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| Research Article / Araştırma Makalesi |

Understanding What You Read From Ihsâu'l Ulûm to Modern Education: Turkey's PISA Test Performance

Ihsâu'l Ulûm'den Modern Eğitime Okuduğunu Anlamak: Türkiye'nin PISA Testi Performansı

Gözde ÇAVDAR[1]

Keywords

1. Reading Comprehension
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Abstract

Purpose: The aim of this study is to reveal the deficiencies in students' reading comprehension skills in the Turkish education system and to evaluate the importance of linguistics in Farabi's Ihsâu'l Ulûm from the perspective of modern education.

Design/Methodology/Approach: In the research, Farabi's "Ihsâu'l Ulûm", PISA test results and various academic studies were used. By applying literature review and text analysis method, the data were evaluated with theoretical comparison and interpretation techniques.

Findings: It was found that students in Turkey scored below the OECD average in PISA tests in terms of reading comprehension ability. The main reasons for this situation were found as school type, socio-economic status, inadequacy of educational materials and discontinuity in the education system. It was also observed that al-Farabi considered the science of language as the basis of all sciences and emphasized that expressing and understanding thoughts correctly requires mastery of language rules. The views of al-Farabi, stating that grammar is prioritized over logic in education, serve as a guide in solving modern educational problems.

Highlights: In order to improve students' reading and comprehension skills, it is necessary to increase access to materials, update educational content with a focus on analysis and interpretation, and ensure continuity and stability in educational policies.

Öz

Bu çalışmanın amacı, Türk eğitim sisteminde öğrencilerin okuduğunu anlama becerilerindeki eksiklikleri ortaya koymak ve modern eğitim perspektifinden Farabi'nin *İhsâu'l Ulûm*'unda dilbilimin önemini değerlendirmektir.

Materyal ve Yöntem: Araştırmada Farabi'nin *İhsâu'l Ulûm* adlı eseri, PISA test sonuçları ve çeşitli akademik çalışmalar kullanılmıştır. Literatür taraması ve metin analiz yöntemleri uygulanarak, veriler yorum tekniğiyle değerlendirilmiştir.

Bulgular: Türkiye'de öğrencilerin PISA testlerinde okuduğunu anlama becerisi açısından OECD ortalamasının altında puan aldığı görülmüştür. Bu durumun başlıca nedenleri okul türü, sosyo-ekonomik durum, eğitim materyallerinin yetersizliği ve eğitim sistemindeki süreksizlik olarak belirlenmiştir. Ayrıca, Farabi'nin dil bilimini tüm bilimlerin temeli olarak gördüğü ve düşüncelerin doğru ifade edilip anlaşılmasının dil kurallarına hâkimiyeti gerektirdiğini vurguladığı gözlemlenmiştir. Farabi'nin, eğitimde mantıktan önce grameri önceliklendiren görüşleri modern eğitim sorunlarının çözümünde yol gösterici niteliktedir.

Önemli Vurgular: Öğrencilerin okuma ve anlama becerilerini geliştirmek için materyallere erişimin artırılması, eğitim içeriklerinin analiz ve yorum odaklı olacak şekilde güncellenmesi ve eğitim politikalarında süreklilik ve istikrarın sağlanması gerekmektedir.

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INTRODUCTION

Knowledge has remained the most significant source of power for all communities throughout history. From the most primitive societies to today's advanced civilizations, people have utilized knowledge both to survive and to secure a place in the competitive atmosphere of international platforms, making tremendous efforts to expand existing knowledge. When evaluated in terms of its nature, knowledge today is categorized into natural knowledge, scientific knowledge, philosophical knowledge, artistic knowledge, and religious knowledge (Mengüşoğlu, 2015: 74–93). However, due to its role as the fundamental means of relating to external objects, it has occupied a central place in the agenda of many philosophers from Ancient Greece to the present—most notably Plato and Aristotle—who categorized sciences in hierarchical order to reach the good and the beautiful as an outcome of the state of knowing. The aim of this study is to establish a relationship between al-Fârâbî's emphasis on linguistics and the reading comprehension skills of Turkish students who participated in the PISA tests.

