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## Exploring the views of Arab scholars and their contributions to education

**A B S T R A C T**

The present study aims to explore the contributions of Arab scholars to the field of education. Focusing on the intellectual and cultural impact of their work. It also sheds light on some aspects of Arabic society, the educational institutions, and several notable scholars who paved the path for modern educational methods. Despite the profound impact of these contributions, the educational theories of Arabic scholars have received limited attention in modern academic discourse. This study seeks to address this gap by re-evaluating philosophical, pedagogical, and ethical aspects of Arabic educational thought, demonstrating its potential to improve modern education. The study starts with an overview of the historical developments of education in Arabic society, with a specific focus on what is called "the Islamic golden age" and the views of those scholars concerning: the selection of content; the manners and styles of the teachers; the purpose of education; the emphasis on freedom of learning; and the theory of knowledge. The study concludes with some teaching methods that Ibn Khaldun has put forward.

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استكشاف وجهات نظر العلماء العرب ومساهماتهم في التعليم

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**الخلاصة:**

تهدف هذه الدراسة إلى استكشاف إسهامات العلماء العرب في مجال التعليم، مع التركيز على التأثير الفكري والثقافي لأعمالهم. كما تسلط الضوء على بعض جوانب المجتمع العربي، والمؤسسات التعليمية، وعدد من العلماء البارزين الذين مهدوا الطريق لظهور الأساليب التعليمية الحديثة. وعلى الرغم من التأثير العميق لهذه الإسهامات، إلا أن النظريات التعليمية للعلماء العرب لم تحظَ بالاهتمام الكافي في الخطاب الأكاديمي الحديث. تسعى هذه الدراسة إلى معالجة هذا النقص من خلال إعادة تقييم الأبعاد الفلسفية والتربوية والأخلاقية للفكر التعليمي العربي، مع إبراز إمكانياته في تحسين التعليم الحديث. تبدأ الدراسة بعرض للتطورات التاريخية للتعليم في المجتمع العربي، مع التركيز بشكل خاص على ما يُعرف بـ "العصر الذهبي الإسلامي"، وآراء العلماء حول: اختيار المحتوى؛ أساليب المعلمين وسلوكياتهم؛ أهداف التعليم؛ التركيز على حرية التعلم؛ ونظرية المعرفة. وتختتم الدراسة بتقديم عدد من أساليب التدريس التي طرحتها ابن خلدون.

**الكلمات المفتاحية:** العلماء العرب، الإسهامات في التعليم، نظرية المعرفة، ابن خلدون، ابن رشد، فلسفة التعليم.

## Introduction

Arab scholars contributed greatly to preserving ancient Greek knowledge and its subsequent transfer to the West. A privileged channel that played a significant role in that job was the vast volume of translations of medical, mathematical, and philosophical writings. The ancient Eastern cultures of India, Greece, and Eastern Christianity fostered Islam's scientific understanding, which was initially fairly limited. The entire Islamic cultural legacy would eventually be reversed in the West. One of the most brilliant paths of culture is the one that originates in Hinduism, Greece, and the Christian East, which comes to rest in Islam, and then reverses itself through Spain and Sicily in the Christian West throughout the Middle Ages. (Galino, 1968).

When it comes to religion, the vast majority of Arabs were Muslims. Indeed, there were Christian Arabs both inside and outside the Arabian Peninsula's borders before and shortly after the appearance of Islam. Furthermore, many Christian and Jewish scholars, doctors, and writers made significant contributions to the study of Arabic; yet, Arab culture was formally formed under Muslim guidance. Indeed, it is possible to consider Arab civilization to be interchangeable with Muhammadan

civilization (Totah, 2002). Islam has always been the official religion of the Arabian Empire and all of its dynasties. In a word, then, this civilization that I am considering and this contribution that is under discussion are Muslim. That's why the development of education in the Arab world is closely intertwined with Islam which will be seen in the following sections.

Despite the significant contributions of Arab scholars to the development of educational theories and practices, their perspectives and intellectual legacy have not been adequately recognized or explored in modern academic discourse. This oversight has resulted in a limited understanding of the philosophical, pedagogical, and ethical dimensions of Arabic educational thought, which could otherwise offer valuable insights for addressing contemporary educational challenges. Furthermore, the role of Arabic educational institutions and scholars during pivotal historical periods remains underrepresented in scholarly research.

This study aims to bridge the gap in modern academic discourse by examining the contributions of Arab scholars to education. It seeks to explore the philosophical foundations, pedagogical approaches, and ethical considerations embedded in their work, while also highlighting the cultural and intellectual impact of Arabic educational thought. By re-evaluating these contributions, the study intends to uncover their relevance and potential applications for improving modern educational practices. Additionally, it aims to shed light on the historical context, societal influences, and key figures that shaped education in the Arab world.

## **Section one: A Historical Overview**

A historical overview will help in the understanding of the structure and the development of Arabic society and its relation to Islam which has a great influence over every aspect of that society and its education.

### **1.1 Education among Arabs Before Islam**

Before the appearance of Islam, relatively few Arabs were literate, and the majority of them had little desire to learn the art of reading and writing. The culture of the time was primarily oral. Poetry was the pagan Arabs' greatest intellectual achievement. Ancient Arabic or pre-Islamic poetry provides the majority of the information about the social structure, economic circumstances,

and customs of the Arabs in the fifth and sixth centuries A.D. As a result, experts acknowledge this poetry as the most significant and reliable source for explaining the Arab people and their traditions at this time. (Beliaev, 1969).

