

Arabic Language Learning in Cybernetic Theory Perspective: A Case Study of Hayfa Academy as an Effort to Improve SDGs4

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Abstract : The quality of Arabic speaking skills among students tends to be low. This quality hurts their effective communication skills. This problem needs to be addressed because it hinders the achievement of the Sustainable Development Goals (SDGs). Arabic is essential for establishing effective communication in the global world. This study explores in depth the Arabic language learning process of Hayfa Academy from the perspective of cybernetic theory and its contribution to the achievement of SDG 4. With a qualitative method and case study approach, this study collected data through interviews, distributing questionnaires, and observations. Data that has been obtained is then analyzed using collecting data, direct interpretation, forming patterns, and naturalistic generalization as a conclusion. The results of this study reveal that Hayfa Academy uses cybernetic theory in its learning process, namely giving attention to internal and external conditions of students. Hayfa Academy's Arabic language learning process also has a positive impact on the achievement of SDG 4. Hayfa Academy has implemented the Arabic language learning process by paying attention to the achievement of SDG 4, especially point 4, namely student skills and quality education.

INTRODUCTION

Low Arabic language skills, especially speaking skills, are a fundamental challenge in Indonesia. The proficiency of students in Arabic speaking skills is generally low, which adversely affects their ability to communicate effectively. ¹This issue requires attention as it poses a barrier to achieving the Sustainable Development Goals (SDGs). Arabic is very important for establishing effective communication in the global world. ² This opinion emphasizes that Arabic language proficiency can help achieve the SDGs targets, especially the fourth goal. Coupled with the UN decision to establish Arabic as an official language and its

¹ Lailah Nailufarh Atsaniyah, "Upaya Peningkatan Keterampilan Berbicara Bahasa Arab Dengan Metode Cooperative Learning Melalui Kegiatan Muhadhoroh," *Semnasbama*, 2021, 619-28, <https://prosidings.arab-um.com/index.php/semnasbama/article/view/841>.

² Dafa Nur Abtia Zayuda et al., "Eksistensi Maharah Al- Kitabah Dalam Pembelajaran Bahasa Arab," *Counselia; Jurnal Bimbingan Konseling Pendidikan Islam* 4, no. 2 (2023): 164-80, <https://doi.org/10.31943/counselia.v4i2.117>.

significant role as a means of international communication. Arabic has become increasingly interesting, including education, politics, trade and security.³

Students' low Arabic language skills are thought to hinder the achievement of the relevant skills they need for sustainable life success, as targeted in SDGs 4 related to quality education, namely increasing the number of youth and adults with relevant and appropriate skills for survival.⁴ Various initiatives and innovations have emerged to overcome the low Arabic language skills, including providing Arabic language tutoring by formal and non-formal institutions.⁵ Alfalah also showed that online media, such as Instagram through the @kursus_arab_alazhar account, could be an innovation that helps Arabic language students acquire language skills.⁶ In line with these findings, several Instagram accounts can be used as innovations in Arabic language learning media, namely (1) @bahasa.arabku, (2) @arabicquantum, (3) @nahwu_pedia, (4) @dr.nahwu, and (5) @kursus_arab_alazhar.⁷ Several other online tutoring institutions have been collected by researchers in Table 1, along with the Arabic language skills programs that can be selected, as follows:

Table 1. Online Arabic Language Tutoring Institutions

No.	Name of Arabic Language Tutoring Institution	Learning Mode	Choice of Learning Program
1.	Darul Lughah Al-Arabiyah	Online dan Offline	8 (Eight)
2.	Hayfa Academy	Online	5 (Five)
3.	Kursus Arab <i>Online</i>	Online	6 (Six)
4.	Marhaban Academy	Online	4 (Four)
5.	E-Markaz Arabiyah <i>Online</i>	Online	6 (Six)
6.	Maha Arabic Center	Online	4 (Four)
7.	Kursus Arab Id	Online dan Offline	2 (Two)
8.	Kursus Baitul Arabiyah	Online	5 (Five)
9.	KUBA (Kursus Unggulan Bahasa Arab)	Online dan Offline	5 (Five)
10.	Elmedina Academy (Privat Kursus Bahasa Arab <i>Online</i>)	Online	3 (Three)

³ Miftachul Taubah, "Maharah Dan Kafa'ah Dalam Pembelajaran Bahasa Arab," *Studi Arab* 10, no. 1 (2019): 31-38, <https://doi.org/10.35891/sa.v10i1.1765>.

⁴ Sekretariat Nasional SDGs, "SDGs KNOWLEDGE HUB," SDGs Bappenas, n.d., <https://sdgs.bappenas.go.id/>.

⁵ Alvi Dyah Rahmawati, "Manajemen Pengorganisasian Program Kursus Bahasa Arab Di Pare Kediri," *Journal of Arabic Studies* 3, no. 1 (2018): 70-80.

⁶ Adib Alfalah, Maman Abdurrahman, and Syihabuddin, "Penggunaan Instagram Kursus @_arab_alazhar Sebagai Media Arabic Self-Directed Learning Mahasiswa Bahasa Arab," *Shaut Al- ' Arabiyah* 12, no. 1 (2024): 70-87.

⁷ Syindi Oktaviani R Tolinggi, "Microblog Pada Instagram Sebagai Inovasi Media Pembelajaran Bahasa Arab," *Prosiding Konferensi Nasional Bahasa Arab VII*, 2021, 95-111.

The above institutions offer three learning programs, namely (1) Beginner to Advanced Arabic Language Learning, (2) Test Preparation and Advanced Study, and (3) Arabic for Special Purposes. This learning has been carried out offline and online. Online learning can make it easier for students because it can be started quickly and completed in one session, allowing students to master Arabic language materials quickly, even in just a few weeks. In addition, students can determine their own learning pace, saving time and eliminating the need to travel to class locations. Through online modes, students can also choose specific and relevant Arabic language learning materials according to their needs without studying all the materials simultaneously. Furthermore, online learning supports forming a learning community that allows students to interact with each other, share, and receive knowledge without location limitations.⁸

This online learning mode aligns with Norbert Wiener's cybernetic theory regarding technology-based learning.⁹ In its application, this theory emphasizes technology integration in learning and demands a systematic order in the entire learning process. The cybernetic theory emphasizes that learning must be arranged by considering students' internal and external factors, the preparation of structured materials, and the role of teachers as facilitators who optimize students' cognitive aspects to achieve learning goals.¹⁰ The success of the application of this theory has been proven. Cybernetic theory can increase the effectiveness of learning *aqidah akhlak* at MTs IKABA Gebang.¹¹ This finding aligns with the development of student learning outcomes after this theory was applied.¹² With the support of technology and wider access to information, cybernetic theory allows students to gain a deeper understanding.

