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MINISTRY OF HIGHER EDUCATION



iOER

NATIONAL INCLUSIVE OPEN EDUCATIONAL RESOURCES POLICY





United Nations
Educational, Scientific and
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OF HIGHER
EDUCATION

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iOER

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FOREWORD

DATUK SERI DR. NORAINI AHMAD

Minister of Higher Education
Ministry of Higher Education Malaysia



The Ministry of Higher Education (MoHE) has structured several strategies in transforming the higher education system in Malaysia to provide essential experiences to students. As part of these strategies, a future-ready curriculum (FRC) has been designed to cover three important elements, namely: Organic curriculum structure, transformative delivery and holistic assessment.

In light of the Malaysia Education Blueprint 2015-2025 (Higher Education), MoHE also encourages globalised online learning, which addresses Shift 9 of the blueprint. While achieving this, Malaysia' education sector will simultaneously support UNESCO's Sustainable Development Goal 4 which champions for quality education.

As we step into the era of the Fourth Industrial Revolution (4IR), there is a notable change and improvement in teaching and learning (T&L) methods. In the last decade, the development and implementation of online T&L has become a requirement for academic institutions. MoHE and Higher Learning Institutions (HLIs) in Malaysia have allocated tremendous resources for the development and implementation of online learning platforms.

It is important for educators and students to adapt to new technologies such as the Internet of Things (IoT) as it prepares future talents to cope with the latest technology. It is a building block to orientate students for the job market which increasingly places importance on the ability to use new technologies.

Malaysia aspires to tackle numerous challenges that come with the 4IR and digital transformation era through the empowerment of T&L which encourages collaborative, creative, flexible and a globalized learning ecosystem. Additionally, it is important to ensure

that higher education is inclusive regardless of students' ability, geographical location, age, gender, or socioeconomic background.

To achieve this, the inclusive Open Educational Resources (iOER) has been produced as a national policy statement to provide direction in the design, development and use of iOER. It drives to increase access and support quality T&L in Malaysia's higher education under a creative commons license which involves content, activities and resources that fit and can be adapted to everyone's unique needs with no or minimal barriers.

I would like to take this opportunity to express my gratitude to everyone who has contributed to the development of the National IOER Policy. In particular, I would like to thank Mr. Moez Chakchouk, Assistant Director-General, Communication and Information UNESCO Paris; Mr Joe Hironaka, Programme Specialist, ICT in Education, Science and Culture Knowledge Societies Division, Communication and Information Sector, UNESCO Headquarters; The William Flora Hewlett Foundation; Dr. Ming Kuok Lim, Advisor for Communication and Information, UNESCO office, Jakarta, Indonesia; Prof. Dr. Rasid Mail, Deputy Vice-Chancellor (Academic & International) Universiti Malaysia Sabah; Commonwealth of Learning; Creative Commons; The UNESCO OER Chair, Canada; Malaysian e-Learning Council for Public Universities (MEIPTA); the Malaysia Centre for e- Learning (MyCeL); National NGOs for persons with disabilities, International and National OER experts and Prof. Dr. Fong Soon Fook, UNESCO Consultant.

Last but not least, I would like to thank the Department of Higher Education for their initiative to publish this book in order to drive academic excellence through flexibility in Malaysia's higher education ecosystem.

Thank you.

DATUK SERI DR. NORAINI AHMAD
Minister of Higher Education
Ministry of Higher Education Malaysia

MOEZ CHAKCHOUK
Assistant Director-General
for Communication and Information
UNESCO Paris



UNESCO believes that universal access to information through quality education contributes to peace, sustainable social and economic development, and intercultural dialogue. In many countries, the growth of Open Educational Resources (OER) has been shown to support inclusive access to education, as well as to improve the quality of learning outcomes. Thus, OER can be a key component toward successfully achieving the 2030 Agenda for Sustainable Development.

The term OER was first coined at UNESCO in 2002. OER are teaching, learning and research materials that reside in the public domain – such as the works of Euclid and Mozart – or that are published under an open license, such as Creative Commons license, which permits no-cost access, use, adaptation and redistribution, with no or limited restrictions.

In November 2019, UNESCO's 40th General Conference adopted the UNESCO OER Recommendation, which calls upon all Member States to (i) build capacity of stakeholders to create access, use, adapt and redistribute OER; (ii) develop supportive policy; (iii) encourage inclusive and equitable quality OER; (iv) nurture the creation of sustainability models for OER; and (v) to facilitate further international cooperation.

Malaysia emerged as one of the leaders of this multi-stakeholder and global consultation which led to this international standard-setting framework. The Government of Malaysia's commitment included hosting the Asian Regional Consultation on OER (organized in Kuala Lumpur in December 2016) which provided wide-ranging inputs to the 2017 World OER Congress and its Ljubljana Action Plan. This in turn was a cornerstone for the 2019 UNESCO OER Recommendation.

Since 2019, UNESCO is proud to have worked closely in Malaysia with the Ministry of Higher Education and core experts and key stakeholders in order to develop policy guidelines and

build capacity for more inclusive OER development, based on Universal Design for Learning (UDL) principles. We welcome Malaysia's important initiative to guide this National Policy through a multi stakeholder approach. The national consultation began in July 2019 with the organization in Kuala Lumpur of a workshop bringing together the Ministry with some 25 core experts and key stakeholders, with key support through UNESCO by the Director of the E-Learning Centre, Universiti Malaysia Sabah, Prof. Fong Soon Fook. We are grateful for a close partnership *inter alia* with the Academic Excellence Division of the Ministry of Higher Education; the Malaysian e-Learning Council for Public Universities (MEIPTA); the Malaysia Centre for e-Learning (MyCeL); the Malaysian Education Deans Council; the senior representatives and experts of all the 21 public and private universities; the national NGOs for persons with disabilities; as well as international experts on OER and UDL including from the Commonwealth of Learning, Creative Commons and UNESCO OER Chair, who have all provided their input to this draft.

I wish to warmly thank and encourage the Ministry of Higher Education, and her excellency the Minister of Higher Education, Datuk Seri Dr. Noraini Ahmad, for her ongoing leadership for inclusive OER (iOER) national policy and capacity building, which should help empower all learners in Malaysia and tangibly contribute to inclusive quality education outcomes. Malaysia's iOER policy development also should provide a model for others to realize the goal of inclusive and equitable OER for all.

