# EFFECT OF PROBLEM BASED:
# LIFE-LONG EDUCATION IN INDUSTRIAL AND DEVELOPING COUNTRIES

## Nurlela Baco[1], Elihami Elihami[2]

[1,2] Nonformal Education Department, Muhammadiyah University of Enrekang
✉Corresponding email: *nurlelah9248@gmail.com*

| Article info | Abstract |
|---|---|
| | To explore how well graduates of self-directed, problem-based undergraduate curricula (USA, Vietnam, Taiwan, RRC, and Japan) who go on to primary care careers adhere to current clinical practice guidelines. Lifelong education is education that does not stop until it becomes an individual to become an adult, but continues throughout life. Lifelong education is of higher urgency at this time because humans need to continually adjust themselves so that they live naturally in an ever changing society. Lifelong education in industrialized and developing countries is indispensable in order to increase equality in the distribution of educational services, has pleasant economic implications, and essential in dealing with changing social structures there are vocational reasons for determining it will deliver an increase in the quality of life. Although the concept of lifelong education in industrialized and developing countries is different, the goal remains the same". |
| | |

## INTRODUCTION

Lifelong education is understood as a concept which states that the educational process can be carried out anywhere and anytime without being limited by age. This shows that education takes place from the time a human is born until he dies. Lifelong education is a human act naturally and naturally, (Elihami, E., 2016), the process does not always require teachers, tutors or educators. The learning process may not be realized by a person or group that he or they are always involved in it. Lifelong learning activities are manifested when there is an urge in a person to meet learning needs and satisfaction

and if there is awareness and enthusiasm to learn while life is still in the body.

According to the concept of lifelong education, educational activities are considered as a whole. The entire education sector is an integrated system, (Elihami, E., & Saharuddin, A, 2017). This concept must be adapted to the realities and needs of the community concerned. An advanced society will have different needs from an underdeveloped society. If most of the people of a nation are still illiterate, then efforts to eradicate illiteracy among adults will get priority in the lifelong education system, (Elihami, E., & Syahid, A. , 2018). But in industrialized countries that have developed rapidly, the problem of how to fill the free time to get on this system.

Lifelong education provides opportunities for people to learn flexible and broadly according to their interests, ages and needs. With lifelong education, humans can continue to develop their potential wherever and according to their portion. The implementation of lifelong education in every country cannot be the same, (Djafar, S., Nadar, N., Arwan, A., & Elihami, E, 2019). The aim aimed at industrial and developing countries in general is to increase human resources. However, the interests of a country of course different. Industrial countries focus on maintaining the progress of the nation and improving human resources. While developing countries aim to improve welfare and improve the quality of life of their people, (Zhang, et.al., 2021).

## DISCUSSION

The role of lifelong education:
1. Life long education allows a person to develop their potential according to their needs, because basically all human beings born into the world have the same rights, especially to get education and increase their knowledge and skills (Asrianti, et.al., 2021). With the potential, the knowledge and skills possessed are then developed as life goes on. And with this potential, it can encourage people to work harder in living life, with this knowledge humans are not easily fooled, with these skills humans can make new and useful things, (Agusriandi, et.al., 2021).

1. Through lifelong education, is the most effective way to get out of a circle of ignorance and poverty. Lifelong education enables a person to:
2. Increase their productivity so that they can maximize their abilities.
3. Maintain and develop the resources they have for the development of themselves and others around them.
4. It is possible to live in a healthier and more enjoyable environment because of the education we have been taught when we were young.
5. Have motivation in caring for and educating their children appropriately, so that family education is very important and of great significance.
6. In general, in developing countries there are still many parents who are not aware of the importance of formal education for their children. Therefore,

many of their children receive less formal education, drop out of school or do not attend school at all. Thus, lifelong education is a solution to the problem of parents because it changes their view from being indifferent to education to be positive thinking, namely that education is able to change attitudes, be more skilled and be more useful for families.

7. In the current era of globalization, it seems that the world is hit by the exploitation of science and technology (IPTEK) with the various products it produces. Everyone, including educators, scholars, leaders and so on, is required to always update their knowledge and skills like what is happening in developed countries, (Hami, E., & Idris, M. , 2015). Therefore, lifelong education provides knowledge that is not yet possessed or which is not yet known.