Many poems were spoken at literary fairs, the successful conclusion of battles, and other noteworthy occasions during the "jahiliyyah," or period of ignorance. However, relatively few people actually knew how to write or read those poems. They were memorized and repeated without the use of letters, just like Homer's works. Muhammad referred to the Jews and Christians as "the people of the Book," and they were the ones who wrote and read. Before the appearance of Islam, the Arabs produced a great deal of poetry, but it was clearly ineffective as a motivator for learning to read and write. (Totah, 2002).

Arabian society in the pre-Islamic period was largely tribal, and the mechanisms of knowledge transmission were rooted in oral culture. This emphasis on oral tradition was essential because of the limited availability of written materials and the low levels of literacy. Knowledge transmission occurred within the family and tribe, with elders and skilled members imparting necessary knowledge to younger generations through demonstration and verbal instruction. Although literacy was rare, some forms of writing existed in the Arabian Peninsula. In the southern regions, particularly in the areas now known as Yemen and Oman, civilizations such as the Sabaean and Himyarite kingdoms developed scripts, including Musnad and Zabur. These inscriptions, often found on stone or metal, were used for recording administrative, religious, and monumental information. However, the reach of literacy and written records was limited, with writing largely confined to the southern Arabian kingdoms and a few trading towns such as Mecca. In northern Arabia, including the Hijaz region, where Mecca and Medina are located, there is evidence of the use of the Nabataean script, a precursor to the Arabic script, for commercial and communication purposes. Merchants and traders may have had functional literacy to manage trade records and correspondence. Yet, the broader population generally did not have access to or a need for written records, given the strong reliance on oral tradition. Even within urban centers, the motivation for literacy was minimal, as societal roles did not typically demand written proficiency (Crone, 1987).

## 1.2 Education During the Early Islamic Age

A class of people known as "Qurra" (readers) immediately emerged as Islam spread and the Quran gained popularity, albeit these men were frequently merely "reciters" rather than "readers." Nonetheless, the Arabs started learning to read and write in earnest in the first three years of the seventh century A.D. Therefore, the Quran granted charters to the first and the majority of Arab schools. The earliest schools were established anywhere a man who could read met another who was less affluent but yet eager to learn. They may be set up in a private home, a tent, or under a palm tree, but they were still schools. Muslims established a dedicated building for prayer and worship fairly early on, and it later served as both the hub of the expanding community's religious activity and the retreat for the pious. Additionally, it made sense as a location for letter farming. Therefore, the mosque appears to be the best location for education in its service. (Totah, 2002).

## 1.3 Education in the Umayyad Period

There is evidence that schools were established during the Umayyad era (661-750 A.D.). To stay in power, this dynasty was engaged in both foreign and civil battles. It was a time of change—the move from a nomadic to an established way of living. At that time, the Arabs were acclimating to their new surroundings and making an effort to comprehend the Greek and Persian culture they had just acquired. The Umayyads were occupied with securing their victories. They were establishing Arabic as the official language of the government and courts. Greek was being replaced by Arabic in Syria, Coptic in Egypt, and Aramaic in Mesopotamia and Persia. Coinage in Arabic was being adopted. The Umayyads had limited time to build a school system in such circumstances. (Totah, 2002).

## 1.4 Education in the Abbasids Period

We now turn to the Abbasids, another Arab dynasty that ruled from 750 A.D. until 1517, when it finally ceded the Caliphate to the Ottoman Turks, despite a string of calamities and setbacks. Baghdad was founded by the House of Abbas. There was a certain spontaneity to the expansion of nutritious educational options during the older Abbasid era. The closest source was the most informal way to quench the ardent hunger for knowledge. Classes called "majalis al-'ilm" and

"majalis al-adab" were held, and students who excelled were rewarded with nuts tossed to them along with a ride around the streets. On one of these trips, a poor student lost his eye as a result of the nuts that were thrown at him. Mosques, private homes, "kuttabs," or elementary schools, and occasionally stores served as the venues for education. Since mosques have already been considered as educational institutions, it is enough to say that there were many of them in the towns and in practically every village. According to AU-Ya'qubi, who has given us a description of Baghdad in the ninth century A.D., the metropolis had thirty thousand mosques. It is important to keep in mind that every mosque had the potential to become a school. In addition to the mosques, the "kuttâb," or "maktab," which functioned as an elementary school, is mentioned often. A "kuttâb" and a "maktab" in Kufah are mentioned by the author of "al-Aghâni" (ninth century). According to Al-Jâhîz, who lived in the same century, "kuttâb" means school. According to legend, the ninth-century Caliph al-Mu'tasim went to a "kuttâb." These elementary schools and their teachers are often mentioned by other authors, including Yaqut. Because al-Ma'mun established Bait al Hikmah (the "House of Wisdom"), where the higher areas of learning were explored, the Abbasids' education was not limited to children and elementary schools. According to Ibn al-Nadîm, the Caliph assigned Salam, the college's principal, to travel to the "country of the Greeks" in order to translate their writings into Arabic. The fact that this same premise was specifically chosen to explain Ptolemy's book Almagest suggests that he was mathematically proficient. The College Bait al-Hikmah took pride in having a library staffed by a renowned astronomer and mathematician. This individual was al-Khwarizmi, whose algebraic treatise is still in existence. Bait al-Hikmah must be considered a legitimate institution or university as it had a leader who was knowledgeable about the Almagest and a librarian like al-Khwarizimi (Totah, 2002).