MOEZ CHAKCHOUK

Assistant Director-General
Communication and Information
UNESCO Paris

EXECUTIVE SUMMARY

During the 40th session of the UNESCO General Conference in 2019, UNESCO Member States adopted the UNESCO OER Recommendation by consensus. This Recommendation is the only existing normative instrument in the area of technologies and education in UNESCO and calls on the Member States to undertake actions in five areas:

- i. building capacity of stakeholders to create, access, re-use, adapt and redistribute OER;
- ii. developing supportive policy;
- iii. encouraging inclusive and equitable quality OER;
- iv. nurturing the creation of sustainability models for OER, and
- v. facilitating international cooperation.

The OER Recommendation 2019 supports the mainstreaming of OERs to assist all 193 member states in the engendering of inclusive knowledge societies with the long-term objective of achieving the 2030 sustainable development agenda with reference to the SDG 4 (Quality education), SDG 5 (Gender equality), SDG 9 (Industry, innovation and infrastructure), SDG 10 (Reduced inequalities within and across countries), SDG 16 (Peace, justice and strong institutions) and SDG 17 (Partnerships for the goals). This Recommendation (http://portal.unesco.org/en/ev.php-URL_ID=49556&URL_DO=DO_TOPIC&URL_SECTION=201.html) makes it incumbent upon all member states to adopt the present recommendation of the OER, recommends that Member States apply the provisions of the recommendation by taking appropriate measurable action, which include the establishment of legislative frameworks within their respective national laws and acts, in conformity with the constitutional practice and governing structures of each State, to give effect to within their jurisdictions to the principle of this recommendation. Member States must endeavour to bring the OER Recommendation 2019 to the attention of the authorities responsible for learning, education and research, in the case of Malaysia, the relevant ministries and departments of education and higher education and consult with the relevant stakeholders concerned with learning and education. Member states will be required to report to the General Conference of UNESCO, at such dates and in such manner as shall be determined, on the action taken in pursuance of this recommendation. The OER Recommendation 2019 highlight the need for the

incorporation of the recommendations as stated in this draft policy on inclusive open educational resources (iOER) as one of the critical components which can serve to drive the national agenda on OER in the current global direction and ensure that Malaysia remains on par with other member States.

NATIONAL INCLUSIVE OPEN EDUCATIONAL RESOURCES POLICY

Preamble

This national policy statement sets out to provide direction in the design, development and use of inclusive open educational resources (hereinafter referred to as iOER) to increase access to and support quality learning and teaching for all students in Malaysia's higher education institutions under Creative Commons licenses. In doing so, the policy seeks to strengthen commitment to iOER by all concerned. This document is to be read together with the following documents:

- i. National e-Learning Policy
- ii. Malaysia Education Blueprint 2015-2025 (Higher Education)
- iii. Malaysia Copyright Act 1987
- iv. Commonwealth of Learning: Towards National Policy Guidelines on Open Educational Resources in Malaysia, 2017.
- v. Commonwealth of Learning: Institutional OER policy template.
- vi. Malaysia's Persons with Disabilities Act, 2008
- vii. United Nations Convention on the Rights of Persons with Disabilities
- viii. ASEAN Enabling Masterplan 2025: Mainstreaming the Rights of Persons with Disabilities
- ix. The Salamanca Statement & Framework for Action on Special Needs Education, 1994
- x. UNESCO OER Declaration 2012
- xi. The Ljubljana Declaration 2017
- xii. Commonwealth of Learning: Guidelines on the development of Open Educational Resources policies (2019).
- xiii. Draft Recommendation on Open Educational Resources (OER): 39 C/ Resolution 44 (8th October 2019).
- xiv. Learning for All: Guidelines on the Inclusion of Learners with Disabilities in Open and Distance Learning, 2018.
- xv. Malaysian Copyright Act (1987) (Act 322).

xvi. The UNESCO OER Recommendation 2019 (25 November 2019). available at http://portal.unesco.org/en/ev.php-URL_ID=49556&URL_DO=DO_TOPIC&URL_SECTION=201.html

Malaysia aspires to improve access by making available higher education to relevant populations and ensuring quality and equity regardless of ability, geography, age, gender, or socioeconomic background.

The term Open Educational Resources (OER) as adopted by UNESCO Member States in The OER Recommendation 2019 - “Open Educational Resources (OER) are learning, teaching and research materials in any format and medium that reside in the public domain or are under copyright that have been released under an open license, that permit no-cost access, re-use, re-purpose, adaptation and redistribution by others. Open license refers to a license that respects the intellectual property rights of the copyright owner and provides permissions granting the public the rights to access, re-use, re-purpose, adapt and redistribute educational materials”. The UNESCO OER Recommendation 2019 provides an internationally adopted normative framework to take actions to support OER development in 5 areas of action, namely;

- i. building capacity of stakeholders to create, access, re-use, adapt and redistribute OER;
- ii. developing supportive policy;
- iii. encouraging inclusive and equitable quality OER;
- iv. nurturing the creation of sustainability models for OER, and
- v. facilitating international cooperation.

Since 16/06/1958, Malaysia is a Permanent Delegate to UNESCO. The Commonwealth of Learning report entitled “Towards National Policy Guidelines on Open Educational Resources in Malaysia” was published in 2017. The report emphasized the importance of open educational resources (OER) for improving equality in education. OER are a worthwhile option to make education more accessible, affordable, shareable and reusable. The adoption, expansion and enculturation of OER with the aid of information and communication technology in Malaysian education will transform educational practices through the effective use of educational resources available with open licenses. Several higher education institutions in Malaysia have joined the OER movement. However, there is not yet widespread

understanding about OER and open licenses due to the lack of specific guidelines. In Malaysia, the National eLearning Policy (DePAN 2.0) focuses on open courseware, and it is important to develop specific guidelines for the same. With the support of the Commonwealth of Learning, the Universiti Sains Islam Malaysia (USIM) conducted this study and organized a national consultation to develop draft guidelines that may be adopted by the appropriate education ministries in Malaysia. Malaysia was selected as a host country for Asia Regional Consultation (ARC), held on 1st and 2nd December 2016, to gather OER experts and policy makers from more than 100 countries, organised by the Commonwealth of Learning in cooperation with UNESCO, to compile recommendations for the adoption of inclusive OER. The objectives of the ARC were: to raise regional awareness about the importance of OER and its relationship to SDG4, to provide a hands-on experience for all participants to establish personal OER knowledge, to explore mechanisms to facilitate the mainstreaming of OER, to identify strategies and solutions to overcome the challenges or barriers to mainstreaming OER; and, and to agree on inputs that factor into the planning of the 2nd World OER Congress. The objective of identifying strategies and solutions to overcoming the challenges or barriers to the mainstreaming of OER is of specific relevance to the iOER policy as individuals with disabilities are likely to face multiple challenges when they try to access content which has been developed without due attention to the different classes of learners.