8. The rapid development of science and technology has had a major impact and influence on various educational concepts, techniques and methods. In addition, these developments are also getting wider, deeper and more complex, which makes it impossible for science to be taught entirely to students in schools. Therefore, the main task of school pathway education is to teach how to learn, instill strong motivation in learning. the child's self to learn continuously throughout his life, providing skills to students effectively so that he is able to adapt in a society that tends to

change rapidly. In this regard, it is necessary to create a condition which constitutes the application of the principle of lifelong education.

The concept of lifelong education in industrial and developing countries

1. United States

The main characteristic of education in the United States is that it is decentralized. The federal, state, and local governments have very clear rules and administrative responsibilities. The United States does not have a centralized or national education system. However, that does not mean the federal government is not provide direction and influence on educational problems. The legislature, judiciary and fedaral Executive are very active in the decision-making process regarding education.

The appointment of teachers is the authority of the state government. Each state has its own provisions regarding the requirements for obtaining a teaching certificate. There are states that require teaching requirements, such as mastering drug counseling, mastering computers and so on. There are also states that provide certificates. teaching for undergraduate (S.1) graduates, the second certificate stage for Masters (S.2) graduates. Then providing written examinations and teaching practice as a requirement for teacher appointments. The state also issues certificates for administrative staff of schools-principals and regional educators.

2. Lifelong learning in Vietnam

Education in Vietnam basically occurred before the country became independent, namely during the French government, but was very limited to the elite. As a result, the illiteracy rate reached 90% after the establishment of an administrative region in Hanoi in 1945, a program to eradicate illiteracy was carried out until 1950 and the result was that 90% were literate. After independence in 1975 the program was continued and three years later it was declared complete.

Lifelong learning at this time, the complementary education system is held in line with the formal education system with the aim of providing vocational skills for adults, (Hasnidar, H., & Elihami, E. , 2020). Meanwhile, basic education is intended for community members after literacy education, (Firawati, F. , 2017). To support the implementation of these activities, curricula and learning materials are compiled nationally , where the material is adapted to the community environment, (Elihami, E., & Syarif, I. , 2017). Lifelong learning in the future, lifelong education will continue to develop. This is indicated by the increasing efforts of the government in implementing this education.

## 3. Life-long study in Taiwan

Lifelong learning in Taiwan is strongly influenced by the teachings of Sun Yat Sen, a national movement leader. Sun Yat Sen's teachings were developed on the basis of political doctrine and Confucian teachings.

Lifelong learning today, vocational education is carried out through public and private education in the fields of agriculture, industry, trade, performing arts, economics and households, health and marine production. However, the method used in state institutions does not use traditional methods, so it is not suitable for adult needs, (Elihami, E., & Suparman, S, 2019). So a program offered by private institutions was born that prioritizes the development of sustainable learning abilities. Problem solving, critical thinking, and creativity. But not all people have participated in the program.

Lifelong learning in the future, even though there are changes in socio-political life, the three principles put forward by Sun Yat Sen, still survive and influence the practice of lifelong education. For example, students feel that it is the government's obligation to provide educational opportunities for all members of society. Besides, the program that is run must be balanced, not only vocational but also personal and social development must be developed in the program, (Efendi, A., & Elihami, E. , 2019).

Another teaching that influences lifelong education is the Confucian teachings. According to this teaching, respect for adults lies in self-development activities and moral policies, (Elihami, E., Rahamma, T., Dangnga, M. S., & Gunawan, N. A, 2019). This is what encourages adults to learn throughout their lives. Another aspect that affects lifelong development is the number of elderly people, which is increasing by 7-8% of the total population, (Musdalifah, et.al., 2021). On the other hand, it becomes an educational resource and on the other hand it becomes the responsibility of education. This group

needs educational services to develop themselves and socially.

4. Lifelong study in China

Lifelong learning in PRC systematically and conceptually became known only when the Learning To Be document was launched by Unesco, although practically this has been done for a long time in the community. The development of lifelong learning in China is more supported by private institutions than the government. The government is more focused on 9 years of basic education which is planned and will be completed by the end of the 30th century, (Jabri, et.al., 2019).