## Section Two: The Islamic Golden Age

Muslim kings built one of the biggest empires in history during the Islamic Golden Age, which is conventionally dated from the middle of the seventh century to the middle of the thirteenth century. Through the preservation of previous traditions as well as the addition of their inventions and innovations, Islamic artists, engineers, scholars, poets, philosophers, geographers, and traders made

contributions to agriculture, the arts, economics, industry, law, literature, navigation, philosophy, sciences, sociology, and technology during this time. During that period, the Muslim world also emerged as a significant hub for philosophy, science, medicine, and education. (islamichistory.org., 2012).

The educational texts of classical Arabic offer valuable insights into the medieval Islamic intellectual culture. They recommend the following: First of all, as was evident soon after the rise of Islam in the early 7th century, Muslims' keen scholarly interest in the social transfer of knowledge and the intellectual growth of individuals and groups was reflected in literary and scholarly writing in the centuries that followed. Second, the innovative embrace of the Hellenistic heritage also influenced Islamic educational theory, having its roots in the translation of classical Greek and Syriac works into Arabic in the eighth and ninth centuries. This is especially evident in the works of Muslim writers who address, from a philosophical and ethical perspective, the phases of human character and personality development, early childhood education, and higher education. Thirdly, some Jewish and Christian perspectives on education that were important to the Middle East at the time were both impacted by and beneficial to Islamic views on education. (Günther, 2004).

## 2.1 Educational Institutions

In the medieval Islamic world, the first universities to provide diplomas were the Bimaristan Medical University Hospitals, which granted medical degrees to Islamic medical students who met the requirements to practice medicine starting in the ninth century. The institution of Al Karaouine in Fez, Morocco, was established in 859 CE, making it the oldest institution in the world to award degrees, according to the Guinness Book of World Records. Often regarded as the earliest full-fledged university, Al-Azhar University was established in 975 CE in Cairo, Egypt, and provided a range of academic degrees, including postgraduate degrees. The "ijazat attadris wal-iftta," or "license to teach and issue legal opinions," in the medieval madrasahs that taught Islamic law is also where the PhD got its start. It is estimated that the Tripoli library housed up to three million books before the Crusaders destroyed it. Even though only a small portion of the surviving Arabic scientific works have been investigated in modern times, the number of significant and unique medieval Arabic works on the mathematical

sciences greatly outnumber the sum of medieval Latin and Greek works of similar importance. The vast quantity of works (about 100,000) and manuscripts (at least 5 million) that were up to date are evidence of the literary endeavors of Arab intellectuals. These figures are so powerful that analogous materials are only found in the printed era. Several unique characteristics of the modern library were brought to the Islamic world, where libraries frequently functioned as a place for meetings and discussions, a public library and lending library, a center for the teaching and dissemination of sciences and ideas, a place for scholars to stay or a boarding school for students, in addition to serving as collections of manuscripts, as was the case in ancient libraries. Islamic libraries from the Middle Ages also adopted the idea of a library catalogue, classifying books according to particular genres and categories. The trust and charitable trust (Waqf), the agency, the lawsuit, and medical peer review are among the legal entities that were brought into Islamic law (islamichistory.org., 2012).

## **2.2 Prominent scholars and their contributions to education**

Many scholars contributed to humanity during what is known as the golden age. Their contributions and ideas are going to be discussed in a chronological order starting from the oldest. According to Totah (2002) Arabic studies like the medieval "trivium and quadrivium," fell into two categories: "al-'ulum al-naqliyyah" (traditional or humanistic knowledge) and "al-'ulum al-'aqliyyah" (rational studies). In the former, Ibn Khaldun places grammar, exegesis, tradition, and jurisprudence, while to the latter he ascribes logic, natural science, metaphysics, music, arithmetic, geometry, and astronomy.

### **2.2.1 Al-Jahiz 776 – 868**

One of the most well-known classical Arabic authors is Abù 'Uthmàn 'Amr ibn Bahr al-Fuqaymì al-Basrì Al-Jahiz, a Mu'tazili theologian and political-religious polemicist. He passed away in Muharram 255/December 868–January 869, having been born in Basra in 160/776. He most likely had Abyssinian ancestry, and his eye deformity earned him the nickname. Al-Jahiz committed himself to education from a young age. He attended debates on Arabic philology, lexicography, poetry, and philosophy at the Mirbad, a renowned public space in Basra that was essential in forming Arabic culture during the Middle Ages, as well

as study groups hosted in mosques. Al-Jahiz acquainted himself with the works of the ancient Greek philosophers (especially Aristotle) available in Arabic since the great translation movement under the caliph al-Ma'mùn (r. 813–833). He participated frequently in the intellectual conversations taking place in the salons of the upper class, where issues of general concern to Al-Jahiz seems to have held no official or regular post in his life. It is known, however, that when he was in Baghdad he worked for some time as a scribe and teacher. Al-Jahiz himself reports that the caliph al-Mutawakkil (r847–861) had apparently endeavored to entrust him with the education of his children. However, the caliph later changed his mind, seemingly because of Al-Jahiz's ugliness. The circumstances and often unfair treatment of professional teachers Al-Jahiz witnessed, and may have experienced firsthand, seem to have induced him to write a book entitled "The Teachers." This provided him with the opportunity not only to defend but also to champion schoolteachers and stress their superiority over all other classes of educators and tutors (Hirschfeld, 1922).