This study focuses on Hayfa Academy to understand how this institution addresses the low Arabic language skills among students by applying cybernetic theory. The selection of Hayfa Academy is based on its commitment to providing Arabic language education and development in the field of communication skills and career advancement in the Arab world.¹³ The application of cybernetic theory in this study includes three main points: the Arabic language learning process at

⁸ Faiq Ilham Rosyadi and Munaya Ulil Ilmi, "E-Learning: An Implementation for Arabic Learning During the Covid-19 Pandemic," *Alsuniyat: Jurnal Penelitian Bahasa, Sastra, Dan Budaya Arab* 4, no. 1 (2021): 47-57, <https://doi.org/10.17509/alsuniyat.v4i1.32259>.

⁹ Nisa Permatasari, "Pengaruh Model Pembelajaran Cybernetic Dengan Strategi Kooperatif Terhadap Kemampuan Berpikir Kreatif Matematis Siswa" (Universitas Islam Negeri Syarif Hidayatullah, 2017).

¹⁰ Omon Abdurakhman and Radif Khotamir Rusli, "Teori Belajar Dan Pembelajaran," *Didaktika Tauhidi: Jurnal Pendidikan Guru Sekolah Dasar* 2, no. 1 (2015), <https://doi.org/10.24090/insania.v25i1.3651>.

¹¹ Rahmansyah, Muhammad Aidil Nur, and Muhammad Khalidi, "Hubungan Teori Belajar Sibernetik Dengan Efektivitas Pembelajaran Aqidah Akhlaq," *Transformasi Manageria: Journal of Islamic Education Management* 1, no. 2 (2021): 176-90, <https://doi.org/10.47476/manageria.v1i2.593>.

¹² Riza Wahyuna, Usmaidar, and Rani Febriyanni, "Analisis Teori Sibernetik Pada Era Pembelajaran 5.0 Dalam Perkembangan Hasil Belajar Siswa Di Kelas VII MTsN 1 Langkat," *Journal Ability: Journal of Education and Social Analysis* 4, no. 2 (2023): 34-40, <https://pusdikra-publishing.com/index.php/jesa>.

¹³ Hayfa Academy, "Hayfa Academy," 2024, <https://hayfa-academy.com/about-us/>.

Hayfa Academy pays attention to students' external and internal conditions, the arrangement of learning materials, and the role of teachers in achieving learning objectives. This study examines the role of learning that combines technology with cybernetic theory in Arabic language learning and recommends steps for educational institutions and policymakers to improve the quality of Arabic language education in Indonesia. From a theoretical perspective, this study will reveal the role of Hayfa Academy in supporting the achievement of SDGs, especially SDG 4 related to quality education, especially in sub-target 4, which focuses on improving relevant skills.

METHOD

For answer the research questions, this study uses a qualitative method with a case study approach to explore students' Arabic language learning process through the tutoring program conducted by Hayfa Academy. Creswell explained that case studies focus on specific conditions, covering individuals or a group in a portrait of life.¹⁴

Data collection was carried out through observation, interviews with educators, questionnaires given to students in beginner and advanced classes at Hayfa Academy, and documentation. Hayfa Academy assigns one teacher to accompany 15-30 students in each study group, with more than 200 teachers involved in various programs.¹⁵ Participants in this study focused on students in beginner and advanced classes, along with two teachers who guided both programs.

Furthermore, the data will be analyzed in four stages, including (1) Collection of categories by collecting data according to relevance; (2) Direct interpretation to find meaning in the data; (3) Forming patterns; and (4) Naturalistic generalization as a conclusion of the case study.¹⁶ .

Table 2. Demographics of Participants

Classification	Number
Region of Origin	
Java Island	15
Kalimantan Island	6
Sumatera Island	3
Education	
Junior High School/Equivalent	3
Senior High School/Equivalent	9
Diploma Degree	3
Bachelor Degree	9

¹⁴ Yuni Kusmarni, "Studi Kasus," *UGM Jurnal Edu UGM Press* 1 (2012): 1-12, <https://doi.org/10.1080/07263869100034611>.

¹⁵ Hayfa Academy, "Hayfa Academy."

¹⁶ Kusmarni, "Studi Kasus."

Hayfa Academy Program	
Beginner Class	6
Advanced Class	18
Arabic Language Experience	
Already Experienced	21
Have No Experience	3

RESULT AND DISCUSSION

Implementation of Cybernetic Theory in Arabic Language Learning at Hayfa Academy

The learning process at Hayfa Academy is carried out by paying attention to students' internal and external aspects based on the questionnaire the researcher has distributed. The internal conditions of students include the initial abilities, motivation, attention, perception, memory, forgetting, retention, and transfer, which can affect the learning process and are crucial for a teacher to pay attention to in managing learning. The external conditions of students include learning conditions and goals, as well as providing feedback.¹⁷ The finding that Hayfa Academy has carried out the learning process by paying attention to the internal and external conditions of students shows that Hayfa Academy has carried out a learning process based on cybernetic theory; the researcher attaches the following details in the form of a chart for easy understanding:

