PYP process, and it should be ensured that the school administration takes measures to facilitate teachers' adaptation to change.

It is seen that the PYP increases the school's relationships with its environment, and the environment is used as a resource to enrich the learning process and to associate learning with real life. According to Elliot (2013), accreditation is accepted as a tool that can increase the visibility of the school at the national and international levels and strengthen its reputation and brand. Therefore, it can be said that the PYP increases the interaction and recognition of the school with its environment, thus improving its open system feature.

As a result, it is seen that the PYP has positive effects on the input, process, output, feedback, and environmental elements of the school system. Schools have different characteristics such as being a private teaching institution, being a chain school, applying only to PYP, or applying to other IB programs in the year of receiving, and it is seen that those differences do not make a significant difference in the effects of PYP on the system elements. PYP supports students' academic performance and social development. It enriches the learning-teaching processes at school and changes the learning outcomes towards originality and diversity. It contributes to the professional development and job satisfaction of teachers and brings an understanding of cooperation and co-production to the school culture. It involves the parents more in the learning

process and improves the relations of the school with its environment.

Implications and suggestions

In this section, we share the educational implications of our findings and make suggestions relevant to the successful implementation of the accreditation programs.

Schools could add professional competence, adaptability to change, communication, and team skills to their recruitment criteria. Even then, during and after the accreditation process, necessary support should be provided to identify and meet the needs of teachers to be active PYP practitioners. This is particularly important as Twigg (2010) argues PYP practices increase teachers' responsibilities and workload as well as a burden a heavy load in their minds.

Our findings suggested that PYP had, by and large, positive impacts on parent satisfaction. However, it is important for parents to be informed about the accreditation process and kept updated. This requires schools to establish feasible communication channels for the flow of information to families. This is also important as parent participation increases students' valuation of the school and hence improves their performance (Knappenberger, 2018).

IB programs have the eventual purpose of developing inquiring, knowledgeable and caring youth who would work toward a peaceful world with intercultural sensitivity (https://www.ibo.org/about-the-ib/). However, high-stake central exams in Turkey do not aim to assess such assets. Therefore, accredited schools need to develop strategies and make their priorities accepted by all stakeholders to manage the dilemma they face between the national system, exam pressure, and the goals and objectives of the program.

The effect of accreditation is reflected in quality and recognition rather than financial return, and the positive effect on quality and recognition indirectly reflects on profitability in the long run. According to Patel (2012), the accreditation process penetrates the thinking and infrastructure of the institution in the short run and brings benefits such as financial accountability and competitiveness for the organization in the long run. Therefore, it is important for schools wishing to be accredited to analyze their context very well in terms of their vision, economic conditions, and parents' expectations of the school. It can be suggested that these schools embark on this journey as a result of the evaluations they will make on criteria such as sustainability, cost-benefit, and readiness of the school community.

Our final words consider further research suggestions. The number of schools surveyed could be increased to examine the effects of accreditation more broadly, and parents and students could be involved in the interview process. Graduates of the approved schools could be followed to look at the long-term effects of the PYP. Moreover, by investigating the effects of other IB programs (MYP, DP) on system elements would also provide important insights. The effects at the secondary and high school levels could also be important research undertakings.

Acknowledgement

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