### **2.2.1.1 Curricular and non-curricular topics of teaching**

In his book "The Teachers," Al-Jahiz suggests an impressive variety of topics to be taught. He does so, however, without indicating that these topics in fact relate to two very different categories of teaching: (a) the formal, curricular kind of teaching, as conducted by the schoolteachers at the elementary and the more advanced levels (i.e. the kind of instruction which Ibn Sahnùn is concerned with in his treatise on primary education); and (b) the informal, non-curricular kind of teaching, which could take place at various locations, including "on the shop floor," for example. Since Al-Jahiz was interested in teaching in general terms, a clear-cut distinction between the teaching topics belonging to one or the other category is rather difficult to make. This notion needs to be taken into account when looking at the following list of teaching topics drawn from his book (Hirschfeld, 1922).

Obligatory topics:

- Reading and Writing—The essentials of writing (kitàb).
- Arithmetic
- The Essentials of Religion

- Literature and Literary Theory
- Logic and Disputation
- Accounting

Recommended topics [at a more advanced stage of education]:

- Hunting.
- Sports, including the use of light arms.

### 2.2.1.2 Advice for teachers

The text provides numerous pieces of advice for teachers, some of which are given expressly, while others are indicated in a more general way. Some of the more striking examples shall be presented here by Günther (2004) they concern:

1. The process of education
  - Take the mental ability of students into account. Use a language understandable to them.
  - Treat students gently and in a most lovable way. Attempt to reach their hearts when it comes to the subject matters taught.
2. The purpose of reading
  - Make the students understand that the purpose of reading books is to learn and to understand and not, simply, the enjoyment of nice words, for: “He who reads the books of eloquent writers and leafs through the collections of sages to acquire ideas pursues the right course. He, [however,] who looks into these books [simply] to learn [more] words pursues the wrong course
3. The means of expression and style
  - Make the students familiar with the arguments of writers and their eloquent use of simple and easily understood words. Make them taste “the sweetness of brevity and the comfort of sufficiency [in expression]
  - Warn the students against pretentiousness.
  - Teach them to express themselves in a way understandable to people without the need for any additional interpretation and comment.
  - Teach them to choose simple words whose semantic fields, or meanings, do not cover “extremes, nor extravagance and unnaturalness;” there are

already too many people who do not care about the loss of meaning in words, but concern themselves instead with eloquence and “meaningless elegance” in expression.

- Make the students understand that content has priority over style, because the least eloquent person is he “who has prepared the means of conveying meaning before preparing the meaning itself.” Enrich their active vocabulary, for one should not just stick to the words one already knows. New vocabulary, however, should be limited to known and distinct meanings, and should not just be created off-hand.

#### 4. Good manners and style in writing

- Warn the students about using bad manners in life and in writing. They should also be warned about slow articulation, inactive performance, extreme arrogance, and the keenness to be counted among the eloquent. Again, make them aware of good style; prepare them to distinguish between a smooth and easy style and a complicated one.

### 2.2.1.3 Deduction vs. Memorization

- The leading sages, masters of the art of deductive reasoning and [independent] thinking, have been averse to excellence in memorization, because of [one’s] dependence on it and [its rendering] the mind negligent of rational discernment, so [much so] that they said: “Memorization inhibits the intellect.” (Hārūn, & Abd al-Salām, 1991)

[وكرهت الحكماء الرؤساء، أصحاب

الاستنباط والتفكير، جودة الحفظ لمكان

الاعتماد عليه، وإغفال العقل من التمييز، حتى قالوا: "الحفظ عذق الذهن"]

- The reason they have been against it is that memory just makes one an imitator, whereas logical reasoning gives one the power of confidence and the coolness of certainty. (Hārūn, & Abd al-Salām, 1991)

[ولأنّ مستعمل الحفظ لا يكون إلّا مقلّداً، والاستنباط هو

الذي يفضي بصاحبه إلى برد اليقين وعزّ الثقة.]

- Even though memorization has a higher honor than [deductive reasoning], the real claim and the commendable conclusion are that when [a student] continues to learn by memorization, it undermines deductive

reasoning, and when he continues to learn by deductive reasoning, it undermines learning by memorization. (Hàrùn, & Abd al-Salàm, 1991)

[والقضية الصحيحة، والحكم المحمود: أنه متى أدام التحفظ أضّر ذلك بالاستنباط، ومتى أدام الاستنباط أضّر ذلك بالحفظ، وإن كان التحفظ أشرف منزلة منه.]

### 2.2.2 Ibn Sahnun 817- 870

Muhammad Ibn Sahnun al-Tanùkhî<sup>3</sup> was a renowned scholar of the Hadith, a biographer, a historian, and an authority on Màlikî jurisprudence.<sup>4</sup> He was born in the current Tunisian city of al-Qayrawàn in 202/817. Ibn Sahnun was an accomplished academic. It is said that he wrote around 200 books and treatises. Only three of the twenty-four works—including "Rules of Conduct for Teachers"—have survived, despite their title identification. K. Àdàb al mu'allimîn<sup>23</sup> by Ibn Sahnùn is categorized as professional adab-literature. Ibn Sahnùn's work, like other manuals of this kind that are written for secretaries, clerks, copyists, or judges, is directed at a particular group of people: primary school teachers, to whom he offers legal and professional guidance. (Günther, 2004).

Ibn Sahnùn presents to the teachers a number of rules. Some of them are obligatory; others are recommended. One can conclude from the text the following obligatory rules: (Günther, 2004).

