ESD国際シンポジウム in 奈良 2024

International Symposium on Education for Sustainable Development in Nara 2024

"Seeking for Sustainable Society through Education Collaborating with Diverse Actors beyond Borders"

国境を越え、多様な主体が協働する教育（ESD）を通じた
持続可能な社会の探求

2024年2月17日 土 9:30-17:40　於）ホテル日航奈良

Date: 17th, February, 2024　Venue: Hotel Nikko Nara in Nara City, Japan

主催　奈良教育大学／奈良教育大学ESD・SDGsセンター

Organizer: Center for ESD and SDGs, Nara University of Education

The Meeting Abstracts

International Symposium on Education for Sustainable Development in Nara 2024

ESD国際シンポジウム in 奈良 2024 講演要旨集

Greetings

President, Nara University of Education

Toshiya MIYASHITA

It is my great pleasure to welcome you to the International Symposium on Education for Sustainable Development (ESD) in Nara 2024.

The theme of this symposium is "The Quest for a Sustainable Society through Education for Sustainable Development (ESD) that Transcends National Borders and Involves Diverse Actors." In the world, wars and conflicts persist, and in Japan, the "Noto Peninsula Earthquake" has occurred, threatening the peace of the entire planet. We face a critical time when we must gather the wisdom of the world to accelerate the transformation of our educational systems, educational practices, and actions as "Education for Sustainable Development: Towards achieving the SDGs" (ESD for 2030).

Now, Nara University of Education is situated in the ancient capital of Japan, surrounded by 1,300 years of history and culture. From a global perspective, Nara is the terminus of the Silk Road, and Nara University of Education is the first Japanese university of higher education accredited as a UNESCO School. Therefore, Nara University of Education and the Center for ESD and SDGs, established within the university in 2022, aspire to be a university of education that promotes ESD not only in Japan but also worldwide.

In Japan, an advocate of ESD, the Japanese Society of Education for Sustainable Development (JSESD), was established in 2017, accumulating a wealth of theoretical and practical research. Additionally, excellent ESD practices are being developed throughout Japan. We hope that this symposium today will help share practices from Japan and around the world, fostering partnerships and collaborations beyond the boundaries of individuals, individual schools, and institutions to create an international network for the promotion of ESD.

For the sake of the children of the world, who will lead the next generation, and for the sake of peace on earth.

ご挨拶

奈良教育大学　学長

宮下俊也

本日ここに、世界で ESD（Education for Sustainable Development）に関わってご活躍されている皆様を多数お迎えし「ESD 国際シンポジウム in 奈良 2024」を開催できますこと、大変嬉しく思い、心より歓迎申し上げます。

このシンポジウムのテーマは、「国境を越え、多様な主体が協働する教育（ESD）を通じた持続可能な社会の探求」です。世界では、今なお戦争や紛争が続いており、日本でも「能登半島地震」が発生するなど、地球全体の平和が脅かされ続けています。今まさに、世界の叡智を結集し、「ESD for 2030」（Education for Sustainable Development: Towards achieving the SDGs）として、教育のシステムと実践、そして我々の行動の変革を加速しなければならない時に直面しています。

さて、奈良教育大学は、1300 年の歴史・文化に包まれた日本の古都にある大学です。世界的に見れば、奈良はシルクロードの終着点であり、奈良教育大学は日本の大学で初のユネスコスクールに認定された高等教育機関です。それゆえに、奈良教育大学と 2022 年に学内に組織した「ESD・SDGs センター」は、日本国内のみならず、世界とともに ESD を推進する教育大学でありたいと考えています。

ESD の提唱国である日本では、2017 年に日本 ESD 学会（The Japanese Society of Education for Sustainable）が設立され、理論的･実践的研究が数多く積み重ねられています。また全国各地で優れた ESD の実践が展開されています。今日のこのシンポジウムにより、日本と世界の実践を共有することとともに、個人や個々の学校・諸機関の枠を超え、パートナーシップとコラボレーションを世界に拡げ、国際的なネットワークとなって ESD が推進されることを期待します。

次代を担う全世界の子どもたち、そして地球の平和のために。

Greetings

Director, Center for ESD and SDGs at Nara University of Education

Shizuo Nakazawa

We would like to express our sincere gratitude for allowing us to host an international symposium related to ESD, welcoming people from all over the world who are dedicated to the dissemination and promotion of ESD.

In 2015, "Transforming our world: the 2030 Agenda for Sustainable Development" was formulated. However, it cannot be said that the world is moving towards a sustainable society. There are numerous problems threatening the survival of humanity. Achieving a sustainable society requires a change in the behavior of each individual. ESD aims to develop individuals who can act as creators of a sustainable society by changing their behavior.

Notably, Nara has been actively contributing to the creation of a sustainable society for 1,300 years, as exemplified by the Great Buddha of Todaiji Temple. In 743, Emperor Shomu issued an edict to create a statue of the Great Buddha, citing reasons corresponding to SDGs goals.