The United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) emphasises access to education, among other things, as an important consideration towards making reasonable accommodations for persons with disabilities. Within the context of the UNCRPD, national governments are key players in the ratification and implementation process. Governments which ratify the UNCRPD are expected to set strategic plans which align and harmonise with national development goals and priorities and allocate resources for its implementation. In aligning with the objectives of UNESCO's efforts on establishing inclusive OER, this policy is an initiative to drive the national OER agenda towards supporting UNESCO Sustainable Development Goal 4 (Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all). Several higher education institutions in Malaysia have joined the OER movement. However, not all OER are designed in an inclusive manner. An inclusive learning experience involves content, activities and resources that fit and can be adapted to everyone's unique needs with no or minimal barriers. It is important

to ensure that mainstreaming of accessibility and Universal Design for Learning (UDL) should be considered within a broader educational context of inclusive design for OER. However, there is not yet widespread understanding of inclusive OER and open licenses due to the lack of a national policy governing the design, development and use of OER. Hence, it is essential for such a policy to be in place.

1. **Open Educational Resources (OER):** Based on the 2012 Paris OER Declaration (UNESCO, 2012, p.1)¹, Open Educational Resources (OER) are learning, teaching and research materials in any format and medium that reside in the public domain or are under copyright that have been released under an open license, that permit no-cost access, re-use, re-purpose, adaptation and redistribution by others. Open license refers to a license that respects the intellectual property rights of the copyright owner and provides permissions granting the public the rights to access, re-use, re-purpose, adapt and redistribute educational materials.
2. **OER Creation:** The design, development/production and online sharing of quality assured OER.
3. **OER Adoption:** A practice of adopting existing OER for use in a course without any change.
4. **OER Adaptation:** Because OER are openly licensed for revision, they can be adapted to help address issues of diversity, equity, and inclusion into the learning environment.
5. **OER Integration:** A logical and systematic approach to the “five Rs” (Hilton, Wiley, Stein & Johnson, 2010)² of reusing, revising, remixing, redistributing and retaining of OER.
6. **OER Sharing:** Making OER freely accessible, in editable formats, in online repositories.
7. **Inclusivity:** The provision of OER to all learners, including learners who have been marginalised in many educational settings: and students from low-income communities and minorities, learners with disabilities, learners who are gifted and talented, learners from diverse cultures and linguistic backgrounds, and learners in

¹ UNESCO. (2012). 2012 Paris OER Declaration. Retrieved from http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/WPFD2009/English_Declaration.html

² Hilton, J., Wiley, D., Stein, J., & Johnson, A. (2010). The five R's of openness and ALMS Analysis: Frameworks for open educational resources. *Open Learning: The Journal of Open and Distance Learning*, 25(1), 37-44.

rural areas. The opportunity for all learners and educators to contribute to and participate in the creation, revision, reuse and remixing of OER.

8. **Inclusive OER (iOER):** According to The OER Recommendation 2019 (Para II. (iii). 13), Member States are encouraged to support the creation, access, re-use, re-purpose, adaptation and redistribution of inclusive and equitable quality OER for all stakeholders. These would include those learners in formal and non-formal education contexts irrespective of, inter alia, age, gender, physical ability, and socio-economic status, as well as those in vulnerable situations, indigenous peoples, those in remote rural areas (including nomadic populations), people residing in areas affected by conflicts and natural disasters, ethnic minorities, migrants, refugees, and displaced persons. In all instances, gender equality should be ensured, and particular attention paid to equity and inclusion for learners who are especially disadvantaged due to multiple and intersecting forms of discrimination.
9. **Accessibility:** Article 9 of the UNCRPD states: 'To enable persons with disabilities to live independently and participate fully in all aspects of life, States Parties shall take appropriate measures to ensure to persons with disabilities access, on an equal basis with others, to the physical environment, to transportation, to information and communications, including information and communications technologies and systems, and to other facilities and services, open or provided to the public, both in urban and in rural areas.' Accessibility is one of the general principles within Article 3 of the UNCRPD.
10. **Assistive Technologies:** BATA (2011) suggests that: 'AT is any item, equipment, hardware, software, product or service which maintains, increases or improves the functional capabilities of individuals of any age, especially those with disabilities, and enables them more easily to communicate, learn, enjoy and live better, more independent lives' (British Assistive Technology Association (BATA), 2011. Assistive technology services can be defined as any service that directly assists an older adult or individual with a disability in the selection, acquisition, or use of an assistive technology device. This includes: evaluation, acquisition, adaptation / modification, co-ordination of therapies, training of end users, families and

- professionals, provision, maintenance, repair and replacement of accessible information technology. (From the US Assistive Technology Act of 1998, as amended).
11. **Disability:** Disabilities refer to learners who is certified by a medical practitioner or psychologist as having - visual disability, hearing disability, speech disability, physical disability, learning difficulties or multiple disabilities with any combination of the above mentioned. These disabilities may be permanent or temporary.
 12. **Universal Design for Learning (UDL):** Universal Design for Learning (UDL) means a scientifically valid framework for guiding educational practice that —(a) provides flexibility in the ways information is presented, in the ways students respond or demonstrate knowledge and skills, and in the ways students are engaged; and (b) reduces barriers in instruction, provides appropriate accommodations, supports, and challenges, and maintains high achievement expectations for all students, including students with disabilities and students who have limited English proficiency. Incorporation of UDL in OER for Learners with Disability refers to OER that provides the opportunity for learners with disabilities to access, participate in, and progress in the general-education curriculum by providing either multiple means of engagement and/or multiple means of representation, and/or multiple means of actions and expressions according to UDL guidelines.
 13. **Inclusive Design Practice** Leveraging the diversity of OER, and the open permission to create new variants, as a means of matching diverse learner requirements (one-size-fits-one learning experiences), within an OER system. Inclusive Design Practice recognizes that: all learners are diverse; this diversity should be addressed in an integrated system; learners benefit from understanding their own diverse needs; the OER processes should be designed to be accessible to all learners and educators; and, that education is a complex adaptive system and OER designed for diversity should benefit all learners and educators. Inclusive Design Practice leads to Accessibility and achieves Universal Design for Learning.
 14. **Content Developer:** Any person (typically author) engaged in the design and development of educational materials.
 15. **Copyright Laws:** Laws that regulate the use of the work of a creator, such as an artist or author. This includes copying, distributing, altering and displaying creative, literary