1. In addition to teaching students to read, write, and use grammar correctly, teachers also need to teach them how to articulate the Quran precisely.
2. It is highly recommended that educators refrain from teaching the Quran to be recited melodiously (albàn al-Qur"àn). This is "unlawful" because it encourages singing, which is disgusting.
3. The obligations of worship (such as the number of inclinations and prostrations in prayer, the ablutions before prayers, etc.) must be taught by teachers.
4. Since excellent manners are a duty to God, teachers must instill them in their students.

As recommended topics for teaching, Ibn Sahnun suggests the following:

1. The basics of Arabic language and linguistics.

2. Arithmetic.
3. Calligraphy.
4. Writing letters.
5. Poetry, however, only if the verses are decent.
6. Proverbs of the ancient Arabs.
7. Historical reports (akhbàr) of the ancient Arabs and legends of their battles.
8. Sermons (khutab), if the pupils show interest in them.

These fairly varied suggestions from Ibn Sahnun are important because of the importance that the Mālikites in the Maghrib often placed on teaching boys the Quran. Other regulations cover a wide range of topics. For instance, teachers are cautioned against teaching young girls and males together because it corrupts the youth. This claim appears to indicate that, first, education was not limited to boys, and second, coeducation may have been rather common in elementary schools. Additionally, Christian youngsters should not be taught the Quran by their teachers. This regulation is based on Ibn Sahnun's father's authority. On the one hand, it appears to suggest that Christian and Muslim children were enrolled in the same schools. On the other hand, it shows that Ibn Sahnun took the quranic command “There is no compulsion in matters of faith” (Q 2:256) literally (Günther, 2004).

In his book Günther (2004) included recommendations and advice from Ibn Sahnun that are beneficial to understanding the teaching principles of that era. They are divided into:

1. Mental challenges for pupils, teaching assistance, and teacher responsibilities.
    - Ibn Sahnun stated: “. . . There is no harm in having them dictate to each other, because this is for their benefit. Yet he (the teacher) must review their dictation. [Moreover,] he must not let them move from one sura to another until they have memorized [the first sura] with its desinential inflexion and orthography—unless [the pupils’] fathers give him leeway to do so”.
- [قال: وقال سحنون: ... ولا بأس أن يجعلهم يملئ بعضهم على بعض، لأن ذلك منفعة لهم، وليتفقد إملاءهم. ولا يجوز أن بنقلهم من سورة إلى سورة حتى يحفظوها بإعرابها وكتابتها إلا أن يسهل له الآباء].
- Sahnun stated: “It is more appropriate for the teacher not to put one of the boys in charge of the beatings nor designate for them a monitor from

amongst them, unless it is a boy who has finished [learning] the Quran and knows it, and no longer needs instruction. Hence, there is no harm in it. [Also, there is no harm for] the boy to help the teacher; [for] this is of benefit to the boy.

[قال: وأحب للمعلم أن لا يولي أحداً من صبيان الضرب، ولا يجعل لهم عريفاً منهم، إلا أن يكون الصبي الذي قد ختم وعرف القرآن، وهو مستغن عن التعليم، فلا بأس بذلك، وأن يعينه؛ فإن ذلك منفعة للصبي].

- Yet it is not permissible for him (i.e. the boy assisting the teacher) to give orders to any of the pupils, or to instruct any of them—unless there is benefit in that for the boy's formation, or his father has approved of it. [If this is not the case,] the teacher himself should be in charge of this [teaching] or hire someone to help him, if he is equally qualified”.

[ولا يحل له أن يأمر أحداً، وأن يعلم أحداً منهم إلا أن يكون ذلك منفعة للصبي في تخرجه، أو بأذن والده في ذلك. وليل هو ذلك بنفسه أو يستأجر من يعينه إذا كان في ثل كفايته].

- Sahnun stated: The teacher must be committed to working hard. And he must devote himself to the pupils,...for he is a hireling and cannot leave his work.

[قال: وليلزم المعلم الاجتهاد، وليتفرغ لهم

...، لأنه أجير لا يدع عمله].

- Sahnun stated: The teacher is not permitted to send the boys [to take care of] his personal matters.

[قال سحنون: ولا يجوز للمعلم أن يرسل الصبيان في حوائجه].

## 2. Advice For Teachers

- The teacher must not be excessive [in his punishment], as I have [already] told you. [Moreover,] he must command them to refrain from harming [one another],

[وعلى المعلم اني لا يفرط في العقاب وان يحث على كف الاذى]

## 3. Handling Trouble Between Pupils

- Ibn Sahnun said: Sahnun was asked about the teacher: “Should he accept the word of boys concerning the harm [done] by others?”

[قال: وسئل سحنون عن المعلم: أيأخذ  
الصبيان بقول بعضهم عن بعض في الأذى؟]

- He replied: “I do not consider this [an issue] requiring legal judgment. However, the teacher should discipline them if they have harmed one another. In my view, he should do so if knowledge of the harm has been spread by a group of them, or [if ] there was admission [of the misdeed]— unless they are boys known to him to be truthful; then, he should accept their word and punish accordingly.

[فقال: ما أرى هذا من ناحية الحكم. وإنما  
على المؤدّب أن يؤدّبهم إذا آذى بعضهم عضاً. وذلك عندي إذا استفاض علم الأذى  
من الجماعة منهم أو كان الاعتراف، إلا أن يكونوا صبياناً قد عرفهم بالصدق فيقبل قوهم ويعاقب  
على ذلك.]