① Kenkon phase peacefully. (Wishing for calm weather and peaceful days without earthquakes.)
This corresponds to Goal 13 and Goal 11.
② Pray for the prosperity of all plants and animals.
This corresponds to Goal 14 and Goal 15.
③ Additionally, smallpox was prevalent during the Nara period, so countermeasures against infectious diseases were an urgent issue.
This corresponds to Goal 3.

While having these common goals is important, it alone will not lead to the erection of the Great Buddha. The Great Buddha was erected in 752 after 2.6 million people participated in its construction in response to Emperor Shomu's call.

I sincerely hope that we can collaborate with everyone to ensure that the SDGs do not end up being a mere 'pie in the sky'.

ご挨拶

奈良教育大学　ESD・SDGsセンター長

中澤静男

世界各地より、ESD の普及・推進に取り組まれている方々をお迎えし、ESD に関わる国際シンポジウムを開催できますこと、心より感謝申し上げます。

2015 年に「我々の世界を変革する：持続可能な開発のための 2030 アジェンダ（Transforming our world: the 2030 Agenda for Sustainable Development）」が策定されましたが、世界は持続可能な社会に向かっているとは言えません。人類の生存を脅かす問題が山積しています。世界を持続可能な社会へ向かわせるには一人一人の行動の変革が必要です。そして持続可能な社会の創り手として行動を変革する人を育てるのが ESD です。

実は、奈良は 1300 年前から持続可能な社会づくりに取り組んできました。それを証明するのが東大寺の大仏様です。743 年に聖武天皇より盧舎那仏造顕の詔が発せられており、その中に大仏様を造る理由が記されています。

①乾坤相やすらかに（いつも通りの穏やかな気候と地震のない平穏な毎日を願って）
　SDGs の目標 13 と目標 11 に該当します。
②動植ことごとく栄えることを願って
　SDG ｓの目標 14 と目標 15 に該当します。
③さらに奈良時代は天然痘が大流行していましたので、感染症対策も喫緊の課題でした。
　SDG ｓの目標 3 に該当します。

これらの共通の目標を掲げたことも大事ですが、それだけでは大仏様は建立されません。聖武天皇の呼びかけに応じて 260 万人が大仏づくりに参加したことで、752 年に大仏様が建立されています。

SDGs を画餅に終わらせないために、皆さんと連携できることを願ってやみません。

Program

【Morning Session】 9：30－12：30

(1) Opening Ceremony (9:30－9:45)

Opening Remarks

Dr. Hiroyuki SAKAKI
Chairman of Nara National Institute of Higher Education and Research

Greeting from MEXT

Mr.Masami WATANABE
Director-General for International Affairs, MEXT
Secretary General of the National Commission for UNESCO

(2) Keynote Speech (9:45－10:25)

ESD: trends, challenges and opportunities in "transforming education"

Ms. Jun MOROHASHI
Chief, Section of Education for Sustainable Development, UNESCO Headquarters

＜Break Time 5min.＞

(3) Presentation from each Country and Sectors (10:30－12:10)

①ESD promotion initiatives in Japan and the prospects

Mr. Shin SAITO
First Secretary, Permanent Delegation of Japan to UNESCO

②Transforming the learning environment: Exploring ESD through UNESCO Associated Schools' Activities, and International Partnerships in Korea

Ms. Hyunsook SEO
Director, Division of Network Programme, Korean National Commission for UNESCO

③Roles of ESD in the UN Decade of Ocean Science for Sustainable Development

Dr. Yutaka MICHIDA
Chairman, Intergovernmental Oceanography Commission, UNESCO

④Uzbekistan's policy on reaching education SDGs

Dr. Mukhsinkhuja ABDURAKHMONOV
Ambassador Extraordinary and Plenipotentiary of the Republic of Uzbekistan to Japan

⑤Ruminations of an Old Cowboy:ESD, a Lifelong Quest for Better Days through Better Ways

Mr. Tim JONES
Manager, Gladney Farm in Hokkaido (Former High School Teacher in USA)

(4) Q&A (12：10-12：30)

＜Break & Lunch Time for 60min.＞

プログラム

【午前の部】 9：30－12：30

（1）開会行事（9:30－9:45）

挨拶

榊　裕之
国立大学法人　奈良国立大学機構　理事長

祝辞

渡辺　正実 氏
文部科学省国際統括官・日本ユネスコ国内委員会事務総長

（2）基調講演（9:45－10:25）

演題「ESD：その潮流と課題、そして、教育変革の機会」

講師：諸橋　淳　氏
国連ユネスコ本部　ESD課長

＜休憩・5分＞

（3）各国・各セクターからの提言（10：30－12：10）

①日本のESD推進のイニシアティブと展望

斉藤　眞　氏
ユネスコ日本政府代表部　一等書記官

②学習環境の変革：韓国のユネスコスクールの活動と国際パートナーシップを通じたESDの探求

SEO Hyunsook（ソ・ヒョンスク）　氏
韓国ユネスコ国内委員会　国際連携部長

③国連『持続可能な開発のための海洋科学の10年』におけるESDの役割

道田　豊　氏
UNESCO政府間海洋学委員会（IOC）議長

④教育のSDGs達成に関するウズベキスタンの政策

Mukhsinkhuja ABDURAKHMONOV（ムクシンクジャ アブドゥラフモノフ) 氏
ウズベキスタン共和国 駐日特命全権大使

⑤老カウボーイの反芻：ESD、より良い方法でより良い日々を求める生涯にわたる探求

Tim JONES（ティム・ジョーンズ）氏 ※オンライン
Gladney Farm（北海道）牧場長

（4）質疑応答（12：10-12：30）

＜休憩・昼食60分＞

【Afternoon Session】13：30－17：40

（5）Symposium on ESD

Purpose: Through sharing the diverse ESD practice based on the situations and issues of each country, and discussing how to promote practical ESD and foster future generation, we accelerate international partnership and collaboration for ESD promotion.