The development of lifelong learning is closely related to the factors of the development of science and technology, economy, community culture, and education itself, (Syaparuddin, et.al., 2020). In science and technology there have been extraordinary developments. The industry has used new technology so that workers who have lost their jobs or need training In the economic field, the PRC has entered the world market so that it inevitably has to compete with other countries. Besides these needs, society also needs self-development and culture, which is no less important is education itself. In this case the government does not have sufficient funds to finance all the needs of the community. Until high school level, the number of students that must be accommodated reaches 200 million or 25% of the total number of students worldwide. The main priority is the fulfillment of basic education needs
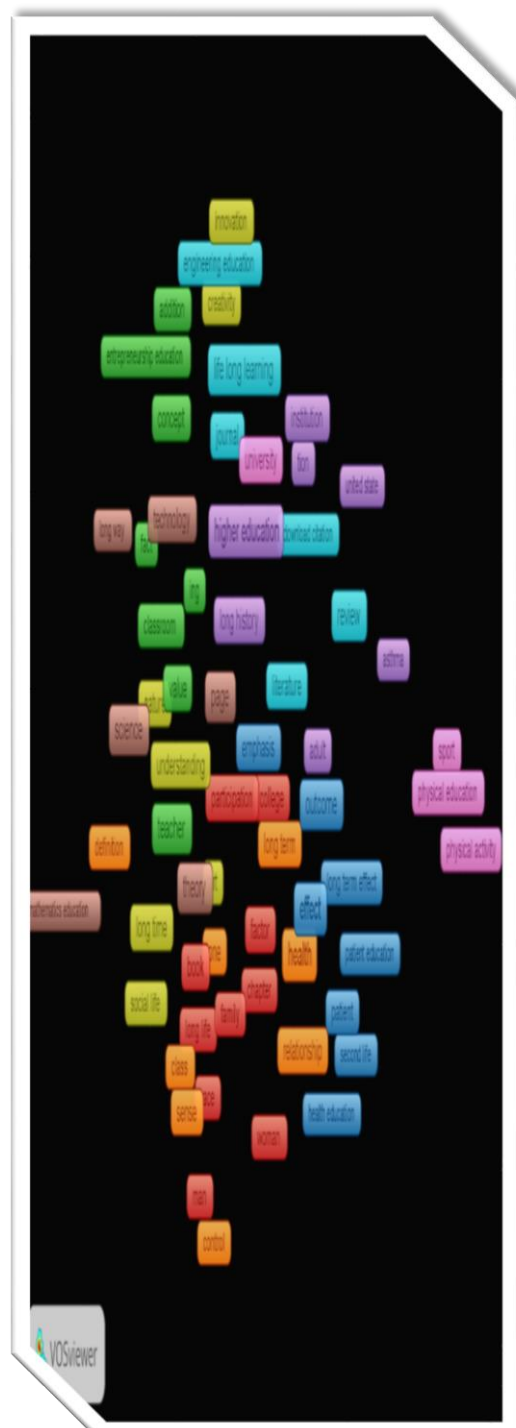


Figure.1 VOS Viewer

Since 2009, VOSviewer has been in active development.

VOSViewer employs van Eck and Waltman's VOS (Visualization of Similarities) algorithm to depict the relationship between entities in such a way that both direct and indirect connections between entities result in those entities being placed closer together on a map. Bibliometrics is often presented in the context of research data management in the library science literature, often as a service provided by research data management departments in large research universities. Bibliometrics is also used as a tool for post-processing data collected through other means, such as the content management system used for virtual reference transactions.

## 5. Life-long study in Japan

There are three main factors driving the development of lifelong learning in Japan. These three factors are internationalization, the reform era and the elderly society. Internationalization occurs in three stages, namely importing raw materials and processing them as finished goods for export. The transfer of industry to other countries, and the emigration of Japanese professional workers abroad and the immigration of foreign manual labor to Japan. The reform era has changed the organizational system from centralized to decentralized, strict management control pyramid to horizontal arrangement. Besides, Japan will enter the age of the elderly. It is estimated that in 2025 the population aged 65 years and over will reach 27%. These three conditions require changes in the education system that is more flexible and open.
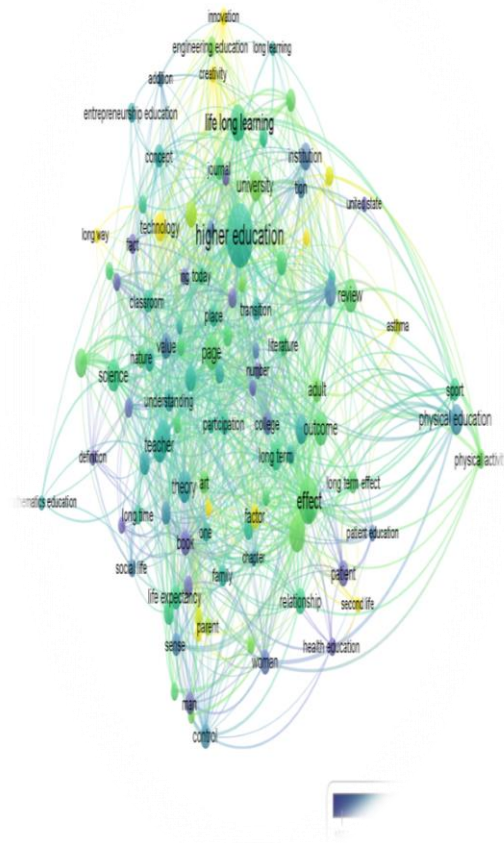