Although neither Plato nor Aristotle explicitly discussed language, al-Fârâbî, who brought Islamic culture and Ancient Greek philosophy together, assigned significant importance to the science of language. In his work *Ihsāu'l Ulûm* (The Classification of the Sciences), where he classified sciences, al-Fârâbî prioritized linguistics over even logic, assigning it to the first rank, while placing logic afterward. From this perspective, the study focuses on the ability to comprehend written texts in a particular language, as this competence plays a central role in both contributing to a culture's internal richness and ensuring alignment with global scientific, cultural, and economic developments.

The PISA test is an international assessment tool conducted every three years since 2000 by the Organisation for Economic Co-operation and Development (OECD). It evaluates 15-year-old students' proficiency in reading, mathematics, and science—skills deemed essential for full participation in social and economic life. The most fundamental way for Turkey to play an active role in the competitive environment that includes other countries is to evaluate its education system and implement necessary improvements, thereby raising its children to the level of those from globally dominant countries—or even beyond. Therefore, analyzing PISA test results is of considerable importance. This study focuses particularly on the 2009 and 2018 PISA tests, as reading literacy was designated the primary focus in those years. Since Turkey joined PISA in 2003, there is no dataset available for the 2000 cycle. Regrettably, Turkish students consistently lag their international peers, especially in the reading comprehension category (OECD, 2023: 1). This indicates a deficiency in the Turkish education system's capacity to adequately train students in reading comprehension. It is evident that current modern education strategies in Turkey fall short in terms of student success. However, no definitive conclusions have been reached regarding the methodological parameters causing this shortfall. In the subsequent sections, this issue will be discussed considering relevant literature and PISA report data.

Classification of Sciences

The classification of sciences began with Plato in Ancient Greek philosophy and continued with Aristotle's divergent interpretation. In his work *The Republic*, Plato discusses the theory of knowledge, stating: "Those who study scientific subjects must not rely on their senses, but must use their reasoning. However, since they examine these subjects based on assumptions without reaching first principles, they cannot truly understand objects that can only be comprehended through such principles" (Plato, 2010: 551d). Through this statement, Plato emphasizes the importance of reaching knowledge, while also providing clues about how knowledge can be attained and how it should be defined.In the seventh book of *The Republic*, Plato (2010) concentrates on the sciences that should be taught to those who will rule the state, presenting what is considered the first example of scientific classification in history (Erdoğan, 2009: 138). In this dialogue, Plato regards as sciences only those disciplines that are entirely intellectual in nature, devoid of empiricism, and yield conclusions through deductive reasoning. These sciences, in order, are arithmetic, geometry, astronomy, harmony, and above all, dialectics, which encompasses and transcends all others. Plato asserts that the subject matter of true knowledge or science (*episteme*) is the realm of true being and the intelligible world. He claims that if the object of investigation is a visible or perceptible entity, then true knowledge cannot be attained (Plato, 2010: 529b). In this regard, science concerns what is immutable, non-particular, and non-sensory- things that cannot be otherwise. Science is, therefore, that which is rational and unchanging. Conversely, any domain associated with the world of appearances is inherently subject to change, transformation, coming-to-be, and decay. As a result, human beings develop opinions (*doxa*) about such matters. The objects of thought, however, are products of knowledge and belong to the domain of being. On this point, Plato states that no object can simultaneously belong to both *episteme* and *doxa*, emphasizing that *doxa* refers to a state between knowledge and ignorance (Plato, 2010: 478d).

Thus, anything that does not reach a first principle, which is individual, subject to change, and capable of being otherwise cannot be regarded as true science. Additionally, based on his famous Allegory of the Cave, Plato considers the sensible world entirely as a world of shadows. His ultimate objective is to attain knowledge, and he views the world merely as a path toward achieving that knowledge. For this reason, he completely excludes empirical investigations of the physical world (Afşar, 1997: 149). Consequently, within Plato's classification of sciences, there is no place for the so-called natural sciences, which are grounded in human experience (Arslan, 2006: 237). According to Plato, disciplines such as physics, chemistry, biology, and medicine are not recognized as true sciences.