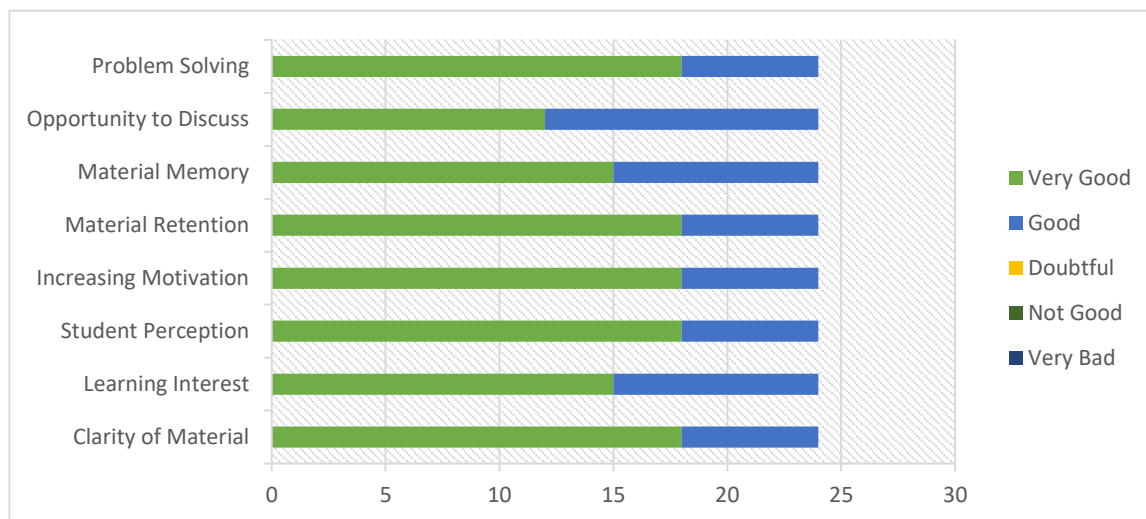


Figure 1. Internal Conditions of Hayfa Academy Students

The figure shows that the Arabic language learning process at Hayfa Academy pays close attention to students' internal conditions, including their initial abilities, motivation, attention, perception, memory, forgetting, retention,

¹⁷ Omon Abdurakhman and Radif Khotamir Rusli, "Teori Belajar Dan Pembelajaran.," *Didaktika Tauhidi: Jurnal Pendidikan Guru Sekolah Dasar* 2, no. 1 (2015): 17-22, <https://doi.org/10.24090/insania.v25i1.3651>.

and transfer.¹⁸ The data shows that the Arabic language learning process at Hayfa Academy pays close attention to solving students' problems. In this context, teachers always guide students who experience difficulties learning. Teachers always allow students to discuss and express their views on the learning material during the learning process. This opportunity to discuss has a good impact on motivation, perception, and the attractiveness of learning.¹⁹ In addition, Arabic language learning materials at Hayfa Academy are delivered clearly so that it is easy for students to remember and retain.

Other studies have shown that students' cognitive abilities, one aspect of internal conditions, greatly affect their learning outcomes, especially in e-learning-based distance learning.²⁰ In addition, students' learning motivation is also a key factor that can improve learning outcomes, where high motivation can encourage students to be more active in the learning process. Students' attention also plays an important role in the learning process.²¹ Other studies have shown that the attention students get can increase their learning motivation, ultimately positively impacting their learning outcomes.²²

Overall, Arabic language learning at Hayfa Academy pays enough attention to the internal conditions of students. This was also validated by Hayfa Academy teachers, who said that "Management of internal conditions is carried out by recognizing the needs of each student, such as the need to work in an Arab country or become a tour guide, so that motivation and attention are given according to the character and needs of the student. In addition, online-based learning is supported by communication through WhatsApp groups to maintain attention and support."²³

In addition, Hayfa Academy pays attention to the external conditions of students when they are carrying out the learning process. According to cybernetic theory, students' external conditions include learning conditions, learning

¹⁸ Omon Abdurakhman and Radif Khotamir Rusli, "Teori Belajar Dan Pembelajaran.," *Didaktika Tauhidi: Jurnal Pendidikan Guru Sekolah Dasar* 2, no. 1 (2015): 17-22, <https://doi.org/10.24090/insania.v25i1.3651>.

¹⁹ Sakahuni Sakahuni, "Analisis Hasil Peningkatan Motivasi Siswa SMA Dalam Pembelajaran Fisika," *Schrödinger: Journal of Physics Education* 1, no. 3 (2020): 92-96, <https://doi.org/10.37251/sjpe.v1i3.442>.

²⁰ Verlia Winanda and Yana Enceng, "Faktor Yang Mempengaruhi Hasil Belajar Kognitif Siswa Dalam Pembelajaran Jarak Jauh Berbasis E-Learning," *Perspektif: Jurnal Pendidikan Dan Keguruan* 12, no. 2 (2021): 147-52, <https://journal.uir.ac.id/index.php/Perspektif/article/view/9386/4197>.

²¹ Kusumaningrini, Dyah Lukita, and Niko Subidjo, "Faktor-Faktor Yang Mempengaruhi Motivasi Belajar Siswa Di Era Pandemi Covid-19," *Akademika* 01, no. 10 (2021): 145-61, <https://doi.org/https://doi.org/10.34005/akademika.v10i01.1271>; Siti Nurhasanah and A. Sobandi, "Minat Belajar Sebagai Determinan Hasil Belajar Siswa," *Jurnal Pendidikan Manajemen Perkantoran* 1, no. 1 (2016): 128, <https://doi.org/10.17509/jpm.v1i1.3264>.

²² Zhonggen Yu, Mingle Gao, and Lifei Wang, "The Effect of Educational Games on Learning Outcomes, Student Motivation, Engagement and Satisfaction," *Journal of Educational Computing Research* 59, no. 3 (2021): 522-46, <https://doi.org/10.1177/0735633120969214>.

²³ Interviews, "Pengajar Hayfa Academy."

objectives, and the teacher's feedback process.²⁴ The researcher presents the questionnaire results related to the external conditions of Hayfa Academy students in Figure 2.

