

دراسة تعريب العلوم للأغراض الأكاديمية A Study on Arabizing Sciences for Academic Purposes

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الملخص:

يقوي التعليم الرابطة بين الشباب وبلدهم من حيث الهوية. يتبنى الشباب القيم الغربية بسبب مجموعة من العوامل مثل؛ نظامهم السياسي وحداستهم وقيمهم الأخلاقية وغيرها من الصفات. تساعد اللغة الشباب على الوصول إلى الثقافات الأخرى وتعزز فهمهم بشكل أفضل. عزل النفس أو المجتمع يولد الجهل. ومع ذلك، للحفاظ على الهوية العربية المحلية، من الضروري أيضاً تعريب المنهج والمناهج التي يتم تدريسها في المدارس والجامعات. بدون تعريب العلوم، لن يتمكن العرب أبداً من التفكير بشكل مستقل ويصبحوا مبدعين. تبحث هذه الورقة في أهمية تعريب العلوم، وأهمية التعريب اللغوي، والخلفية الثقافية للتعريب، والعقبات التي تواجه التعريب، والتعريب كوسيلة لدعم الوجود العربي، وتركز في المقام الأول على التعريب في التعليم.

الكلمات الدالة

التعريب، المنهج، الجامعات، ترجمة المصطلحات العلمية.

1 - أستاذ مشارك بجامعة زايد - الإمارات

Abstract

Education strengthens the bond between the young and their country in term of identity. The young adopt Western values due to a combination of factors like; their political system, their modernity, their moral values and other attributes. Language helps youth to reach out to other cultures and fosters better understanding. Isolating oneself or society breeds ignorance. However, to preserve local Arab identity it is also necessary to Arabize the syllabus and curriculum taught in schools and universities. Without Arabizing sciences, Arabs would never be able to think independently and become innovative. This paper investigates the importance of Arabizing the sciences, the importance of linguistic localization, cultural background of Arabization, obstacles facing Arabization, Arabization as a mean to support Arab presence and it primarily focus on Arabization in education.

Keywords

Arabization, The curriculum, Universities, Translating scientific terms.

Introduction

Teaching in Arabic does not mean neglecting the foreign languages. It is possible to learn about other cultures, their innovations and developments in the scientific fields. The call for Arabization came about when Arabic is needed as a language of dialogue and scientific writing, especially those who use it as their mother tongue. Arabization is important to the contemporary life of the Arabs, who are today striving to get rid of dependency and stagnation, to develop and progress in the fields of science and technology as they did in the past.

The importance of Arabizing the Sciences

The Arabic language in the Middle Ages was the language of the civilized world and used in many scientific books. This is evidenced by the great scientific heritage from the Abbasid and Andalusian periods. Arabic was use by both Arabs and non-Arabs. Many scientific books (medicine, philosophy, literature, astronomy, mathematics, physics, and applied sciences) in Arabic were translated into foreign languages. Teachers and scholars of different science branches were taught in Arabic; such as: Jabir, Khwarizmi, Ibn Sina and Ibn Bitar, and their works were translated into Latin, and then to other European languages (Eickelman & Dennison, 2008).

When discussing Arabization, the term "Arabs" has been included in the meaning of the word, also meaning translating of foreign texts into Arabic and teaching foreign sciences in Arabic. Arabization is a term use when Arabic words are used to replace foreign words, to be taught in

Arabic and used in all fields of human knowledge (Elmgrab, 2011).

The Arabic language is the national language in the Arab world and it is used to express concepts, used in education, in various branches of scientific research, and as a working language throughout Arab society. Arabization may overlap with the concept of translation. It involves technical issues about the nature of the language, its semantic and absorptive energies, its own mechanisms, the preparation and training of translators, etc. In this context, the issue of Arabization deals with the intellectual and cultural relationship between the Arabic language and other foreign languages (Haddad, 1971).