When approached from the perspective of Plato's student, Aristotle, it becomes evident that Aristotle did not follow Plato's path but rather developed a significantly different perspective on the classification of sciences. Aristotle argued that the desire to know is innate and that its indication lies in the pleasure we derive from sensory experiences—even at the most basic level and beyond mere utility (Aristotle, 2009: 980b). In this regard, Aristotle's position stands in direct contrast to that of his teacher, Plato, particularly in relation to the role of the senses and opinions. For instance, while Plato emphasized that true knowledge consists of universal knowledge situated at the level of first principles, Aristotle maintained that those who possess only theoretical universal knowledge lack experience. Because they are not acquainted with the underlying causes of universals, they are unable to reach specific conclusions. Thus, Aristotle argues that particulars have an independent existence (Aristotle, 2009: 981b). From this perspective, it would be appropriate to position Aristotle as a pioneer of the realist approach, which emphasizes causal explanation through the discovery of particulars (Keat & Urry, 2001: 18). Given his emphasis on experiment and observation, it would not be incorrect to regard Aristotle as a philosopher who made significant contributions to the empiricist and practical approach. In contrast to Plato's approach, which accepts only sciences that deal with ideals or universals within a theoretical framework, Aristotle evaluated sciences as diverse fields of being, each with distinct goals, starting points, and domains. This perspective (Cevizci, 2016: 393) brought about major differences in the classification of sciences.

From this point of view, Aristotle developed his own unique categorization of the sciences, evaluating each science within its own framework, and further identifying the relationships and distinctions between philosophy and the sciences (Erdoğan, 2009: 153). According to him, "each science investigates certain principles and causes related to its own subject matter" (Aristotle, 2009: 1064a). Based on this understanding, it is not difficult to comprehend why Aristotle included in his classification disciplines such as medicine, physics, chemistry, and biology—fields that can be characterized as practical sciences. Aristotle's classification of the sciences is fundamentally structured into three categories: Theoretical (*Theoretikē*), Practical (*Praktikē*), and Productive (*Poiētikē*) sciences (Reeve, 2009: 15). "The primary aim of each category is to seek knowledge, but their end goals vary; acquiring knowledge, taking action, and creating useful and beautiful objects" (Ross, 2005: 21). Although this aim of reaching the 'good' resembles the final cause found in Plato's thought, a closer look at the specific disciplines Aristotle places under each category reveals a clear divergence in intellectual orientation.

Accordingly, under Theoretical Sciences, Aristotle includes disciplines such as theology, philosophy, mathematics, and the natural sciences, which pursue knowledge for its own sake, without any practical end. Practical Sciences, which treat knowledge as a guide to action, include ethics, household management, political governance, and politics. Under the Productive Sciences—those aimed at producing something beneficial or beautiful—he places the applied sciences and crafts, such as medicine and architecture (Reeve, 2009: 15). From this perspective, while Aristotle's valuation of mathematics differs in its priority compared to Plato's, the discipline itself retains its significance for both philosophers. However, the same cannot be said for the natural sciences such as physics, biology, and chemistry. While Plato excluded these from the domain of true sciences, Aristotle emphasized their importance and included them in his classification. Additionally, Aristotle did not regard logic as an independent science. Instead, he treated it as a general intellectual discipline that must be employed by anyone investigating any science (Ross, 2005: 21). Indeed, at the core of all sciences lies the activity of reasoning about particulars, making judgments, and interpreting them through the lens of logic.