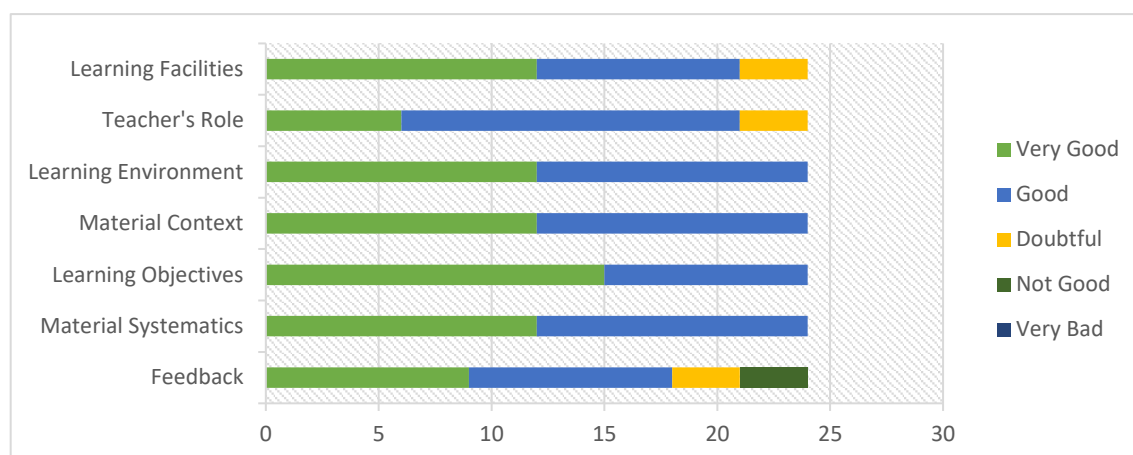


Figure 2. External Conditions of Hayfa Academy Student

The figure above shows that most of the external conditions of students at Hayfa Academy, including learning facilities, the role of teachers, the learning environment, and other aspects such as the context of the material, learning objectives, systematic materials, and feedback, received very positive assessments. This reflects a conducive and effective learning environment that supports teaching and learning. However, there are still a few areas that show doubts from students. This can be a note to continue improving the quality of these aspects to achieve optimal learning outcomes.

However, the application of cybernetic theory in the Arabic language learning process at Hayfa Academy is quite good. Arabic language learning at Hayfa Academy requires materials to be arranged systematically and sequentially in line with cybernetic theory. This is done by considering the information processing process that students will obtain in the learning process. In addition, a structured arrangement of materials can give students the freedom to think and digest learning materials.²⁵ The arrangement of learning materials is a crucial element in the education process that directly impacts learning. Other aspects, such as learning conditions, can affect changes in student behaviour, learning objectives can affect the learning process and increase student learning

²⁴ Omon Abdurakhman and Radif Khotamir Rusli, "Teori Belajar Dan Pembelajaran.," *Didaktika Tauhidi: Jurnal Pendidikan Guru Sekolah Dasar* 2, no. 1 (2015): 17-22, <https://doi.org/10.24090/insania.v25i1.3651>

²⁵ Omon Abdurakhman and Radif Khotamir Rusli, "Teori Belajar Dan Pembelajaran.," *Didaktika Tauhidi: Jurnal Pendidikan Guru Sekolah Dasar* 2, no. 1 (2015): 17-22, <https://doi.org/10.24090/insania.v25i1.3651>

motivation, and providing constructive feedback can help students understand their mistakes and improve the learning process.²⁶

The statements of Hayfa teachers also support this finding obtained through interviews, where they stated that "Feedback is given through interesting and habit-based materials, not memorization. The use of online applications supports student engagement and increases enjoyment in learning, which affects their retention. In addition, feedback focuses more on understanding words and sentences for communication. The interactive and practical process in class supports student retention and interest in learning."²⁷

Furthermore, the teachers at Hayfa Academy have carried out their role as facilitators very well, as recognized by students who feel helped in achieving their learning goals, especially in mastering Arabic. Based on the research findings, teachers consistently explain learning objectives at each meeting so that students understand the direction and focus of the material being studied. In addition, teachers have also succeeded in helping students apply learning materials to everyday life, making the learning process more relevant and practical. Teachers also provide space for students to discuss actively, boosting their confidence and engagement in learning. Teachers provide personal support and guidance for students who face difficulties, helping them overcome challenges more confidently. Combining these approaches creates a meaningful learning experience and supports students' success in achieving their learning goals. The external conditions of Hayfa Academy students, which have been explained previously, have a positive impact on the internal conditions of students. Students feel that Arabic language learning at Hayfa Academy makes it easier for them to process learning information.

Hayfa Academy's Contribution to the Efforts to Realize SDGs 2030

Arabic language learning that is carried out by paying attention to its students' internal and external conditions also positively impacts the achievement of SDG 4, especially in point 4 regarding skills relevant to community finances. This was conveyed by teachers in the interviews that were conducted.

"Hayfa Academy is vital in answering the need for Arabic language learning in Indonesia. Unlike the traditional approach that focuses on standard Arabic (fushah), Hayfa offers high-quality online education that is flexible, focused, and relevant to the needs of students of all ages. Although online based, the material taught remains measurable and by the use of everyday Arabic in the field. As a private institution, Hayfa also supports sustainable

²⁶ Diyah Ayu Karunianingsih et al., "Pengembangan Video Media Pembelajaran Berbasis Multimedia Dan Animasi Bagi Guru Sekolah Dasar," *PARAHITA : Jurnal Pengabdian Kepada Masyarakat* 3, no. 1 (2022): 17–28, <https://doi.org/10.25008/parahita.v3i1.59>; Syifa Setiawati, Fitri Silvia Sofyan, and Tridays Repelita, "Implementasi Nilai-Nilai Karakter Bangsa Dalam Di Mts Ghoyatul Jihad," *Dewantech: Jurnal Teknologi Pendidikan* 1, no. 1 (2023): 66–78.

²⁷ Wawancara, "Pengajar Hayfa Academy."

development goals (SDG 4) through affordable fees, access to relevant materials, and learning that follows developments in the Arab world, especially for students abroad."

This finding is also in line with what was conveyed by Hayfa Academy students, as shown in the following table:

Table 3. Students' Views on SDG 4 Achievement

No.	Question	Answer				
		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1.	Hayfa Academy helps in improving Arabic language skills	15	9	-	-	-
2.	Hayfa Academy improves literacy skills in the field of Arabic language	18	6	-	-	-
3.	Hayfa Academy provides Arabic language skills materials that are in accordance with the achievement of SDGs 2030	6	9	9	-	-
4.	Hayfa Academy implements the Arabic language learning process with good quality	15	9	-	-	-

Based on the interview excerpts and Table 3, the researcher concluded that Hayfa Academy has made a very good contribution to realizing SDGs 2030, especially in point 4, namely quality education. The contribution made by Hayfa Academy has implications for solving the problem of the lack of Arabic language skills in Indonesia. In the process of learning Arabic, Hayfa Academy also pays attention to how its students can have skills that will support them in the world of work and gain financial stability as stated by Hayfa's teacher, "In the world of work, approximately 4 years Hayfa has been present. Hayfa has helped many Indonesian workers in Arab countries. Many of them take special classes, namely Private. So that their work sector can adjust to the teaching materials provided and needed".