Arabic is a language of culture and civilization and not only a language of science. The lack of scientific advancement in the Arab world arises out of many factors related to culture, historical and social circumstances. The effort to Arabize the sciences involves rebuilding the scientific foundation in Arab countries. This foundation is grounded in the scientific heritage of the Arabs that needs to be rekindled. This heritage is tied up in the relationship the Arabs have with the Arabic language. There is currently a scientific renaissance in the Arab world however this follows the Western model and methodologies and in a foreign language (Sliouat, 2002).

Arabizing the sciences is important at the national level, as the sciences help to develop society, and increases public awareness. Arabization can widen current scientific horizons, help to explore new technologies and encourage creativity of those working in science. A national language is often the

language of ideas and feelings, and experiments done in the mid-1960s at the American University of Beirut have proven that Arabization of sciences is essential (Sayeh, 2013). English and French are commonly used as the language of study in the universities, colleges, and the labor market today in most of the Arab countries. This is an inescapable fact.

Most Arab countries have been colonized, but despite being independent for almost a century, they are still dependent on foreign knowledge. The Arab world continues to rely on foreign languages in its universities and educational institutions, unlike some other countries post-independence. The Arab countries still call for the Arabization of education, even though they possess a language that is considered to be the highest and most important among the Semitic languages (Haulkory, 2014).

The Importance of Linguistic Localization

Arabization has many linguistic implications. It contributes to enriching the Arabic language of a professor, for instance, when they try to innovate and be creative by digging deeper into the language. The teaching of scientific materials in Arabic stimulates the teacher and the translator in trying to translate these materials into Arabic. Arabization also promotes comparative linguistic studies as there is a back and forth between the Arabic language and the foreign language. This back and forth enriches both languages (Iair Or, 2017).

Arab scholars and researchers have come across many dubious terms, strange words and terms that are originally Arabic. The origin of these has been confirmed by Arab scientists after being questioned by Western scientists. The

Arabization of subjects in universities is in line with the aspirations of Arab nations to return to its former scientific glory. It is not only about Arabization per se, but it also involves dealing with new sciences from the modern Arabic perspective. Arab nations have their own constituent issues like education of Arab youths in their mother tongue. This must filter through into research and the applied sciences (Khrisa & Majiduddin, 2014).

Cultural Background

Arabization promotes Arab unity in its entirety and helps to break the cycle of underdevelopment and frees Arab minds from all kinds of economic, technological and cultural hindrances. Language is a national entity and proof of character of the nation and its cultural identity. Higher education must be based on language as a proof of national sovereignty, along with self-cultural development, and building cultural specificity. This is represented by cultural identity, the basic characteristics of the society and in its cultural heritage, foremost of which is the national language, which is neither a form nor a symbol, but content and a way of thinking (Daoud, 1991).

There are those who believe that the problem of Arabization is twofold: the fact that a foreign tongue replaces the original tongue, and secondly: the fact that this original tongue is cut off from other languages due to the stagnation of society. The first aspect is a social phenomenon arising from oppression and foreign occupation, so that the foreign tongue takes centre stage, and the original tongue becomes an attribute (E.W., 2016).

The call for Arabization in education is clearly political. It promotes national unity and is an attempt to stop a dangerous current that divided Arabic society into two communities, a foreign one and the colonized arising out colonial practices. This is the problem that hinders Arabization of higher education in the Arab world namely: the failure to make the decision to adapt and adopt Arabic in the universities, the cycle of underdevelopment and dependence, illiteracy, the non-Arab culture, the absence of language, nationalism, a sense of smallness and arrogance, and cultural heritage (Al Mahdi, 2016).

Some efforts to Arabize education have been made, by private and public institutions, individuals and government etc. Some of them were carried out by linguistic assemblies, such as universities. Some of these efforts were also carried out by foreign institutions. These diverse efforts are spontaneous, but they are also intertwined (Al-Shbiel, 2017). Post-independence, foreign languages still dominate at universities with the exception being the Faculty of Medicine at Damascus University with medicine being taught in Arabic. Most Arab professors resist the Arabization of sciences under the pretext that Arabic is not capable of teaching these sciences, as well as the lack of Arabic references. Nevertheless, interest in the national language does not mean ignoring foreign languages as knowing them is a necessity and needed for the study of the sciences (Halpern, n.d.).