During the Islamic Golden Age, al-Fârâbî (870–950), a prominent Turkish-Islamic philosopher known by the honorific title "The Second Master" (*al-Mu'allim al-Thânî*), undertook the study and translation of the works of influential Ancient philosophers such as Plato and Aristotle, and sought to establish a connection between Islam and philosophy by imbuing Islamic thought with a philosophical dimension (Farabî, 2019: xvii). Additionally, al-Fârâbî is considered the founder of political philosophy in the medieval Islamic world and holds a unique position for his assertion that "in order for a nation to reach the pinnacle of its cultural history, it must examine the stages of development in language and thought" (Korkut, 2015: 26). For these reasons, al-Fârâbî is a philosopher worthy of careful examination, not only for the depth of his philosophical work but also for his pivotal role in introducing Ancient Greek philosophy to the Islamic world during a period described as the Golden Age—an era shaped by an intense emphasis on knowledge and science.

Like Plato and Aristotle, whose works he translated and through which he served as a bridge between Ancient Greek philosophy and the Islamic world, al-Fârâbî also classified the sciences. In his book *Ihsāu'l Ulûm* (*The Classification of the Sciences*), which contains this classification, al-Fârâbî states that his purpose in writing the work is to list the sciences of his time one by one and to explain into which categories each science is divided internally (Farabî, 2019: 1). Furthermore, while introducing the book, he emphasizes that those who consult it will understand what discipline they are engaging with, what benefits it will provide to them, and which virtue they will ultimately attain as a result (Farabî, 2019: 1). Al-Fârâbî, like Plato and Aristotle, viewed studying the sciences as essential to attaining higher virtue and clearly expressed this belief.

In his work *Ihsāu'l Ulûm* (*The Classification of the Sciences*), al-Fârâbî classified the sciences into five main groups: the Science of Language, the Science of Logic, the Mathematical Sciences, the Natural and Theological Sciences (Physics and Metaphysics), and the Sciences of Politics, Jurisprudence, and Theology. Notably, among these disciplines, the Science of Language—absent from Aristotle's classification—occupies the foremost position in al-Fârâbî's ordering. Moreover, logic, which Aristotle regarded merely as a methodological tool and not as an independent science, is placed by al-Fârâbî immediately after the Science of Language, in the second position (Farabî, 2019: xi). This reveals that, for al-Fârâbî, the Science of Language is the most fundamental and indispensable of all sciences, and its most essential companion in achieving success is the Science of Logic.

al-Fârâbî and the Science of Language in Ihsâuʾl- Ulûm

When enumerating the sciences, al-Fârâbî places the Science of Language at the very top of the list—an order that is by no means coincidental. According to al-Fârâbî (2019: 3), language underlies every science. The fundamental content of the Science of Language, he states, is "the learning of utterances that signify meaning […] and knowledge of the rules governing these utterances." In this context, it becomes possible to derive many expressions by memorizing a limited set of linguistic units (Farabî, 2019: 4). This, in turn, implies the application of logic. Although the language whose rules are articulated in the text is Arabic, al-Fârâbî's account of language pertains to universal linguistic principles and is adaptable to the languages of all nations. As al-Fārābī himself states (2019: 15), just as there are common linguistic rules across languages, each community also possesses its own unique linguistic characteristics. In his view, knowing and internalizing the language of a society or nation is a prerequisite for being considered a member of that society or nation (Korkut, 2015: 27). Indeed, language is the precondition of communication, and individuals can only contribute to a shared culture if they converge upon a common linguistic medium.

al-Fârâbî (2019: 4) divides the Science of Language into seven parts: the Science of Isolated Words, the Science of Compound Words, the Science of the Rules Governing Words in Isolation, the Science of the Rules Governing Words in Combination, the Rules of Correct Writing, the Rules of Correct Reading, and the Science of Poetic Rules. Al-Fārābī provides general principles for each of these linguistic divisions, and his treatment of the *Rules of Correct Reading* is especially notable for its detailed consideration—even extending to punctuation marks. Although each of these sections may appear to focus solely on the structural elements of language, al-Fârâbî (2019: 10–16) establishes a direct connection between grammar and logic. He argues, particularly in the section on logic, that the correct expression of thought—and indeed the accurate understanding of expressed thought—requires prior knowledge of linguistic rules, and especially grammar. For al-Fârâbî, grammar is not merely a technical subject but a necessary foundation for rational discourse and comprehension.