### 2.2.3 Ibn Tufayl 1116 - 1185

The life of Abu Bakr Ibn Tufayl is not well known. He was born in the northeastern region of Grenada, which was then governed by the Muslim Berber dynasty of the Almoravids (1046–1147), close to the city that is now known as Guadix, possibly around the year 1116. Ibn Tufayl had Arab ancestry. He most likely attended schools in the Iberian Peninsula's intellectual hotspots of Seville and Cordoba. Ibn Tufayl learned about astronomy, physics, medicine, mathematics, and other natural sciences in Islamic Spain. He also learned about poetry. He first settled as a doctor in what is now Granada, Spain, after finishing his education. Ibn Tufayl presents a theory of knowing that admits the value of empirical experience but contends that the superior being is the sole source of knowledge that is both profound and ultimate. (Guenther, 2018).

Concerning education Ibn Tufayl's perspective was the emphasis on the development of oneself to learn, which came to be known as character education. Character education is commonly defined as moral or value education intended to help students or kids make good or terrible decisions about various things. Participants in character education are now adults rather than just kids and teenagers. The essential requirement for the survival of this nation This suggests that regardless of our age or surroundings, character education is necessary in our lives. The following examples illustrate a variety of publications on character education from an Islamic perspective: Rethinking Character Education from an

Islamic Perspective: A Search for Character-based Education in Indonesia by Supriyono (Supriyono, 2016); Developing Character Education Concerning Islamic Perspective: a Conceptual Review by Supriyono Eka (Eka, 2017), Ibn Miskawaih defines it as "a state of the soul which causes it to perform its actions without thought or deliberation." It is a mental state that causes actions to appear without deep thought or consideration (Arifin, 2002). At the same time, al-Ghazali defines morality as the form or nature of a state implanted in the soul from which deeds are easily born without thought and consideration (Salim, 1986). So, that character is synonymous with morals and ethics. According to his view loving oneself, independence, loving others, and willingness to learn are all basic principles to learning. (Alamin et. al., 2023).

#### **2.2.4 Ibn Rushd 1126 – 1198 A.D.**

Ibn Rushd was a great Muslim scientist who was very influential in his contribution to the progress of world human civilization. Coming from a devout (religious) family who was educated with various kinds of science and knowledge between religion and general science (Nurhuda & Putri, 2023). He studied various scientific fields from teachers who were experts in their fields, including the field of medicine he studied with Ibn Jurrayul, the palace doctor and philosopher from Abu Ja'far ibn Harun Al Tarjali, and in the field of astronomy, he also studied with Abu Ishaq ibn Wadi (Forcada, 2007). From various studies he has received from teachers who are experts in their fields, it is not surprising that he is known as a person who is competent in the fields of philosophical thought, Islamic law, mathematics, astronomy, geography, and medicine.(Rahman et al., 2021).

##### **2.2.4.1 Ibn Rushd's Thoughts and Contributions to Education**

Ibn Rushd's thoughts in the field of education have never actually been specifically formulated, but from his works thoughts can be constructed that contain educational elements to be explored more deeply. Efforts to trace thoughts that tend to have educational content from his thoughts began with him classifying science into two, namely theoretical science (nadhari) and practical science (amali). This classification, viewed from an educational perspective, really influences the cognitive level of students where the two are interrelated and used(Nurhuda, 2022b). Next, according to Ibnu Rushd, the purpose of education is

what is desired by the Shari'a, namely providing guidance for human life in carrying out correct actions, the results of human reason (ratio) should lead him to actions that are not by norms and morals to achieve world happiness and hereafter(Putri et al., 2023). Ibnu Rushd's thoughts, which have other educational content, produce methods of human thinking in three categories, including khitobiyah (rhetorical argumentation), jadaliyah (dialectical argumentation), and burhaniyah or meaning deep analogies (Hania & Suteja, 2021). Another spark of Ibn Rushd's thought was his effort to harmonize philosophy and religion, which, if drawn from the current context, has made many real efforts not to separate general lessons from religious lessons (Islamization of Science), and Islamic educational institutions that combine with the concept of general schooling (Huda et al., 2023).

#### **2.2.4.2 Knowledge Theory from Ibn Rushd's Point of View**

Through his studies to Aristotle thoughts on Self and Intellect, Ibn Rushd could present authentic theory in Knowledge based on comparison between perceived existence and reasonable one, as well as promotion from the first to the second. Also his theory emphasizes on the fact that religious rules urged to know Allah the Mighty and all creatures and considering thereof by mind; i.e. mental measurement, as Knowledge is promoted from perceived things to reasonable things. Ibn Rushd theory is set out on mental methodology which considers Knowledge way is based on sense, mind and promotion from the first to the second. Ibn Rushd considers that Knowledge is possible via senses and via mind as well, but he classified the mental epistemology to be of high level. Ibn Rushd believed that mind has the ability to acquire science via its cognition of abstract totality, but also may be promoted to communicate with world of spirits and minds which is the last perfection of the human (Muraad, 1988). The most important feature of Ibn Rushd theory is freedom route and allow wildy human to employ its mental abilities to gain science and Knowledge (Al-Rsa'i, 2018).

#### **2.2.4.3 Ibn Rushd's Philosophy of Education**

The first principle states about learning and acquire the knowledge which could be achieved through seeing, foresight and realization of mind, in the same time it did not deny the heart refinement and isolation from anything that may keep mind busy as well as self-struggling to be additional factor that assist some parties

to acquire knowledge; in other words Education process is framed by thinking and morals ( Günther, 2012).