The Arabic language has been excluded and has not been used to teach the sciences. The Arabs have managed to solve

this problem by using foreign languages in their universities. Many Arab professors and scientists still believe that Arabs nations will not become developed nations if Arabic becomes the language of university education (Al-Ajrmi, 2015) Education in a foreign language requires teachers who master the language as well as students that are able to understand the language. Still there are occurrences of lectures at prestigious Arab universities being delivered in hybrid language where local vernacular is mixed with foreign terms (Miller, 2007).

Obstacles Facing Arabization

The debate over Arabization has been a protracted one. Several problems cropped up and most began at the beginning of the European colonization of the Arab world. Arabization in Egypt and Lebanon for example, was canceled despite being continued in Syria. Despite the independence of the Arab countries from colonialism in the middle of the last century, despite the establishment of the Arab Organization for Education, Culture and Science and its institutions, and despite the calls at conferences, all these did not resolve the many problems of Arabization, and these problems persist in all the Arab countries in varying degrees (Woodward, 2017).

The problem that hinders Arabization is sometimes due to the lack of scientific references in Arabic, arising out of the problems of authorship and translation. At the level of authorship, the number of scientific books written in Arabic is small compared to translated books and books written in foreign languages, perhaps because of the lack of qualified

authors in Arabic. Distribution is another issue facing Arabic writers as well problems with printing and other technical issues (Salloum, 2016).

Translated books are also few in numbers, despite the existence of Translation and Publishing office of the Arab Organization for Education, Culture, and Science in Damascus founded in 1991. However, the problem remains, due to the lack of translators and updating of new researches. Translated books may become obsolete if the information is not updated (Or, 2017). In Sudan, for example, between 1970 and 1980, no books were translated, whereas in Jordan, only 50 books were translated, and in Tunisia, 92 books were translated (Harabi, 2008).

Most Arab libraries lack scientific books in Arabic. This forces university students to refer to foreign references. A possible solution is by providing incentives to produce scientific books in Arabic. Other initiatives may include supporting translation activities, providing support services like printing, distribution, training competent specialists in editing, technical support and quality assurance (Benkharafa, 2013).

Foreign terms used in Arab countries need to be unified, despite the efforts of the Office for the Coordination of Arabization, the Arab League and the Union of Arab Synagogues. These terms still cause confusion leading to different translations and not helped by the lack of specialized terminology dictionaries. This hinders further developments; however, the problem of unification can be solved as the terms are readily available in books and can be

immediately used. The establishment of a special committee to look into Arabization, will contribute to reducing the problem of translation and unification of the terms (Al-Hamly & Farghal, 2013).

Some faculty members lack faith in Arabization. The reason for this is that the Arabic language is not used widely in research and not used in publishing high quality journals. Most researchers are only interested to publish in these journals. These problems associated with research and publication hamper the use of Arabic as a language of instruction (Carnell, 2016).

The lack of Arabic references, terminology, dictionaries and the weakness of the teaching staff and the lack of faith in using Arabic for teaching affects the students negatively and the issue needs resolution. University students are being taught the sciences in foreign languages and this makes foreign languages their language of dialogue and research. Society, in general, finds it difficult to balance the language of daily life (local language) and the language of science (foreign language (Al-Aufi, 2012).

The Arab governments are mistaken in believing that Arabic is a scientific language, and this is a major obstacle to Arabization. The Arab countries were divided between those who supported or opposed Arabization at the Seventh Arabization Conference in Khartoum. Even the countries that support Arabization, still use foreign languages as medium of instruction at their universities despite the directive issued by the League of Arab States in support of Arabization, and to

make Arabic the language of teaching in universities (Ghazala, 2013).

Scientific institutions especially universities must be convinced that Arabization and unification in an issue facing all Arab countries. Governments must enact laws that require these institutions to implement the resolution. This should move Arabization forward and address the problem (Halim, 2018).