In *Ihsāʾ al-ʿUlūm*, al-Fârâbî (2019: 10) discusses the similarities between the Science of Language and the Science of Logic, noting that just as we reach knowledge related to reason and rational entities through the art of logic, we likewise access the general rules of speech through the art of language. It is also possible to observe that al-Fârâbî establishes connections between grammar and logic in his other works beyond *Ihsāu'l Ulûm* (as cited in Korkut, 2015: 27). For instance, in his treatise *Advice on the Path to Happiness*, al-Fârâbî emphasizes that the discipline which enables a person to correctly express what they think is not logic, but grammar (as cited in Korkut, 2015: 27). In this regard, al-Fârâbî meticulous approach to language—and, by extension, to expression and the interpretation of language—renders his perspective particularly significant for the present study.

METHOD/MATERIALS

Research Design

This study is designed as a qualitative research project. In qualitative research, the inclusion of the researcher's subjective interpretation emerges as a necessity for the research process (Denzin et al., 2024: 3). The study employs the document analysis method, and the data were evaluated through content analysis techniques.

Data Collection Tools

The main axis of the study consists of analyzing and correlating *Ihsāu'l Ulûm* (*The Classification of the Sciences*)—a seminal work by al-Fârâbî, one of the most prominent philosophers of the Islamic-Turkish intellectual tradition—and the PISA test reports published by the OECD. Accordingly, *Ihsāu'l Ulûm* as well as the PISA 2009, PISA 2018, and PISA 2022 educational reports were selected for analysis. Since the PISA 2009 and PISA 2018 tests designated reading literacy as the core domain, the study focuses particularly on those two cycles in greater detail.

FINDINGS

PISA Tests and Turkey's Reading Comprehension Performance

Turkey's education system is characterized by the continuous evaluation of students' knowledge. From the moment they begin formal education, students are subjected to numerous examinations in various subjects and internalize the educational system's emphasis on the practice of "recalling acquired knowledge" to secure a good job—and by extension, a good life. Considering the general structure of the system, these exams typically take the form of reading written texts and answering a specific number of questions within a limited time frame. This structure underscores the importance of assessing the extent to which students comprehend what they read and how effectively they can recall that information. These evaluations have now extended beyond the national framework, being conducted through international projects established within the context of an increasingly globalized world order. In this regard, Turkey participates in initiatives such as the Progress in International Reading Literacy Study (PIRLS), the Trends in International Mathematics and Science Study (TIMSS), and the Programme for International Student Assessment (PISA), all of which serve to identify and address existing shortcomings in the national education system.

The PISA test is an international assessment administered every three years by the Organisation for Economic Co-operation and Development (OECD), of which Turkey has been a founding member since 1961. It aims to measure the extent to which 15-year-old students can apply the knowledge they have acquired at school to real-life situations. The test primarily evaluates

students' competencies in reading, mathematics, and science. Since its inception in 2000, each cycle of the test has focused in depth on one of these three core skill areas. According to information available on the official OECD website, Turkey began participating in the PISA test in 2003, and among the three core domains, reading literacy was selected as the primary focus in the years 2000, 2009, and 2018 (MEB, 2022: 3). Official data indicate that Turkey's average reading score in the 2009 PISA test was 464 (OECD, 2010: 15). In this test, it was reported that the average performance level of Turkish students was at Level 2. At this level, students are expected to:

> "Locate information that meets multiple conditions, make comparisons or contrasts based on a single clearly defined feature, interpret the meaning of a well-defined part of a text—even if the information is not explicitly stated—and make connections between the text and their own experiences" (OECD, 2010: 52).