So learning and Knowledge acquirement strategies used by Ibn Rushd are variable. i'tibār (reflection), faḥṣ (examination), istinbāt (deduction and discovery), naẓarburhānī (demonstrative study), qiyās 'aqlī (intellectual reasoning), tamthīl (comparison and analogy) as well as ta'wīl (allegorical interpretation), in addition to aqāwīljadalīya (dialectical reasoning), aqāwīlburhānīya (demonstrative reasoning) and aqāwīlkhiṭābīya (rhetorical reasoning) ( Günther, 2012).

Even though freedom is the route which Ibn Rushd used in his Philosophical thinking, we are sure that such route and methodology is reflected on education principles thereto as it explains that the teaching, learning method and purport shall be compatible with human mind abilities. As a result, there would be teaching defined methods for beneficial elite, rather than methods directed to public. This principle is considered, in our current era, as one of the most important educational principles which takes into account the individual differences (Averroes, 1961).

Whereas Ibn Rushd theory is established on mental methodology which considers knowledge acquirement is based on sensation, mind and promotion from the first one to the second one, then acquiring the knowledge starts from perceived things and senses as knowledge tools then promote to the mind which the most efficient tool to produce knowledge and learning. This could be noticed in its idea; Recognizing the "I am" is not possible except from recognizing others; i.e. starting from recognizing the physical environment (existing things) (Al-Rsa'i, 2018).

### **2.2.5 Ibn Khaldun 1332 – 1406 A.D.**

Ibn Khaldun (1332–1406) was one of the most remarkable Muslim scholars of the pre-modern period. He founded what he called the science of human society or social organization, as well as a new methodology for writing history and a new purpose for it, namely to understand the causes of events. While his ideas had little impact on the development of Muslim thought for several centuries, they hugely impressed European thinkers from the nineteenth century on—some of them proclaimed Ibn Khaldun a progenitor of sociology and modern historiography. Ibn Khaldun has been accepted and commented upon by historians, jurists, theologians, politicians, teachers, educators and environmentalists alike". His

newly invented discipline hugely impressed European thinkers from the nineteenth century. "The Muqaddimah" can be regarded as the earliest attempt made by any historian to discover a pattern in the changes that occur in man's political and social organization. For Ibn Khaldun, education is a social enterprise. He classified sciences in what he perceived to be a logical way starting with the most useful ones, and based on his research of the systems prevalent around him and his studies of history. He supported his opinions with examples and enriched the conclusion he reached with a comparative study (Dajani, 2014).

### **2.2.5.1 Ibn Khaldun's Philosophy of Education**

Ibn Khaldun integrated the educational programs with the behavioural ones in a way that all sciences became a combination of both. As he believed in the influence of the behavioural education, he assumed that learning leads to a stage of transition in both; the individual mind and the individual manners. For instance, Ibn Khaldun advised that children should first be taught calculation: "The best method of instruction is to begin with calculation, because it is concerned with lucid knowledge and systematic proofs. As a rule, it produces an enlightened intellect that is trained along correct lines. It has been said that whoever applies himself to the study of calculation early in his life will as a rule be truthful, because calculation has a sound basis and requires self-discipline, soundness and self-discipline will thus become character qualities of such a person. He will get accustomed to truthfulness and adhere to it methodically..." (Muqaddimah, p. 376). Furthermore, Ibn Khaldun started by dividing sciences into two categories; one that man realized by instinct (ascribed primary sciences) while the other is acquired through education (acquired – secondary sciences). He explains; "God had offered man two beneficial things that man should make use of: the mind through which we can obtain the most useful, lasting needs and the senses through which we can gain knowledge." Following this, he further divided the ascribed – mental – sciences, which are called the sciences of philosophy and wisdom. They comprise four different sciences or as they are called the intellectual sciences: logic, physics, metaphysics, and measurement (Dajani, 2014).

Ibn Khaldun had put forward several principles that served as guidelines to education and he summarized his main remarks concerning these standards of conduct as mentioned in AlHossary (1953). as follows:

1. Education should be taken gradually in order to be useful.
2. A student, who specializes in a specific science efficiently, will be ready to learn another easily.
3. The process of education should be done permanently and within fixed periods so that children would not forget what they had learned.
4. Different sciences must be taught at different times.
5. Being hard with students would lead to negative results such as weakening the students' enthusiasm and leading to laziness, encouraging lying and teaching dishonesty and wickedness.
6. Travelling in order to seek knowledge, education and to meet with scholars would increase people's learning because each one would add to his/her own means of research and investigation.
7. Basic sciences such as Shari'a, Tafsir, Hadith, Fiqh, Physics and Theology should be studied more and investigated. On the other hand, the secondary sciences such as Logic, Arabic, and Mathematics should be studied as complementary courses (AlHossary, 1953).

#### **2.2.5.2 Ibn Khaldun's Methods of Teaching and Learning**

The following is an account of Ibn Khaldun's methods of learning and teaching as mentioned in Nudin et al. (2022):

##### **1. The Phased Method (Tadarruj)**

Teaching to children should be done gradually, step by step and little by little. First of all the teacher explains the principal problems regarding each branch of the discussion being taught, the information given must be general and comprehensive, taking into account the ability of reason and the readiness of students to understand what is taught to him. Ibn Khaldun explained: "Know that teaching knowledge to students is only effective if it is done gradually, step by step, and little by little." [12, p. 234]