and other types of work as per copyright act of Malaysia (Malaysia Copyright Act 1987). Unless otherwise stated in a contract, the author or creator of a work retains the copyright. The author(s) retains the moral rights to the right to assign the rights to any other person or legal entity and share the materials with others in any other conditions he/she may desire.

16. **Open License:** “A license that specifies what can and cannot be done with a work (whether sound, text, image or multimedia). It grants permissions and states restrictions. Broadly speaking, an open license is one which grants permission to access, re-use and redistribute a work with few or no restrictions”.³
17. **Creative Commons:** Creative Commons (CC) is a non-profit organization that is devoted to expanding the range of creative works available for others to build upon legally and to share. CC licenses are the global standard for openly licensing OER.
18. **Institutional Repository:** A set of services offered by an institution “to the members of its community for the management and dissemination of digital materials created by the institution and its community members. It is most essentially an organizational commitment to the stewardship of these digital materials, including long-term preservation where appropriate, as well as organization and access or distribution”⁴.
19. **Higher Education:** A body corporate, organisation or other body of persons which conducts higher education or training programmes including skills training programmes leading to the award of a higher qualification or which award a higher education qualification and includes public or private higher education providers, examination or certification bodies or their representatives.
20. **Knowledge societies:** Knowledge societies according to UNESCO means societies in which people have the capabilities not just to acquire information but also to transform it into knowledge and understanding, which empowers them to enhance their livelihoods and contribute to the social and economic development of their societies.

³ <http://opendefinition.org/guide/>

⁴ Lynch, C.A. (2003). Institutional Repositories: Infrastructure for Scholarship in the Digital Age, ARL 226, Retrieved from <http://www.arl.org/storage/documents/publications/arl-br-226.pdf>

POLICY DECLARATION

The Malaysian post-secondary institutions, hereafter referred to as “institution”, will promote and implement inclusive Open Educational Resources (iOER) that permits no-cost access, re-use, re-purpose, adaptation and redistribution by others within an Open Licensing framework.

The long-term vision of this National Policy on inclusive Open Educational Resources (iOER) is to ensure the adoption of iOER by Malaysian Higher Learning Institutions (HLIs) to provide quality education access to all learners in particular persons with disabilities.

The Policy envisions that iOER will be used effectively in education to enable all learners – in particular those with disabilities – to learn according to their individual learning preferences as well as learning styles and to promote the long-term inclusion into wider society of learners with disabilities, particularly through enhancing their social inclusion and employment opportunities.

1. Policy Statements:

- 1.1 The role of the Ministry of Higher Education shall be to support Higher Learning Institutions (HLIs) in promoting the iOER initiative by providing the required policy direction, administrative and financial support, which is part of lifelong learning and globalized online learning agenda in the Malaysia Educational Blueprint (MEB).
- 1.2 Institutions shall develop their respective policy document to support iOER in alignment with the national iOER policy, taking into consideration their specific needs and resources.
- 1.3 Institutions will support, promote, foster and recognize all efforts towards the creation, adoption, adaptation, integration and sharing of iOER in course design, development, quality assurance, delivery and maintenance.
- 1.4 Institutions, as publisher and owner of the content, will decide on the content to be published as iOER in consultation with the relevant Faculty / School / Department / Division.

- 1.5 Academic staff and academic support staff shall participate in the philosophy of iOER in building capacity and positive attitudes for effective creation, adoption, adaptation, integration and sharing of iOER in the development and delivery of courses as well as other social and professional engagements.
- 1.6 Academic staff and academic support staff will plan and implement suitable academic activities involving inclusive Open Educational Resources (iOER) that permits no-cost access, re-use, re-purpose, adaptation and redistribution by others within an Open Licensing framework to offer courses or programs for learners to enable them to acquire appropriate competencies and desired qualifications.
- 1.7 Institutions shall develop and incorporate a Continuous Quality Improvement (CQI) mechanism that will facilitate informed decisions for any amendments during iOER implementation.
- 1.8 The design and delivery of iOER shall provide equitable interaction to all learners including those with disabilities. Universal and flexible design as well as assistive technologies (AT) and inclusive ICT shall be adopted to enable the inclusivity of OER. Inclusivity in OER covers accessible content and technology.
- 1.9 The Quality Review Board shall be responsible for coordinating developmental activities in the event that multiple agencies are involved in the development of iOERs.

2. Policy Objectives

The objectives of the policy are to:

- 2.1 Establish iOER governance and institutionalization at national and institutional level;
- 2.2 Formulate the necessary strategic direction, that will include inputs, outputs, tasks and performance indicators to achieve iOER creation, adoption, adaptation and integration in the development and delivery of educational content;
- 2.3 Develop awareness about the concept and practices related to iOER among staff, learners and the public;
- 2.4 Build capacity among the academics, learners and non-academics to utilize and optimize iOER appropriately in their professional engagements through continuous professional development;

- 2.5 Establish relevant documentations and support system for the design, development, utilization, and monitoring of iOER;
- 2.6 Establish repositories and metadata to disseminate iOER; this includes metadata that assists in identifying the accessibility characteristics of OER to assist in finding resources that meet the diverse requirements of individual learners.
- 2.7 Implement, monitor and evaluate the sustainability of this policy;
- 2.8 Recognize all stakeholders for upholding and sustaining iOER;
- 2.9 Promote collaboration among stakeholders to enhance iOER; and
- 2.10 Integrate relevant changes based on new developments in iOER.