Figure 2. VOS Viewer

The VOSviewer software makes it simple to access bibliometric mapping using Dimensions, Scopus, and Web of Science data. Citation data that is properly formatted and structured, as well as the ease with which it can be exported, opens up new avenues for use during citation searches and reference interviews. This paper describes specific techniques for using advanced Dimensions searches, exporting citation data, and gaining insights from VOS Viewer maps. These search

techniques and data export practices are quick and accurate enough to incorporate into reference interviews for graduate students, faculty, and post-doctoral researchers.

Problem-based learning differs from problem solving in that the patient's problems are used as a springboard for learning; solving the problem, while important, is not an end in itself. Consideration and analysis of a specific problem is intended to raise awareness of the big picture and its variations, which may lead to changes in the proposed solutions. Students in the MU curriculum learn through inquiry to establish clear learning objectives from the study of health care problems and early contact with patients. Students must identify areas of deficiency in their own performance, locate appropriate educational resources, critically evaluate these resources, and evaluate their own performance, (Shin, J. H., Haynes, R. B., & Johnston, M. E. , 1993).

## CONCLUSION

Lifelong education provides opportunities for people to learn flexible and broadly according to their interests, ages and needs. With lifelong education, humans can continue to develop their potential wherever and according to their portion. The implementation of lifelong education in every country cannot be the same. The aim aimed at industrial and developing countries in general is to increase human resources. However, the interests of a country of course different. Industrial countries focus on maintaining the progress of the nation and improving human resources. While developing countries aim to improve welfare and improve the quality of life of their people.

## BIBLIOGRAPHY

[1] Agusriadi, A., Elihami, E., Mutmainnah, M., & Busa, Y. (2021, February). Technical Guidance for Learning Management in a Video Conference with the Zoom and Youtube application in the Covid-19 Pandemic Era. In *Journal of Physics: Conference Series* (Vol. 1783, No. 1, p. 012119). IOP Publishing.

[2] Asrianti, A., Baas, I. B., Elihami, E., & Yusfika, Y. (2021). Islamic Monumental Works is important for politic and educational psychology: Key Issues and Recent developments in Indonesia. *EduPsyCouns: Journal of Education, Psychology and Counseling*, *3*(1), 146-153.

[3] Djafar, S., Nadar, N., Arwan, A., & Elihami, E. (2019). Increasing the Mathematics Learning through the Development of Vocational Mathematics Modules of STKIP Muhammadiyah Enrekang. *ICONSS Proceeding Series*, 246-251.

[4] Efendi, A., & Elihami, E. (2019). GUIDE-LINING FOR LEARNING TO OPTIMIZING LEARNING ACHIEVEMENT. *JURNAL EDUKASI NONFORMAL*, *1*(1), 56-62.

[5] Elihami, E. (2016). *Meningkatkan Hasil Belajar Al-Islam Dan Kemuhammadiyahan Melalui Kuis Dengan Umpan Balik Pada Mahasiswa Kelas. SAFINA: Jurnal Pendidikan Agama Islam*, *1*(2), 27-37.

[6] Elihami, E., & Ibrahim, I. (2019). TEACHING TO VARIATION IN LEARNING FOR NON FORMAL EDUCATION DEPARTMENT. *JURNAL EDUKASI NONFORMAL*, *1*(1), 29-40.

[7] Elihami, E., & Nurhayani, N. PENINGKATAN KEMAMPUAN BERBICARA ANAK MELALUI MEDIA PAPAN FLANNEL DI KELOMPOK BERMAIN.