In addition, Hayfa Academy strongly supports gender equality in education and does not discriminate against race, ethnicity, or religion. In its program, Hayfa has many students from all over Indonesia, such as Medan, Palembang, Bandung, East Kalimantan, and Bali. There are even students from Singapore and Saudi Arabia. This diversity motivates the students because they can get to know each other and make new friends in addition to learning Arabic. Hayfa Academy teachers also said, "Hayfa Academy is the only course prioritizing gender, race, and ethnic equality. We socialize Arabic language learning for all groups, not only

for Muslims, but many non-Muslim participants also study at Hayfa. As for specialization for female students or vulnerable groups, Hayfa provides a place, namely private or custom private classes for them".

Overall, SDG 4 has several sub-targets, namely (1) Free primary and secondary education, (2) Equal access to quality early childhood education, (3) Equal access to technical, vocational and higher education, (4) Increase the number of people with relevant skills for financial success, (5) Eliminate all discrimination in education, (6) Universal literacy and numeracy, (7) Education for sustainable development and global citizenship, (8) Building and improving inclusive and safe schools, (9) Expanding higher education scholarships for developing countries, (10) Increasing the supply of quality teachers in developing countries.

Hayfa Academy can contribute to achieving SDG 4, especially in sub-target 4, namely increasing the number of people with skills to achieve financial success. However, in reality, Hayfa Academy also contributes to other sub-targets of SDG 4 with the following details:

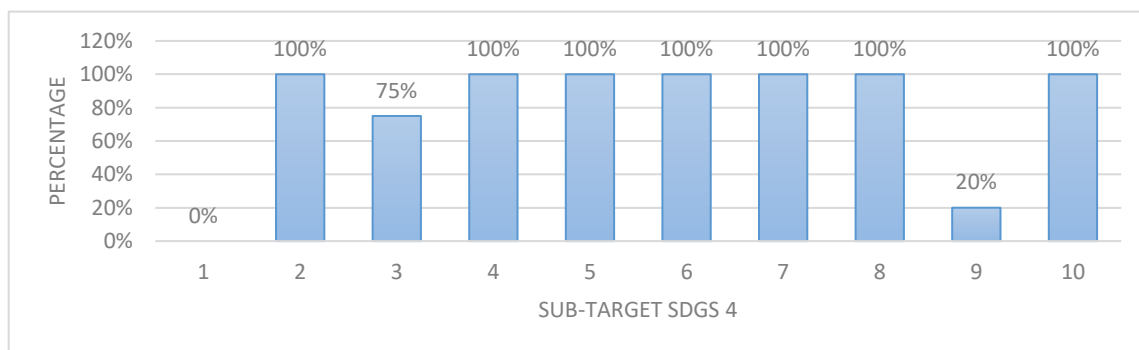


Figure 3. Hayfa Academy Contribution to SDGs 4

Hayfa Academy's contribution to achieving SDG 4 is significant based on the results of the analysis of various sub-targets. From the graph shown, it can be seen that the majority of SDG 4 sub-targets have been achieved with a percentage of 100%, namely sub-targets (2) Equal access to quality early childhood education, (4) Increase the number of people with relevant skills for financial success, (5) Eliminate all discrimination in education, (6) Universal literacy and numeracy, (7) Education for sustainable development and global citizenship, (8) Building and improving inclusive and safe schools, (10) Increasing the supply of quality teachers in developing countries.

Hayfa Academy's contribution to the seven sub-targets of SDG 4 is supported by easily accessible online learning, such as Arabic language learning programs for early childhood. In addition, the Arabic language learning process at Hayfa Academy can improve students' language skills, which are relevant for career and financial development and create an inclusive and safe learning environment. Hayfa's online learning mode facilitates access to education for students with limited time, supports learning flexibility, and expands

opportunities for student success.²⁸ Hayfa also supports students' Arabic literacy, creates an inclusive learning environment without discrimination, and contributes to increasing the supply of quality teachers through training for Arabic language teachers in line with sustainable development components.²⁹

In certain sub-targets, Hayfa's contribution shows an achievement of 75%, namely in sub-target (3) Equal access to technical, vocational, and higher education. This is based on Hayfa's efforts to open non-formal educational institutions with online modes that make it easier for everyone to access education. This aligns with Ossiannilsson's findings, which emphasize that implementing an open education culture can promote equality and accessibility in education.³⁰ The flexibility of online learning platforms allows individuals from various backgrounds to engage in educational opportunities that may not be available, thereby reducing educational disparities.³¹

However, some sub-targets only have a contribution percentage of 0% and 20%, namely in sub-targets: (1) Free primary and secondary education and (9) Expanding higher education scholarships for developing countries. This is the government's duty and authority to improve educational equality. Free primary and secondary education, as a foundation for lifelong learning, is highly dependent on government policy.³² Overall, this discussion can strengthen the finding that Hayfa Academy is not only present as an online learning institution but also as an institution that plays an active role in supporting sustainable development in the field of education, especially in Indonesia.

Based on the study results, Arabic language learning at Hayfa Academy is in line with cybernetic theory, which emphasizes the importance of information processing by considering students' internal and external conditions. This learning process has been proven to provide a positive contribution to the achievement of SDG 4, namely ensuring inclusive and quality education and supporting lifelong learning opportunities. Online learning modes at Hayfa Academy facilitate flexible learning access, allowing students to participate in learning without time and location restrictions.

²⁸ Jayden Holmes et al., "Online Learning and Teaching for The SDGs - Exploring Emerging University Strategies," *International Journal of Sustainability in Higher Education* 3, no. 23 (2021): 503-21, <https://doi.org/https://doi.org/10.1108/ijshe-07-2020-0278>.