3. Scope and Applicability

- 3.1 Unless notified by the Ministry of Higher Education Malaysia as special exclusion, this iOER policy is applicable but not exclusive to:
 - 3.1.1 All Malaysian post-secondary institutions and/or higher educational institutions.
 - 3.1.2 All content developers appointed by the institution on a permanent/temporary/contract basis/vendor basis;
 - 3.1.3 All staff responsible for procuring educational resources and tools to author educational resources.
 - 3.1.4 All support and management staff appointed by the institution on a permanent/temporary/contract/vendor basis;
 - 3.1.5 All types of educational materials and resources released in physical and/or digital format.
 - 3.1.6 Quality Review Board appointed by the institution.
 - 3.1.7 In cases where the material is developed in collaboration/partnership with other institutions, the guidelines governing the collaboration/partnership as indicated in the MOU/MOA will prevail. However, any such agreement should duly consider this iOER Policy before any deviation is agreed upon and approved by the competent authority of the institution.

4. Copyrights and Licenses:

- 4.1 Relevant author(s) is/are the absolute owner of any content created by the author(s) unless they have been contracted to produce the content by an employer as described in the Malaysian Copyright Act 1987 (Act 332)
- 4.2 The institution supports the four OER Compliant⁵ Creative Commons licenses (CC BY, CC BY SA, CC BY NC, CC BY NC SA) and/or dedicating the work to be public domain (CC0)⁶ on all iOER it owns or co-owns;
- 4.3 The choice of license will be decided by the relevant author(s) who has/have developed the material and will be endorsed by the internal iOER Quality Review Board;
- 4.4 The institution will make all iOER it owns available through the iOER repository under the chosen Creative Commons license;
- 4.5 All materials developed by the institution will comply with and be released under a Creative Commons License. For derivatives and reproductions of other CC licensed materials, the institution will respect the CC provisions and the licenses therein.
- 4.6 It is the responsibility of the author(s) of the content to comply with the provisions of the Creative Commons License when revising or remixing existing iOER.
- 4.7 The license declaration on the iOER will be in the Title, Author, Source, License (TASL) format:

20XX [Name of the institution]_[Title of the work, [Author of the work], [URL, where the work is hosted which can be alternatively linked to the Title text]. Except where otherwise noted, this work is licensed under the terms of the [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

- 4.8 Relevant institution reserves the copyright of the institutional logo used in all of its materials and does not permit the use of its logo without written permission for derivatives of its works.
- 4.9 The iOER that has been openly licensed cannot be retracted.

⁵ The two Creative Commons no derivative (ND) licenses (CC BY ND, CC BY NC ND) are not OER compliant because they do not allow for revising or remixing the openly licensed work.

⁶ <https://creativecommons.org/share-your-work/public-domain/cc0/>

5. Quality Assurance & Review (CQI)

Quality Assurance and Review System. The iOER repository will strive to provide quality assured resources.

- 5.1 Learning resources developed by the institution through peer reviewing and with a strict quality assurance mechanism incorporated in the course development process will not require review prior to uploading on to the iOER repository. All other contributions will be peer reviewed within the formal and non- formal program before uploading the material onto the iOER Repository;
- 5.2 An iOER Quality Review Board (iOER-QRB) shall be established by the institution. The board should consist of subject matter and technical experts including relevant stakeholders (i.e. persons with disabilities);
- 5.3 The iOER-QRB shall be authorized to review the design, production, content, delivery, access of iOER and other relevant matters (if any);
- 5.4 The iOER-QRB shall ensure that the process of due diligence includes peer review and field trials. One of the possible field trials may be a Randomized Control Trial;
- 5.5 The iOER-QRB shall ensure that each iOER incorporates a mechanism to ensure the assessment of learning outcomes;
- 5.6 The members of the iOER-QRB shall have a stipulated term subject to the discretion of the head of the institution;
- 5.7 The iOER-QRB shall report directly to the head of the institution;
- 5.8 The institution shall ensure that the peer review process is conducted in accordance with an established framework as decided by the iOER-QRB;
- 5.9 The institution shall ensure that the iOERs are reviewed periodically by the iOER-QRB within the context of Continuous Quality Improvement (CQI) in order to comply with current developments in policies, guidelines and technologies.
- 5.10 The iOER-QRB will adopt a set of inclusive quality assurance (QA) guidelines and indicators (such as the UDL and Inclusive Design) or as specified by the Ministry of Higher Education in the review process.
- 5.11 The institution shall permit the iOER-QRB to share its best practices with other HEIs and pertinent Public and Private Agencies.

- 5.12 The HEIs shall ensure that academic staff are made aware of the review process and that adequate succession planning is implemented in order to enable sustainability.
- 5.13 The HEIs shall ensure that the current development in technologies which permit greater accessibility and user directed learning such as Artificial Intelligence are reviewed and incorporated into existing iOERs based on current developments.

6. Liability

- 6.1 All iOER materials in the institutional repository will carry a disclaimer indicating that the material is for educational purposes only and that the relevant institution absolves itself of any practical misuse of the iOER materials or their content. iOER materials authored and published by staff of the relevant institution do not necessarily reflect the opinion of the relevant institution.
- 6.2 An additional caveat will indicate that derivatives of this work are not authorized to use the institution's logo without prior written authorisation from the institution.
- 6.3 Each institution shall develop a disclaimer which considers their unique situational requirements.

7. Institutional Arrangements

- 7.1 The iOER produced by the relevant institution will be hosted in an online institutional repository.
- 7.2 The relevant institution shall designate relevant department/division that will be responsible for providing access, maintaining the repository and providing technical support.
- 7.3 Capacity building will be conducted for stakeholders engaged in iOER creation, adoption, adaptation and integration.
- 7.4 Content developers will be sensitized to the needs of individuals with disabilities via a process of training and consultation with pertinent public and private agencies of disabled individuals.
- 7.5 The HEIs shall facilitate the engagement of student in the process of content curation and development via a process of sensitization, training, support and recognition.

- 7.6 Regular updates/training on new developments in the field of iOER will be provided by the relevant institution's departments /divisions.
- 7.7 The HEIs shall encourage and support research pertaining to the design, development, implementation and impact of iOERs by providing adequate financial support and recognition.
- 7.8 The HEIs shall ensure that the research findings shall be disseminated in the public domain in order to facilitate the process of collaborative engagement across HEIs, stakeholders and the general public.