Arabization as a mean to support Arab presence

Arabic in the Arab World goes beyond geography and impacts the likes of education, research and management sectors. The unification of Arabic terms may mean the acceptance of other cultures and knowledge. This requires intellectual maturity, material and social acceptance of goals, values, and means, starting from a new sense of reality of the dialectical interaction of production, relations, and self-capacity. Arabization means the rule of the Arabic language over the Arab world, which unites Arab feelings, combines it with its history, reality and fate, which makes it a key factor in handling the current political backwardness, lack of the freedom and Arab unity (Kesbi, 2005).

Arabization of education must be implemented in Arab universities and educational institutions, as is the case with other nations whose students are taught in their local languages like Turkey, Iran, India, and Israel. In Iran, Persian is used to teach many branches of science; such as medicine, pharmacy, and engineering. Colonialism has really weakened the Arabs in various ways like language, culture and identity. These attacks have manifested in many forms, weakening

Arab confidence in their language, causing intellectual backwardness, inability to express themselves and preference for anything foreign especially language. This is still ongoing and if not addressed will lead to further decline, in light of the ongoing cultural invasion (Braude, 2012).

Arabization in Education

The Arabization of education has become a necessity in all Arab countries. A nation's language is a source of strength and pride. Learning the sciences and cultures of other civilizations often through translation of foreign works into the local language can benefit the young. In some Arab societies, like Morocco, French still dominates in schools and universities. Teaching the sciences in universities and higher institutes in a foreign language, presents problems to students (Akhtar, 2013).

Studies have proven that graduates from Syrian universities taught in Arabic can understand their lessons better and receive instructions easily. Universities in countries that teach the sciences in a foreign language rely on foreign books still have problems with indoctrination, comprehension and translation (Ismail, 2002).

Arab countries that embarked to Arabize education haven't been successful; most of them are still using foreign language in their daily lives. These countries continue to be weak economically and in areas such as science and technology. Use of Arabic has been suppressed and there are not enough educational books written in Arabic or translated into Arabic.

This has negatively impacted on Arab students leading to poor academic results (Léglise & Migge, 2008).

The Arabic language is a rich language with more than twelve million words capable of embracing all areas of applied sciences. There should not be any issue with Arabization of education if it is well planned. With proper planning the teaching of the sciences can be done in Arabic in Arab universities (Sabbour et al., 2010).

The Arabization of education has multiple advantages. Students will be able to understand their lessons easier. Teachers will gradually gain the ability to teach the sciences in their mother tongue, write and author scientific books and other materials in Arabic, translate foreign books and materials into Arabic and help the growth of Arabic by coming up with new scientific terms. This essentially contributes to preserve Arab identity, culture and civilization whilst also learning from others. The process of Arabization of education is not easy, it needs to be pursued gradually by first to Arabize scientific material and learn from this experience, continuing with the positive aspects and doing away with the negative aspects of Arabization to ensure success (Kamusella, 2017).

The translation of foreign scientific books into Arabic will also enrich the language through various means like derivation, Arabization and citation. Previous scientific works have testified to the flexibility of the Arabic language; it is important to see what is really needed and not adding redundant scientific terms that weakens the language. It is also important to focus on research conducted in Arabic to

ensure quality and meet international standards of research with its own rules taking into account the structure and style of the Arabic language (Ead, n.d.).

Arabization of education is necessary and achievable, and this approach can drive Arab scientists to participate more in the various fields of applied sciences. This enables the Arabs to contribute to modern society when more of them are taught in Arabic in their universities and institutions (Masrai & Milton, 2017).

It is strange to see Arab professors resisting Arabization of the sciences under the pretext that the Arabic language is not capable to deal with these sciences, and that the sciences need to be taught in foreign languages. Experts believe the most important reason behind the failure to Arabize the sciences is due to the lack of faith in the capability of Arabic to be used as a science language (Elnashar & Abdelrahim, 2015).

Egypt has decided to abolish the teaching of scientific materials in English and to Arabize its curricula in recent years. This is not an issue per se, but to reject the idea outright, condemning the decision and accusing the state of treason and not caring about the future wellbeing of students is the real problem (Nwokoro, n.d.).