##### **2. Repetition Method (Tikrari)**

The teacher's obligation is to return to the main discussion and raise teaching to a higher level, here the teacher must not only be satisfied with the general way of discussion, but also must discuss aspects that are contradictory

and various different views. Here it can be seen that the best way of training according to Ibn Khaldun contains three repetitions. In this case, repeated repetitions depend on the intelligence and skill of the student. He wrote: "Actually it produces 3 repetitions. In some cases, repeated repetitions are needed, but it depends on the skill and intelligence of the student." [4, p. 752] Then the teacher repeats the knowledge being taught so that the child's power to increase his understanding power increases. As he wrote: "Skill can only be acquired through the repetition of an action that imprints something on the brain, further repetition leads to willingness of the soul and further repetition creates skill and is deeply ingrained." [4, p. 258]

### **3. Method of Compassion (Al-Qurb Wa Al-Muyanah)**

Ibn Khaldun recommends that ta'lim be given using the Al Qurb Wa Al-Muyanah method which is translated by Franz Rosenthal to be friendly and gently (love and gentle) and rejects the method of cruelty and rudeness (al-syidah wa al-ghilzhah), in teaching children (wildan). Ibn Khaldun wrote: "Strict punishment in ta'lim is dangerous for muta'alim especially for asaghir al-walad (little children). Because they are in an unstable condition malakah" [4, p. 241] It is emphasized that children should not be taught too gently, especially if he is lazy and relaxed if the child does this attitude it is okay to be a little harsh and rude. Ibn Khaldun quoted the opinion of Harun Ar-Rashid who said: "Don't be too gentle either, if for example he gets used to a relaxed life, fix him as much as possible with compassion and gentleness, if he doesn't want this way you have to do it with violence". Ibn Khaldun's view is in accordance with the point of view of modern education. This orientation in education is to take the principle of specialization except at the Postgraduate level (ad-dirasat al-ulya) after the individual acquires general knowledge that allows him to understand the study of specialization as perfectly as possible, and is far from fanatics and narrow horizons. [13, p. 71]

### **4. Methods of Adjustment to the Physical and Psychic of Learners**

For students, it is recommended that education be carried out using methods that pay attention to the condition of students both psychologically and physically, wrote Ibn Khaldun: "We see many teachers (muallimin), from our generation who do not know at all how to teach, as a result, they have been the beginning gives the

muta'allimin scientific problems that are difficult to learn, and requires them to rack their brains to solve them. The teachers think this method is the right practice. They force the muta'allimin to understand the problems that are crammed into them, at the beginning the lessons of the muta'allimin are taught parts of the lesson further, before they are ready to understand it, this can confuse the muta'allimin, because the ability and readiness to receive knowledge can only be developed little by little.... That ability will grow little by little a little through habit and repetition of the knowledge he learned.... If they continue to be involved in difficult and confusing problems for them, and they have not been trained and are not ready to understand them, then their brains will be filled with boredom, they think the knowledge they are learning is difficult, and then they will lose their enthusiasm to understand and more fatally distance themselves thereof.” [4, p. 234]

## 5. One Field Mastery Method

According to Ibn Khaldun, someone who has an expertise rarely has expertise in other fields. [4, p. 773] This is because someone who is already an expert in a certain field so that his expertise is embedded in his soul, then he will not be an expert in other fields unless the first expertise has not been embedded and has not given a pattern in his thinking, this is based on the nature or style of the soul that cannot be grow in unison. Ibn Khaldun said: "Because, as has been stated, a person's initial expertise reaches a certain point, for example, a person who is skilled in carpentry will find it difficult to become an expert in other carpentry. One thing that students should know According to Ibn Khaldun is not to mix problems with one another, to students teach one science and then after he mastered the new teach another. As Ibn Khaldun wrote: "One of the good schools of thought with the method to be followed in teaching talim is to eliminate ways that confuse students, for example by teaching two branches of knowledge at once."

## 6- Practice/Exercise (Tadrib)

Ibn Khaldun also recommends teaching science through field implementation and practice (practice) after the process of understanding science is carried out (theory), then proficiency will be formed, and this mastery will be formed if the teacher is proficient in teaching science. Ibn Khaldun saw the case of

theoretical teaching, that the teacher's effort to teach science more than one time would hinder the formation of mastery, Ibn Khaldun also saw that people who have expertise in one field of science will not be able to be an expert in other fields. Ibn Khaldun said: "Then it continues until the other work is done, then the embroidery form is given, and the open part emerges but when the person is asked to do the actual sewing work, he simply cannot do it." Ibn Khaldun likens this opinion to coloring, the minds of students are likened to something natural and innocent, then mastery enters like a special color that colors the self and mind. If the mind has been dyed in this color it will be difficult to color it in any other color. Ibn Khaldun stated: "The reason is that, as has been stated, a person's initial expertise reaches a certain point, for example a person who is skilled in carpentry will find it difficult to become skilled in other carpentry."

### Conclusion

In exploring the contributions of Arab scholars to education, the study revealed the significant influence that they had over the world and how they contributed greatly to the conservation of the knowledge of ancient Greece and subsequent transfer to the present time. The study also talked about the principles of education that have been set by al-Jahiz and others; How curriculum was established with rules and was classified into obligatory and recommended subjects. A distinction between Deduction vs. memorization ways of learning have been made. In addition to that, purposes of education were specified and rules and manners of the teacher we addressed. many challenges were addressed by Ibn Sahnun and how teacher should respond to these challenges. Freedom of thought was emphasized by ibn rushd who presented his own theory of knowledge and philosophy of learning. And finally, the study presents a number of methods that are proposed and developed by ibn khaldun. All these contributions paved the way for the modern field of education which is one of the most important field that helps in the transfer of knowledge across the globe.

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