This level is regarded in the PISA report as the basic reading proficiency necessary for students to participate effectively and productively in everyday life. Level 6 on the PISA scale shows that students can overcome their biases when they encounter new, unexpected information. At this level, students are expected to: "Distinguish both explicitly stated and more subtly presented information in a text; and evaluate that information critically, drawing on sophisticated understandings that extend beyond the text itself" (OECD, 2010: 49). Among Turkish students who participated in the PISA 2009 test, almost none were reported to have achieved performance at Level 6. This indicates that students in Turkey were unable to move beyond the basic level of reading proficiency in the PISA reading category in 2009.

In the 2018 PISA test, the average reading performance of students in Turkey was reported as 466 (OECD, 2019: 17). Among the 79 participating countries, the average reading score was 453, placing Turkey above the global average and ranking 40th overall. However, the average reading score among the 37 OECD member countries was 487, and Turkey ranked 31st among them. In the same test, the distribution of Turkish students across proficiency levels was as follows: 26.1% performed below Level 2, 30.2% at Level 2, 26.9% at Level 3, 13.5% at Level 4, 3.1% at Level 5, and only 0.2% at Level 6 (OECD, 2019: 210). While students demonstrated improvement compared to previous tests, they still failed to exceed the basic proficiency threshold in reading literacy. The fact that Turkish students mostly performed at Level 2 is particularly notable in light of Ahmet Benzer's (2019) study, which examined the relationship between Turkish language textbooks and PISA tests. According to his findings, most reading texts in Turkish textbooks were aligned with the cognitive processes of Levels 1b (29%), 2 (25%), and 1a (24%) (Benzer, 2019: 101). In this context, it is not surprising that Turkish students performed above the OECD average specifically at Level 2 in the 2018 PISA reading literacy assessment (OECD, 2019).

DISCUSSION

In both years evaluated, it is evident that the average performance of Turkish students in the PISA reading literacy assessment remained below the overall OECD average. For example, PISA 2009 test (OECD, 2010) reveals that Turkish students' reading comprehension level fell behind the OECD average with 464 points. In this test, none of the students succeeded in level 6 and the average of level 5 succeeders were 1,8 which was one-fourth of OECD countries' accomplishment average at this level. The data obtained from the test reports suggest that students in Turkey are insufficiently equipped in reading comprehension, and despite showing some progress over time, their performance continues to linger at a basic level. This, in turn, may negatively affect their achievement in other academic disciplines. Notably, the logic categorized in al-Fârâbî classification of the sciences is, after all, the language of universal thought and reasoning. It should be acknowledged that students can enhance their capacity to distinguish between meaningful ideas and adapt what they read to their social lives only with the support of their families and the educational system.

The scores obtained from these tests can be correlated with various components of Turkey's education system. For instance, in her study on the factors influencing reading achievement in the PISA 2018 test, Özlem Okatan (2021: 332–333) considered variables such as school type, student-teacher ratio, material shortages, school location, socio-economic status, gender, and pre-school education. According to her findings, all variables except the student-teacher ratio were significantly related to reading performance (Okatan, 2021: 337–346). Students attending Science High Schools had an average reading score of 581.37, whereas those attending Multi-Program Anatolian High Schools had an average of 391.14. As material shortages in schools are addressed, reading performance is expected to improve. Additionally, a shift in school location from village to city is predicted to increase a student's reading performance by approximately 14.60%. Reading scores also rise in tandem with socio-economic status, and the gender variable shows a positive difference in favor of female students. Lastly, participation in pre-school education was observed to contribute positively to students' reading skills. Moreover, Okatan (2021: 332) highlights in her literature review that reading comprehension is not only linked to verbal subjects like Turkish and literature but is also correlated with success in other disciplines such as mathematics and science. Likewise, Benzer's (2019: 107) study suggests that none of the reading comprehension questions in 5th, 7th and 8th grade Turkish language coursebooks represent PISA level 6 reading skills proficiencies. This can be regarded as another reason of the incompetency. Complementing this, Tokay Gedikoğlu (2005: 74) argues that Turkey lacks an ideology-free education system, and that newly implemented educational policies by successive governments have significantly, and often negatively, impacted student achievement.