²⁹ Susanna Ferran Vila, Giorgia Miotto, and Josep Rom Rodríguez, "Cultural Sustainability and the SDGs: Strategies and Priorities in the European Union Countries," *European Journal of Sustainable Development* 10, no. 2 (2021): 73-90, <https://doi.org/10.14207/ejsd.2021.v10n2p73>.

³⁰ Ebba Ossiannilsson, "Open Educational Resources (Oer) and Some of The United Nations Sustainable Development Goals," *International Journal of Information and Learning Technology* 5, no. 40 (2023): 548-61, <https://doi.org/https://doi.org/10.1108/ijilt-01-2023-0002>.

³¹ Walter Leal Filho et al., "Sustainable Development Goals and Sustainability Teaching at Universities: Falling behind or Getting Ahead of the Pack?," *Journal of Cleaner Production*, 2019, 232:285-294, <https://doi.org/https://doi.org/10.1016/j.jclepro.2019.05.309>.

³² Maurice Aoko Ndolo and Enose M.W Simatwa, "Impact of Free Secondary Education Policy on Primary to Secondary Education Transition Rate in Kenya: A Case Study of Mbita and Suba Sub- Counties," *Educational Research* 07, no. 02 (2016): 24-40, <https://doi.org/10.14303/er.2016.126>.

In addition, this study also revealed additional findings highlighting the integration of linguistic content related to *Amiyyah* Arabic language learning materials on the Instagram account @hayfa.academy. This learning content includes essential vocabulary for everyday conversations in Arabic. It often draws comparisons between *Amiyyah* and *Fusha*, helping learners understand the nuances and differences between colloquial and formal Arabic. Doing so bridges the gap between spoken and written forms of the language, making the learning process more comprehensive and practical.

Moreover, the content frequently engages contemporary topics, discussing recent events or issues of relevance in Arabic. For instance, posts have highlighted discussions around the Indonesian football match against Saudi Arabia and other events in Arab countries, using these as relatable contexts to present new vocabulary or grammatical structures. Such content makes the material more engaging and connects learners to real-world applications of the Arabic language, fostering linguistic and cultural understanding.



Figure 4. Arabic Learning Content @hayfa.academy³³

The content uploaded to the Instagram account @hayfa.academy offers numerous advantages for Arabic language learners. It provides a flexible and easily accessible platform that supports students' learning journeys. This approach aligns with modern trends in digital learning, ensuring that educational resources are available to a broad audience, including those who may need access to formal

³³ Hayfa Academy, "Https://Www.Instagram.Com/Reel/DBTPIVLSjpl/," Instagram, 2024, <https://www.instagram.com/reel/DBTPIVLSjpl/>.

Arabic language classes. By offering free and diverse learning materials, @hayfa.academy is pivotal in democratizing education and promoting language learning as a public good.

Additionally, this content is a practical implementation of Arabic language learning based on cybernetic theory, demonstrating how digital tools and interactive media can enhance efficiency and engagement. Integrating visually appealing and thematically relevant posts creates a dynamic learning environment that appeals to various learning styles, making the process effective and enjoyable.

Furthermore, this initiative showcases the potential of combining modern technologies with educational practices to address challenges such as accessibility, learner motivation, and the practical application of linguistic knowledge. The curated content enhances the learning experience for Hayfa Academy students. It extends its benefits to the public, reaching a wider community of learners interested in mastering Arabic.

These findings underscore the importance of utilizing innovative approaches in language education. They highlight how platforms like Instagram can transform the delivery of educational materials, offering learners the tools they need to succeed while supporting broader efforts to align with SDG 4 by promoting inclusive and equitable access to quality education. This example also illustrates how social media can be harnessed to make education more accessible, impactful, and aligned with learners' needs in the digital age.

Implementing cybernetic theory in Arabic language learning at Hayfa Academy provides in-depth insight into the effectiveness of an approach that integrates students' internal and external conditions in the learning process. The research findings show that learning at Hayfa Academy has been carefully designed based on cybernetic principles, such as attention to students' motivation, perception, retention, transfer, and cognitive aspects as internal conditions and learning goals, environment, and feedback as external conditions. This study reveals how integrating these two aspects can create an optimal learning environment that is theoretically relevant and has a practical and sustainable impact on developing Arabic language competence.³⁴

From the research results, learning at Hayfa Academy provides significant space for learners to participate actively. This is achieved through interactive discussions and precise delivery of materials, which increase motivation and support retention and transfer of learning. This process promotes cybernetic theory, which emphasizes the importance of the information processing process,

³⁴ Renzhong Peng and Rongrong Fu, "The Effect of Chinese EFL Students' Learning Motivation on Learning Outcomes within a Blended Learning Environment," *Australasian Journal of Educational Technology* 37, no. 6 (2021): 61-74, <https://doi.org/10.14742/ajet.6235>.

starting from input (information) to producing output (new knowledge or skills). Managing learner motivation and attention becomes essential in online learning, as previous studies confirmed that learning motivation directly impacts learning outcomes, especially when physical interaction is limited.³⁵

Furthermore, the role of teachers as facilitators is very prominent at Hayfa Academy. Teachers not only deliver material but also function as guides who are responsive to the individual needs of learners. This is reflected in the effort to recognize the specific needs of learners, such as the need to work in Arab countries or become a tour guide. This approach is in line with Knowles' (1980) view of adult learning theory (andragogy), which emphasizes the importance of the relevance of learning materials to the needs and goals of learners. Thus, the active involvement of teachers creates a learning environment that is adaptive and relevant to the practical goals of learning Arabic.

The external conditions examined in this study include a conducive learning environment, providing constructive feedback, and utilizing technology in online learning. Hayfa Academy's success in creating favorable external conditions reflects the holistic implementation of cybernetic theory. For example, providing feedback based on understanding words and sentences and using online applications supports learner engagement in the learning process. These findings support the argument about the importance of effective multimedia learning design to maximize technology-based learning, which is easily accessible and promotes independent learning.