APPENDIX

Recommendation on Open Educational Resources (OER)

25 November 2019

PREAMBLE

The General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO), meeting in Paris from 12 to 27 November 2019, at its 40th session,

Recalling that the Preamble of UNESCO's Constitution affirms, "that the wide diffusion of culture, and the education of humanity for justice and liberty and peace are indispensable to the dignity of man and constitute a sacred duty which all the nations must fulfil in a spirit of mutual assistance and concern",

Recognizing the important role of UNESCO in the field of information and communications technology (ICT) and in the implementation of the relevant decisions in this area adopted by the General Conference of that Organization,

Also recalling Article I of UNESCO's Constitution, which assigns to UNESCO among other purposes that of recommending "such international agreements as may be necessary to promote the free flow of ideas by word and image",

Affirming the principles embodied in the Universal Declaration of Human Rights, which states that all people have rights, duties and fundamental freedoms that include the right to seek, receive and impart information and ideas through any media and regardless of frontiers (Article 19), as well as the right to education (Article 26), and the right freely to participate in the cultural life of the community, to enjoy the arts, and to share in scientific advancement and its benefits; and the right to the protection of the moral and material interests resulting from any scientific, literary, or artistic production of which one is the author (Article 27),

Also affirming the 2007 United Nations Declaration on the Rights of Indigenous Peoples, which recognizes the rights of indigenous peoples in formulating national legislation and implementing national policy,

Noting the 2006 Convention on the Rights of Persons with Disabilities (Article 24), which recognizes the rights of persons with disabilities to education, and the principles contained in the 1960 Convention against Discrimination in Education,

Referring to the recommendation adopted at the 32nd session of the General Conference of UNESCO in 2003 with regard to the promotion of multilingualism and universal access to information in cyberspace,

Also referring to the 1997 UNESCO Recommendation concerning the Status of Higher-Education Teaching Personnel as well as the 1966 ILO/UNESCO Recommendation concerning the Status of Teachers, which stresses that as part of academic and professional freedom teachers “should be given the essential role in the choice and the adaptation of teaching material, the selection of textbooks and the application of teaching methods”, Reaffirming the importance of the United Nations 2030 Agenda for Sustainable Development, which underlines that the “spread of information and communications technology and global interconnectedness has great potential to accelerate human progress, to bridge the digital divide and to develop knowledge societies...”,

Recognizing the leading role of UNESCO in the field of education and in the achievement of Sustainable Development Goal 4 (SDG 4), which calls for the international community to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all,

Further referring to the Education 2030 Framework for Action that lists a set of strategic approaches for the implementation of SDG 4, and which underlines that increasing access must be accompanied by measures that improve the quality and relevance of education and learning, and in particular that “education institutions and programmes should be adequately and equitably resourced with safe, environment-friendly and easily accessible facilities; sufficient numbers of teachers and educators of quality using learner-centred, active and collaborative pedagogical approaches; and books, other learning materials, open educational resources and technology that are non-discriminatory, learning conducive, learner friendly, context specific, cost effective and available to all learners – children, youth and adults”,

Acknowledging the Declaration of Principles of the 2003 World Summit on the Information Society, committing “to build a people-centred, inclusive and development-oriented Information Society, where everyone can create, access, utilize and share information and knowledge”,

Also recognizing that the development of information and communications technology (ICT), including artificial intelligence and others, provides opportunities to improve the free flow of ideas by word, sound and image but also presents challenges for ensuring the participation of all in Knowledge Societies,

Further recognizing that quality basic education as well as media and information literacy are prerequisites to access and benefit from information and communications technology (ICT), including artificial intelligence and others,

Recognizing that, in building inclusive knowledge societies, Open Educational Resources (OER) can support quality education that is equitable, inclusive, open and participatory as well as enhance academic freedom and professional autonomy of teachers by widening the scope of materials available for teaching and learning,

Considering the International Covenant on Economic, Social and Cultural Rights (Article 13.1), the 2007 Cape Town Open Education Declaration, the 2009 Dakar Declaration on Open Educational Resources, the 2012 Paris Open Educational Resources Declaration, the United

Nations Millennium Declaration and the 2000 Dakar Framework for Action, which all recognize “the right of everyone to education”,

Building on the Ljubljana OER Action Plan 2017 to mainstream OER to help all Member States to create inclusive knowledge societies and achieve the 2030 Agenda for Sustainable Development, namely SDG 4 (Quality education), SDG 5 (Gender equality), SDG 9 (Industry, innovation and infrastructure), SDG 10 (Reduced inequalities within and across countries), SDG 16 (Peace, justice and strong institutions) and SDG 17 (Partnerships for the goals), thereto:

1. Adopts the present Recommendation on Open Educational Resources (OER), on this twenty-fifth day of November 2019;
2. Recommends that Member States apply the provisions of this Recommendation by taking appropriate steps, including whatever legislative or other measures may be required, in conformity with the constitutional practice and governing structures of each State, to give effect within their jurisdictions to the principles of the Recommendation;
3. Also recommends that Member States bring the Recommendation to the attention of the authorities and bodies responsible for learning, education and research, and consult relevant stakeholders concerned with learning and education;
4. Further recommends that Member States report to it, at such dates and in such manner as shall be determined, on the action taken in pursuance of this Recommendation.

I. DEFINITION AND SCOPE

1. Open Educational Resources (OER) are learning, teaching and research materials in any format and medium that reside in the public domain or are under copyright that have been released under an open license, that permit no-cost access, re-use, re-purpose, adaptation and redistribution by others.
2. Open license refers to a license that respects the intellectual property rights of the copyright owner and provides permissions granting the public the rights to access, re-use, re-purpose, adapt and redistribute educational materials.
3. Information and communications technology (ICT) provide great potential for effective, equitable and inclusive access to OER and their use, adaptation and redistribution. They can open possibilities for OER to be accessible anytime and anywhere for everyone, including individuals with disabilities and individuals coming from marginalized or disadvantaged groups. They can help meet the needs of individual learners and effectively promote gender equality and incentivize innovative pedagogical, didactical and methodological approaches.
4. Stakeholders in the formal, non-formal and informal sectors (where appropriate) in this Recommendation include: teachers, educators, learners, governmental bodies, parents, educational providers and institutions, education support personnel, teacher trainers, educational policy makers, cultural institutions (such as libraries, archives and museums) and

their users, information and communications technology (ICT) infrastructure providers, researchers, research institutions, civil society organizations (including professional and student associations), publishers, the public and private sectors, intergovernmental organizations, copyright holders and authors, media and broadcasting groups and funding bodies.