Many scientists and researchers have been quoted asking the question: "Is it better for our children to start learning science in their mother tongue or in a foreign language that the child is trained to do and will this increase their proficiency in this second language?" Studies have found many positive aspects to the use of the mother tongue in learning science and

mathematics. Learning different languages (English and others) is useful if done on a standalone basis, not as a mean to learn other subjects. It is important to differentiate between learning science in a foreign language and learning the foreign language (Ghazala, 2017).

Many Arab experts believe that learning a second language does not detract from one's Arabic identity and preference for the Arabic language. Colonialism has impacted on the Arab psyche badly especially in their perception of Arabic as a scientific language. It is irrefutable that many foreign terms are from Arabic, however this has been forgotten and more emphasis have been put on learning foreign languages. This affects the Arab approach to educating the young especially in the sciences in their language (Ofek, 2011).

Science does not favor anyone. Arabization arises mainly from a scientific need, and so children need to be taught the sciences in their mother tongue, but the process to Arabize education needs a vision and planned properly (Innes, 1986). Colonialism had paralyzed the Arab World politically, militarily and also in other areas. It is paramount that Arab nations to we re-examine all aspects of life, and deal constructively with the underdevelopment, stagnation and the legacies of colonialism (El-Beheri, 2013).

Importance of Arabization in Education

Arabization can unite the Arabs, foster dialogue amongst them, and build a unified Arab entity. Language makes up a nation's identity and. Arabization can build an Arab nation, and intellectually invigorate people that are politically divided. National unification is important for any Arab

nation. It allows the nation to focus on its civilization and contribution to humanity (Alhamami, 2015).

Teaching and learning in the mother tongue makes for a pleasant experience for both teachers and learners. Students' shared understanding of both spoken and written language with their teachers saves a lot of time for both parties. Studying sciences in Arabic is not as intimidating compared to learning it in English. This helps to overcome the psychological fear to learn amongst students. Researches have shown that Arabic helps the Arabic learner better understand science (Mihoubi, 2017).

The calls to use the national language in university teaching are not something new or strange. Most countries around the world use their local language as a language of higher education in their universities. This is practiced in the republics of the former Soviet Union. The old Soviet Union was able to impose the Russian language on all its former republics, but it also recognized the negative impact on culture and local languages if this policy was strictly applied. A balance between the use of Russian and the local language of the republics was instituted (Hamid, 2011).

The democratization of education is useless if this education is not in a language understood by the citizens of a country. The democratization of education, unless it is in the national language, is merely a slogan without substance (Abdelaziz, Hassan, 2014)

The proponents of teaching in the local language also call for continuity in the teaching of foreign languages, since the proficiency in a foreign language is needed to learn the

sciences. However, there is a difference between mastering a foreign language and using it as an alternative to the national language. Proficiency in a foreign language is required but not use as an alternative at the expense of the local language (Swan, 2015).

Understanding Western philosophy, sciences and foreign languages is required; however, Arabs must also not lose sight of the importance of the Arabic language. The language represents national identity, thoughts, traditions, history, philosophy and religion. It also represents the inner voice of the people expressed in their own local language. Thus, the use of local language in education is not just abstract thought, but also tied to the future of a nation (Tawadrous, 2014).

Conclusion

A child's personality is shaped by his or her early life experiences. Children absorb influences from their surroundings and these will affect their future behavior and action in society. The two most important influences that affect individuals is the language they are raised in, and the culture that surrounds them. These will ultimately influence their various attitudes, ideas and beliefs.

A nation's survival depends mainly on its mother tongue and its ability to preserve its identity and cohesion through the local language. Learning science in a language other than the original language can damage a person's creativity and vice versa.

UNESCO published a study entitled "Mother Tongue Matters" which stressed the importance of learning using the mother tongue. A survey conducted in Mali between 1994

and 2000 showed that students display more creativity if they learn in the local language and French rather than learning in French alone.

The calls for learning in the mother tongue will increase going forward, especially in countries pushing for technological development. The choice, however, remains with the population themselves, on their awareness and their ability to accept the struggle and not to simply choose the easier path.

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