However, several aspects require further discussion to explore the novelty of this study. First, this study shows that integrating students' internal and external conditions improves learning outcomes and supports the achievement of the 2030 Sustainable Development Goals (SDGs), especially SDG 4, related to quality education. In this regard, Hayfa Academy's approach to accommodating the diversity of students from various social, cultural, and religious backgrounds is an innovative step relevant to inclusive education.³⁶ This approach also contributes to other sub-targets of SDG 4, such as improving skills pertinent to financial success and eliminating discrimination in education, which are essential challenges in many modern educational institutions.

This success is supported by a flexible online learning program, which allows students from various locations access education. This approach reflects the principle of open education promoted by UNESCO, where accessibility and

³⁵ Imed Bouchrika, *The Andragogy Approach: Knowles' Adult Learning Theory Principles in 2024* (Education, 2024), <https://research.com/education/the-andragogy-approach>.

³⁶ Paola Aiello and Erika Marie Pace, *Inclusive Educational Principles, Policies, and Practices in Italy*, in *Oxford Research Encyclopedia of Education* (Oxford University Press, 2020), <https://oxfordre.com/education/display/10.1093/acrefore/9780190264093.001.0001/acrefore-9780190264093-e-1282>.

flexibility are key to achieving inclusive education. Thus, Hayfa Academy not only meets the needs of individual learners but also has a broader impact on the accessibility of education in Indonesia, especially for marginalized groups. Second, using social media as a learning tool at Hayfa Academy strengthens implementing cybernetic theory in a digital context. The linguistic content provided through platforms like Instagram supports learners' learning and reaches a broader audience. This shows how modern technology can address challenges such as accessibility and motivation to learn and promote a more inclusive and interactive learning culture.

CONCLUSION

Based on the findings, three conclusions can be drawn: First, Arabic language learning at Hayfa Academy applies Norbert Wiener's cybernetic theory, which is evident in its alignment with the learning process. Second, this approach supports achieving SDG 4 by enhancing learners' skills for financial success and addressing speaking proficiency issues. Third, Hayfa Academy contributes to broader educational goals, including early childhood education through the HayfaKids program, equitable access to vocational training, reducing discrimination, improving literacy, promoting sustainable education, creating safe learning environments, and increasing quality teachers. Additionally, using Arabic learning content on the Instagram account @hayfa.academy enhances students' experiences by providing accessible, engaging materials that reinforce learning beyond the classroom, highlighting social media's role in expanding inclusive and equitable education.

The results of this study have broad implications. Theoretically, these findings enrich the discourse on applying cybernetic theory in Arabic language learning and show how digital technology can be integrated to support education. This study guides educators, policymakers, and educational institutions to utilize social media to support learning. Thus, Hayfa Academy is a successful example in aligning educational practices with SDG 4 and inspires a more inclusive, adaptive, and technology-based approach in education. However, this study also has several weaknesses that need to be considered. One of them is that this approach has not explained how students' learning experiences are with the content of learning materials on the @hayfa.academy Instagram account from the perspective of cybernetic learning theory. Further research is recommended to expand and dig deeper into students' direct experiences to overcome these weaknesses.

References

- Abdurakhman, Omon, and Radif Khotamir Rusli. "Teori Belajar Dan Pembelajaran." *DIDAKTIKA TAUHIDI: Jurnal Pendidikan Guru Sekolah Dasar* 2, no. 1 (2015). <https://doi.org/10.24090/insania.v25i1.3651>.
- Aiello, Paola, and Erika Marie Pace. *Inclusive Educational Principles, Policies, and Practices in Italy*, in *Oxford Research Encyclopedia of Education*. Oxford University Press, 2020. <https://oxfordre.com/education/display/10.1093/acrefore/9780190264093.001.0001/acrefore-9780190264093-e-1282>.
- Alfalah, Adib, Maman Abdurrahman, and Syihabuddin. "Penggunaan Instagram Kursus @_arab_alazhar Sebagai Media Arabic Self-Directed Learning Mahasiswa Bahasa Arab." *Shaut Al- ' Arabiyah* 12, no. 1 (2024): 70–87.
- Aoko Ndolo, Maurice, and Enose M.W Simatwa. "Impact of Free Secondary Education Policy on Primary to Secondary Education Transition Rate in Kenya: A Case Study of Mbita and Suba Sub- Counties." *Educational Research* 07, no. 02 (2016): 24–40. <https://doi.org/10.14303/er.2016.126>.
- Atsaniyah, Lailah Nailufarh. "Upaya Peningkatan Keterampilan Berbicara Bahasa Arab Dengan Metode Cooperative Learning Melalui Kegiatan Muhadhoroh." *Semnabama*, 2021, 619–28. <https://prosiding.arabum.com/index.php/semnabama/article/view/841>.
- Bouchrika, Imed. *The Andragogy Approach: Knowles' Adult Learning Theory Principles in 2024*. Education, 2024. <https://research.com/education/the-andragogy-approach>.
- Ferran Vila, Susanna, Giorgia Miotto, and Josep Rom Rodríguez. "Cultural Sustainability and the SDGs: Strategies and Priorities in the European Union Countries." *European Journal of Sustainable Development* 10, no. 2 (2021): 73–90. <https://doi.org/10.14207/ejsd.2021.v10n2p73>.
- Filho, Walter Leal, Chris Shiel, Arminda do Paço, Mark C. Mifsud, Lucas Veiga Ávila, Luciana Londero Brandli, Petra Molthan-Hill, and Et All. "Sustainable Development Goals and Sustainability Teaching at Universities: Falling behind or Getting Ahead of the Pack?" *Journal of Cleaner Production*, 2019, 232:285-294. <https://doi.org/https://doi.org/10.1016/j.jclepro.2019.05.309>.
- Hayfa Academy. "Hayfa Academy," 2024. <https://hayfa-academy.com/about-us/>.
- — —. "Hhttps://Www.Instagram.Com/Reel/DBTPIVLSJpI/." Instagram, 2024. <https://www.instagram.com/reel/DBTPIVLSJpI/>.
- Holmes, Jayden, Oli Moraes, Lauren Rickards, Wendy Steele, Mette Hotker, and Anthony Richardson. "Online Learning and Teaching for The SDGs - Exploring Emerging University Strategies." *International Journal of Sustainability in Higher Education* 3, no. 23 (2021): 503–21. <https://doi.org/https://doi.org/10.1108/ijshe-07-2020-0278>.
- Karunianingsih, Diyah Ayu, Ade Wahyudin, Ardian Setyo Utomo, Dina Dwika Oktora, and Arum Marwati. "Pengembangan Video Media Pembelajaran Berbasis Multimedia Dan Animasi Bagi Guru Sekolah Dasar." *PARAHITA : Jurnal Pengabdian Kepada Masyarakat* 3, no. 1 (2022): 17–28. <https://doi.org/10.25008/parahita.v3i1.59>.
- Kusmarni, Yuni. "Studi Kasus." *UGM Jurnal Edu UGM Press* 1 (2012): 1–12. <https://doi.org/10.1080/07263869100034611>.
- Kusumaningrini, Dyah Lukita, and Niko Subidjo. "Faktor-Faktor Yang Mempengaruhi Motivasi Belajar Siswa Di Era Pandemi Covid-19." *Akademika* 01, no. 10 (2021): 145–