II. AIMS AND OBJECTIVES

5. One key prerequisite to achieve SDG 4 is sustained investment and educational actions by governments and other key education stakeholders, as appropriate, in the creation, curation, regular updating, ensuring of inclusive and equitable access to, and effective use of high quality educational and research materials and programmes of study.

6. As is articulated in the 2007 Cape Town Open Education Declaration and the 2012 Paris OER Declaration, the application of open licenses to educational materials introduces significant opportunities for more cost-effective creation, access, re-use, re-purpose, adaptation, redistribution, curation, and quality assurance of those materials, including, but not limited to translation, adaptation to different learning and cultural contexts, development of gender-sensitive materials, and the creation of alternative and accessible formats of materials for learners with special educational needs.

7. In addition, the judicious application of OER, in combination with appropriate pedagogical methodologies, well-designed learning objects and the diversity of learning activities, can provide a broader range of innovative pedagogical options to engage both educators and learners to become more active participants in educational processes and creators of content as members of diverse and inclusive knowledge societies.

8. Furthermore, regional and global collaboration and advocacy in the creation, access, re-use, re-purpose, adaptation, redistribution and evaluation of OER can enable governments and education providers to evaluate the quality of the open access content and to optimise their own investments in educational and research content creation, as well as ICT infrastructure and curation, in ways that will enable them to meet their defined national educational policy priorities more cost-effectively and sustainably.

9. Noting these potential benefits, the objectives and areas of action of this Recommendation are as follows:

(i) Capacity building: developing the capacity of all key education stakeholders to create, access, re-use, re-purpose, adapt, and redistribute OER, as well as to use and apply open licenses in a manner consistent with national copyright legislation and international obligations;

(ii) Developing supportive policy: encouraging governments, and education authorities and institutions to adopt regulatory frameworks to support open licensing of publicly funded educational and research materials, develop strategies to enable the use and adaptation of

OER in support of high quality, inclusive education and lifelong learning for all, supported by relevant research in the area;

(iii) Effective, inclusive and equitable access to quality OER: supporting the adoption of strategies and programmes including through relevant technology solutions that ensure OER in any medium are shared in open formats and standards to maximize equitable access, co-creation, curation, and searchability, including for those from vulnerable groups and persons with disabilities;

(iv) Nurturing the creation of sustainability models for OER: supporting and encouraging the creation of sustainability models for OER at national, regional and institutional levels, and the planning and pilot testing of new sustainable forms of education and learning;

(v) Fostering and facilitating international cooperation: supporting international cooperation between stakeholders to minimize unnecessary duplication in OER development investments and to develop a global pool of culturally diverse, locally relevant, gender-sensitive, accessible, educational materials in multiple languages and formats.

III. AREAS OF ACTION

10. This Recommendation addresses five objectives: (i) building capacity of stakeholders to create, access, re-use, adapt and redistribute OER; (ii) developing supportive policy; (iii) encouraging inclusive and equitable quality OER; (iv) nurturing the creation of sustainability models for OER, and (v) facilitating international cooperation.

(i) Building capacity of stakeholders to create, access, re-use, adapt and redistribute OER

11. Member States are recommended to strategically plan and support OER capacity building, awareness raising, use, creation and sharing at the institutional and national levels, targeting all education sectors and levels. Member States are encouraged to consider the following:

(a) building awareness among relevant stakeholder communities on how OER can increase access to educational and research resources, improve learning outcomes, maximize the impact of public funding, and empower educators and learners to become co-creators of knowledge;

(b) providing systematic and continuous capacity building (in-service and pre-service) on how to create, access, make available, re-use, adapt, and redistribute OER as an integral part of training programmes at all levels of education, including assistance in initial training programmes for educators. This should include improving the capacity of public authorities, policy makers, as well as quality development and assurance professionals to understand OER and support their integration into learning, teaching, research and everyday life;

(c) raising awareness concerning exceptions and limitations for the use of copyrighted works for educational and research purposes. This should be enacted to facilitate the integration of

a wide range of works in OER, recognizing that the fulfilment of educational goals as well as the development of OER requires engagement with existing copyright protected works.

(d) leveraging open licensed tools, platforms with interoperation of metadata, and standards (including national and international) to help ensure OER can be easily found, accessed, re-used, adapted and redistributed in a safe, secure and privacy-protected mode. This could include free and open source authoring tools, libraries and other repositories and search engines, systems for long-term preservation and frontier technologies for automatic OER processing and translation of languages (where appropriate or needed), such as artificial intelligence methods and tools;

(e) making available easily accessible resources that provide information and assistance to all OER stakeholders on OER-related topics, including copyright and open licensing of educational material; and

(f) promoting digital literacy skills in order to master technical use of software, codes and open licenses with a view to encouraging the development and use of OER.

(ii) Developing supportive policy

12. Member States, according to their specific conditions, governing structures and constitutional provisions, should develop or encourage policy environments, including those at the institutional and national levels, that are supportive of effective OER practices. Through a transparent participatory process that includes dialogue with stakeholders, Member States are encouraged to consider the following:

(a) developing and implementing policies and/or regulatory frameworks which encourage educational resources developed with public funds that are openly licensed or dedicated to the public domain as appropriate, and allocating financial and human resources for the implementation and evaluation of policies;

(b) encouraging and supporting institutions to develop or update legal or policy frameworks to stimulate the creation, access, re-use, re-purpose, adaptation and redistribution of quality OER by educators and learners in a manner consistent with national copyright legislation and international obligations; and to develop and integrate a quality assurance mechanism for OER into the existing quality assurance strategies for teaching and learning materials;

(c) developing mechanisms to create communities of practice, promote teacher professional development using OER, create networks of experts of OER and properly recognize OER creation as a professional or academic merit;

(d) developing mechanisms to support and incentivize all stakeholders to publish source files and accessible OER using standard open file formats in public repositories;

(e) embedding OER policies into national policy frameworks and strategies and aligning them with other open policies and guiding principles such as those for Open Access, Open Data, Open Source Software and Open Science;

(f) addressing the inclusion of OER in transforming education, adjusting, enriching or reforming curricula and all forms of learning so as to exploit OER potentials and opportunities, and encouraging the integration of different teaching methods and forms of assessment to motivate the active use, creation and sharing of OER; and assessing the impact of OER on inclusive and equitable quality education;

(g) encouraging and supporting research on OER, through relevant research programmes on OER development, sharing and evaluating, including the support of digital technologies (such as artificial intelligence); and

(h) developing and implementing policies that apply the highest standards to privacy and data protection during the production and use of OER, OER infrastructure and related services.