CONCLUSION

Knowledge, the state of knowing, and systematically organized science play a central role in today's highly competitive world. They are crucial not only in shaping the interaction between nations and cultures but also in enabling countries to assert their presence on the global stage. Since the time of Plato, sciences have been classified in order to render them intelligible and to guide societies toward the philosophical ideals of "the good" and "happiness." This process of classification continued with Aristotle and has diversified over time, evolving into the modern understanding of scientific domains. From antiquity to modern times, philosophers have believed that classifying knowledge in various ways would be the most effective path forward and have accordingly proposed such classifications. For instance, Plato, emphasizing the primacy of universals, defined only theoretical disciplines as sciences. His student Aristotle, by contrast, emphasized that particulars also carry intrinsic meaning and classified disciplines such as physics, chemistry, biology, and medicine as sciences, grounded in empirical investigation and experimentation. The medieval Turkish-Islamic philosopher al-Fârâbî, while retaining elements of Aristotle's classification, developed his own distinctive schema. He placed the *Science of Language*—a field Aristotle did not consider a science at all—at the top of his classification system. Immediately following it, he positioned *Logic*, which Aristotle had treated not as a science but as a methodological tool guiding other sciences. Meanwhile, the *Science of Mathematics*, regarded by Plato as the most valuable and foundational discipline, was placed third in al-Fârâbî's hierarchy. From this, it can be concluded that al-Fârâbî regarded the *Science of Language* as indispensable to any cultural formation. In his seminal work *Ihsāu'l Ulûm* (*The Classification of the Sciences*), he extensively examined the structure and general rules of the *Science of Language*, underscoring the idea that the ability to express thought is a precondition for a culture's intellectual enrichment.

Conversely, when viewed from a different angle, the ability to interpret written expressions, to draw inferences from a given text, and to synthesize both explicit and implicit meanings from ideas presented together is just as important as the act of expressing thoughts. In this regard, analyzing the reading proficiency data of national students as measured by international assessments is essential for policymakers in planning effective interventions. Studies (Benzer, 2019; Okatan, 2021) and PISA test results (OECD, 2019) reveal that 15-year-old students in Turkey consistently score below the international average in reading comprehension in their native language. This underperformance may stem from general factors such as school type and socio-economic background, but more specifically, it can also be attributed to the content of the instructional materials provided by the current education system—materials that may fail to equip students with the necessary skills for interpretation, analysis, and synthesis. From a broader perspective, the perpetually changing structure of the education system itself can be said to undermine the effectiveness of learning activities. Indeed, an examination of the views of Plato, Aristotle, and al-Fârâbî on the sciences clearly reveals that their ideas are interrelated and that mutual influence among them is both evident and inevitable.

When it comes to the most recent times, the PISA 2022 Turkey Report (2023) reveals that Turkish students scored 456 points—an even lower result than in 2009 which was 464 and in 2018 which was 466 —reveals further contextual concerns. According to the 2022 report, 28% of students feel lonely at school, and 26% feel excluded. Compared to the 2018 report, the 2022 data suggest that students' sense of belonging at school has decreased (PISA 2022 Results, 2023: 5). Furthermore, 18% of students reported feeling unsafe on their way to school, 13% in their classrooms, and 20% in areas such as cafeterias, hallways, and restrooms (PISA 2022 Results, 2023: 6). Students' feelings of safety and belonging directly impact their academic performance, as evidenced by the data. This can be inferred as the incompetence of the efforts which have been made so far.

It can be said that raising students to become individuals who succeed in life and contribute meaningfully to society and culture involves a chain of interconnected and continuously interacting factors. Students' achievements in each academic discipline are directly related to their reading comprehension skills. Their ability to understand what they read, in turn, is influenced by a multitude of variables: from the level of family engagement in their education, to whether students feel a sense of belonging and safety at school; from the stability of the education system, to whether the curriculum is designed to foster specific competencies; and even to the type and location of the school, as well as the country's overall economic conditions. Therefore, the improvement of students' academic and social success requires coordinated and substantial efforts from the state, educators, and families alike.

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