61. <https://doi.org/https://doi.org/10.34005/akademika.v10i01.1271>.
- Nurhasanah, Siti, and A. Sobandi. "Minat Belajar Sebagai Determinan Hasil Belajar Siswa." *Jurnal Pendidikan Manajemen Perkantoran* 1, no. 1 (2016): 128. <https://doi.org/10.17509/jpm.v1i1.3264>.
- Ossiannilsson, Ebba. "Open Educational Resources (Oer) and Some of The United Nations Sustainable Development Goals." *International Journal of Information and Learning Technology* 5, no. 40 (2023): 548-61. <https://doi.org/https://doi.org/10.1108/ijilt-01-2023-0002>.
- Peng, Renzhong, and Rongrong Fu. "The Effect of Chinese EFL Students' Learning Motivation on Learning Outcomes within a Blended Learning Environment." *Australasian Journal of Educational Technology* 37, no. 6 (2021): 61-74. <https://doi.org/10.14742/ajet.6235>.
- Permatasari, Nisa. "Pengaruh Model Pembelajaran Cybernetic Dengan Strategi Kooperatif Terhadap Kemampuan Berpikir Kreatif Matematis Siswa." Universitas Islam Negeri Syarif Hidayatullah, 2017.
- Rahmansyah, Muhammad Aidil Nur, and Muhammad Khalidi. "Hubungan Teori Belajar Sibernetik Dengan Efektivitas Pembelajaran Aqidah Akhlaq." *Transformasi Manageria: Journal of Islamic Education Management* 1, no. 2 (2021): 176-90. <https://doi.org/10.47476/manageria.v1i2.593>.
- Rahmawati, Alvi Dyah. "Manajemen Pengorganisasian Program Kursus Bahasa Arab Di Pare Kediri." *Journal of Arabic Studies* 3, no. 1 (2018): 70-80.
- Rosyadi, Faiq Ilham, and Munaya Ulil Ilmi. "E-Learning: An Implementation for Arabic Learning During the Covid-19 Pandemic." *ALSUNIYAT: Jurnal Penelitian Bahasa, Sastra, Dan Budaya Arab* 4, no. 1 (2021): 47-57. <https://doi.org/10.17509/alsuniyat.v4i1.32259>.
- Sakahuni, Sakahuni. "Analisis Hasil Peningkatan Motivasi Siswa SMA Dalam Pembelajaran Fisika." *Schrödinger: Journal of Physics Education* 1, no. 3 (2020): 92-96. <https://doi.org/10.37251/sjpe.v1i3.442>.
- SDGs, Sekretariat Nasional. "SDGs KNOWLEDGE HUB." SDGs Bappenas, n.d. <https://sdgs.bappenas.go.id/>.
- Setiawati, Syifa, Fitri Silvia Sofyan, and Tridays Repelita. "Implementasi Nilai-Nilai Karakter Bangsa Dalam Di Mts Ghoyatul Jihad." *Dewantech:Jurnal Teknologi Pendidikan* 1, no. 1 (2023): 66-78.
- Taubah, Miftachul. "Maharah Dan Kafa'ah Dalam Pembelajaran Bahasa Arab." *Studi Arab* 10, no. 1 (2019): 31-38. <https://doi.org/10.35891/sa.v10i1.1765>.
- Tolinggi, Syindi Oktaviani R. "Microblog Pada Instagram Sebagai Inovasi Media Pembelajaran Bahasa Arab." *Prosiding Konferensi Nasional Bahasa Arab VII*, 2021, 95-111.
- Wahyuna, Riza, Usmaidar, and Rani Febriyanni. "Analisis Teori Sibernetik Pada Era Pembelajaran 5.0 Dalam Perkembangan Hasil Belajar Siswa Di Kelas VII MTsN 1 Langkat." *Journal Ability: Journal of Education and Social Analysis* 4, no. 2 (2023): 34-40. <https://pusdikra-publishing.com/index.php/jesa>.
- Wawancara. "Pengajar Hayfa Academy." 2024.
- Winanda, Verlia, and Yana Enceng. "Faktor Yang Mempengaruhi Hasil Belajar Kognitif

- Siswa Dalam Pembelajaran Jarak Jauh Berbasis E-Learning." *Perspektif: Jurnal Pendidikan Dan Keguruan* 12, no. 2 (2021): 147-52. <https://journal.uir.ac.id/index.php/Perspektif/article/view/9386/4197>.
- Yu, Zhonggen, Mingle Gao, and Lifei Wang. "The Effect of Educational Games on Learning Outcomes, Student Motivation, Engagement and Satisfaction." *Journal of Educational Computing Research* 59, no. 3 (2021): 522-46. <https://doi.org/10.1177/0735633120969214>.
- Zayuda, Dafa Nur Abtia, Imas Marlina, Masnida Wati Suryani, Halimah Ibrahim, and Sahkholid Nasution. "Eksistensi Mahārah Al- Kitābah Dalam Pembelajaran Bahasa Arab." *Counselia; Jurnal Bimbingan Konseling Pendidikan Islam* 4, no. 2 (2023): 164-80. <https://doi.org/10.31943/counselia.v4i2.117>.