[8] Elihami, E., & Saharuddin, A. (2017). PERAN TEKNOLOGI PEMBELAJARAN ISLAM DALAM ORGANISASI BELAJAR. *Edumaspul-Jurnal Pendidikan*, *1*(1), 1-8.

[9] Elihami, E., & Suparman, S. (2019). IMPROVING THE SKILLS OF CHILDREN MOZAIK THROUGH MERONCE IN MEDINA. *JURNAL EDUKASI NONFORMAL*, *1*(1), 29-32.

[10] Elihami, E., & Syahid, A. (2018). PENERAPAN PEMBELAJARAN PENDIDIKAN AGAMA ISLAM DALAM MEMBENTUK KARAKTER PRIBADI YANG ISLAMI. *Edumaspul-Jurnal Pendidikan*, *2*(1), 79-96.

[11] Elihami, E., & Syarif, I. (2017, November). *LEADERSHIP MANAGEMENT AND EDUCATION PLANNING: DEVELOPING THE ENTREPRENEURSHIP TRAINING OF ISLAMIC EDUCATION. In INTERNATIONAL CONFERENCE ON EDUCATION* (Vol. 1, No. 01).

[12] Elihami, E., Rahamma, T., Dangnga, M. S., & Gunawan, N. A. (2019). Increasing Learning Outcomes of the Islamic Education through the Buginese Falsafah in Ajatappareng Region. *ICONSS Proceeding Series*, 429-435.

[13] Firawati, F. (2017). Transformasi Sosial dalam Nilai-Nilai Pendidikan Islam di Kabupaten Sidenreng Rappang. *Edumaspul-Jurnal Pendidikan*, *1*(1), 25-35.

[14] Hami, E., & Idris, M. (2015). Pengaruh Implementasi Kurikulum 2013 Terhadap Peningkatan Motivasi Belajar Peserta Didik Dalam Pendidikan Agama Islam Dan Budi Pekerti Di Sman 1 Panca Lautang Sidrap. *Istiqra: Jurnal Pendidikan dan Pemikiran Islam*, *2*(2).

[15] Hasnidar, H., & Elihami, E. (2020). PENGARUH PEMBELAJARAN CONTEXTUAL TEACHING LEARNING TERHADAP HASIL BELAJAR PKn MURID SEKOLAH DASAR. *Mahaguru: Jurnal Pendidikan Guru Sekolah Dasar*, *1*(1), 42-47.

[16] Jabri, U., Elihami, E., & Ibrahim, I. (2019). THE EFFECTS OF APPROACH INSTRUCTION ON STUDENT'S READING

PERFORMANCE. *JURNAL EDUKASI NONFORMAL*, *1*(1), 72-80.

[17] Musdalifah, M., Baharuddin, B., Jabri, U., Elihami, E., & Mustakim, M. (2021, February). Building The Management System: Designs on the use of Blended Learning Environment. In *Journal of Physics: Conference Series* (Vol. 1783, No. 1, p. 012120). IOP Publishing.

[18] Shin, J. H., Haynes, R. B., & Johnston, M. E. (1993). Effect of problem-based, self-directed undergraduate education on life-long learning. *CMAJ: Canadian Medical Association Journal*, *148*(6), 969.

[19] Syaparuddin, S., & Elihami, E. (2020). PENINGKATAN MOTIVASI BELAJAR SISWA MELALUI VIDEO PADA PEMBELAJARAN PKn DI SEKOLAH PAKET C. *JURNAL EDUKASI NONFORMAL*, *1*(1), 187-200.

[20] SYAPARUDDIN, S., MELDIANUS, M., & Elihami, E. (2020). STRATEGI PEMBELAJARAN AKTIF DALAM MENINGKATKAN MOTIVASI BELAJAR PKn PESERTA DIDIK. *Mahaguru: Jurnal Pendidikan Guru Sekolah Dasar*, *1*(1), 30-41.

[21] Zhang, Z., Luo, G., Zhou, S., Zeng, W., Mei, T., Chen, Z., ... & Wang, X. (2021). Reasonably Introduced ZnIn2S4@ C to Mediate Polysulfide Redox for Long-Life Lithium–Sulfur Batteries. *ACS Applied Materials & Interfaces*, *13*(12), 14169-14180.