(iii) Encouraging effective, inclusive and equitable access to quality OER

13. Member States are encouraged to support the creation, access, re-use, re-purpose, adaptation and redistribution of inclusive and equitable quality OER for all stakeholders. These would include those learners in formal and non-formal education contexts irrespective of, inter alia, age, gender, physical ability, and socio-economic status, as well as those in vulnerable situations, indigenous peoples, those in remote rural areas (including nomadic populations), people residing in areas affected by conflicts and natural disasters, ethnic minorities, migrants, refugees, and displaced persons. In all instances, gender equality should be ensured, and particular attention paid to equity and inclusion for learners who are especially disadvantaged due to multiple and intersecting forms of discrimination. Member States are recommended to consider the following:

(a) ensuring access to OER that most suitably meets both the needs and material circumstances of target learners and the educational objectives of the courses or subjects for which they are being provided. This would include offline (including printed) modalities for accessing resources where appropriate;

(b) supporting OER stakeholders to develop gender-sensitive, culturally and linguistically relevant OER, and to create local language OER, particularly in indigenous languages which are less used, under-resourced and endangered;

(c) ensuring that the principle of gender equality, non-discrimination, accessibility and inclusiveness is reflected in strategies and programmes for creating, accessing, re-using, adapting, and redistributing OER;

(d) ensuring public investments and incentivizing private investments in ICT infrastructure and broadband, as well as other mechanisms, to provide increased access to OER, particularly for low-income, rural and urban communities;

(e) incentivizing the development and research of OER; and

(f) developing and adapting existing evidence-based standards, benchmarks and related criteria for the quality assurance of OER, as appropriate, which emphasize reviewing

educational resources (both openly licensed and not openly licensed) under regular quality assurance mechanisms.

(iv) Nurturing the creation of sustainability models for OER

14. Member States, according to their specific conditions, governing structures and constitutional provisions, are recommended to support and encourage the development of comprehensive, inclusive and integrated OER sustainability models. Member States are encouraged to consider the following:

(a) reviewing current provisions, procurement policies and regulations to expand and simplify the process of procuring quality goods and services to facilitate the creation, ownership, translation, adaptation, curation, sharing, archiving and preservation of OER, where appropriate, as well as to develop the capacity of all OER stakeholders to participate in these activities;

(b) catalyzing sustainability models, not only through traditional funding sources, but also through non-traditional reciprocity-based resource mobilization, through partnerships, networking, and revenue generation such as donations, memberships, pay what you want, and crowdfunding that may provide revenues and sustainability to OER provision while ensuring that costs for accessing essential materials for teaching and learning are not shifted to individual educators or students;

(c) promoting and raising awareness of other value-added models using OER across institutions and countries where the focus is on participation, co-creation, generating value collectively, community partnerships, spurring innovation, and bringing people together for a common cause;

(d) enacting regulatory frameworks that support the development of OER products and related services that align with national and international standards as well as the interest and values of the OER stakeholders;

(e) fostering the faithful linguistic translation of open licenses as defined in this Recommendation to ensure their proper implementation;

(f) providing mechanisms for the implementation and application of OER, as well as encouraging the feedback from stakeholders and constant improvement of OER; and

(g) optimizing existing education and research budgets and funds efficiently to source, develop and continuously improve OER models through inter-institutional, national, regional and international collaborations.

(v) Promoting and reinforcing international cooperation

15. To promote the development and use of OER, Member States should promote and reinforce international cooperation among all relevant stakeholders, whether on a bilateral or multilateral basis. Member States are encouraged to consider the following:

(a) promoting and stimulating cross-border collaboration and alliances on OER projects and programmes, leveraging existing transnational, regional and global collaboration mechanisms and organizations. This should include joining efforts on collaborative development and use of OER as well as capacity building, repositories, communities of practice, joint research on OER and solidarity between all countries regardless of their state of OER development;

(b) establishing regional and international funding mechanisms for promoting and strengthening OER and identifying those mechanisms, including partnerships, that can support international, regional and national efforts;

(c) supporting the creation and maintenance of effective peer networks that share OER, based on areas such as subject matter, language, institutions, regions and level of education at local, regional and global levels;

(d) incorporating, where appropriate, specific clauses relating to OER in international agreements concerned with cooperation in the fields of education;

(e) exploring the development of an international framework for copyright exceptions and limitations for education and research purposes to facilitate cross-border exchange and cooperation on OER; and

(f) supporting the contribution of intercultural communication skills, the management of multicultural groups, the design of communities of practice and community adjustment strategies in the local implementation of OER to promote universal values.

IV. MONITORING

16. Member States should, according to their specific conditions, governing structures and constitutional provisions, monitor policies and mechanisms related to OER using a combination of quantitative and qualitative approaches, as appropriate. Member States are encouraged to consider the following:

(a) deploying appropriate research mechanisms to measure the effectiveness and efficiency of OER policies and incentives against defined objectives;

(b) collecting and disseminating progress, good practices, innovations and research reports on OER and its implications with the support of UNESCO and international open education communities; and

(c) developing strategies to monitor the educational effectiveness and long-term financial efficiency of OER, which include participation of all relevant stakeholders. Such strategies could focus on improving learning processes and strengthening the connections between

findings, decision-making, transparency, and accountability for inclusive and equitable quality education and research.

Monitoring:

- Recommendation for which monitoring the Executive Board is responsible ([more information](#))
- 1st Consultation (2023)
 - Presentation of the consolidated report at the General Conference at its 42nd session (Autumn 2023)
 - Examination of the consolidated report by the Executive Board (2023)
 - Examination of the preparation of the forthcoming consultation by the Executive Board (2022)

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