①Show Case(13:30－15:00)

Case 1 Rethinking on a New Journey of Education for Sustainable Development in Thailand: Case of ESD Center Chulalongkorn University

Dr. Athapol ANUNTHAVORASAKUL
Assistant Professor, Chulalongkorn University in Thailand

Case 2 Learning Lessons from Disasters: Sharing Experiences from Sumatra and Great East Japan Earthquake and Tsunami to Build Partnership on Education for Sustainable Development focusing on DRR.

Dr. Muzailin AFFAN
Director, International Office, Syiah Kuala University in Indonesia

Case 3 ESD through International Cooperation and Partnership in Japan

Dr. Miki SIGIMURA
Professor, Sophia University in Japan

Case 4 What to do and what must be done regarding youth action for climate change in Korea.

Dr. Hyuncheol KIM
President, National Youth Policy Institute in Korea

Case 5 Development and Training of Teachers who will Contribute to the Development of Creators of Sustainable Society: Initiatives at Nara University of Education

Mr. Toshiya MIYASHITA
President, Nara University of Education
Mr. Shizuo NAKAZAWA
Director, Center for ESD and SDGs at Nara University of Education

Case 6 Youth Participation in ESD Practice by UNESCO Club, Nara University of Education

Mr. Shota NAWASHIRO
Former Representative, UNESCO Club, Nara University of Education

＜Break 15 min.＞

【午後の部】13：30－17：40

（5）ESDシンポジウム

趣旨: 各国・各地域の実情と国際的な諸課題を踏まえた多様なESDの取組を共有し、実践的なESDの在り方や次世代の育成について議論し、ESDの国際的な連携と協働を促進する。.

①実践発表(13:30－15:00)

事例１ タイのESDの新たな旅を再考する：チュラロンコン大学ESDセンターの事例
Athapol ANUNTHAVORASAKUL（アタポル・アヌンタヴォラサクン）氏
Chulalongkorn大学（タイ）准教授

事例２ 災害から教訓を学ぶ：スマトラ島地震と東日本大震災の津波の経験を共有し、防災を中心とするESDにおけるパートナーシップを構築する
Muzailin AFFAN（ムザイリン・アフファン）氏
Syiah Kuala大学（インドネシア）国際室長

事例３ 日本における国際協力とパートナーシップを通じたESD
杉村 美紀　氏
上智大学総合人間科学部　教授

事例４ 韓国の気候変動に対する若者の行動に関して何をし、何をしなければならないか
KIM Hyuncheol（キム・ヒョンチョル）氏
韓国青少年政策研究院　院長

事例５ 持続可能な社会の創り手の育成に資する教員の育成：奈良教育大学の取組
宮下俊也
奈良教育大学　学長
中澤静男
ESD・SDGsセンター センター長

事例６ 奈良教育大学ユネスコクラブによるESD実践へのユースの参画
苗代 昇妥　氏
奈良教育大学ユネスコクラブ　前代表

＜休憩15分＞

②Panel Discussion（15:15－16:35）

Focus of Discussion

・Role of Education (ESD) on Conserving Rich Nature, History and Culture as well as Tackling Issues of Environmental, Economic and Social Aspects in each Countries.
・Future Promotion and Collaboration on ESD beyond National Boundaries.
・Fostering and Involving next Generation for Further ESD Promotion

Moderator

Dr. Yukihiko OIKAWA Deputy Director, Center for ESD and SDGs at NUE

Panelists

Dr. Mukhsinkhuja ABDURAKHMONOV Ambassador Extraordinary and Plenipotentiary of the Republic of Uzbekistan to Japan

Dr. Athapol Anunthavorasakul Assistant Professor, Chulalongkorn University in Thailand

Dr. Muzailin AFFAN Director, International Office, Syiah Kuala University in Indonesia

Dr. Hyuncheol KIM President, National Youth Policy Institute in Korea

Dr. Miki SUGIMURA Professor, Sophia University in Japan

Floor Discussion including Q&A（20 min.）

＜Break 10 min.＞

③Closing Session：Sharing and Closing Discussion（16:45－17:30）

Commentators

Ms. Jun MOROHASHI Chief of Section of Education for Sustainable Development, UNESCO Headquarters

Dr. Yutaka MICHIDA Chairman of Intergovernmental Oceanography Commission, UNESCO

Mr. Shin SAITO First Secretary, Permanent Delegation of Japan to UNESCO

Ms. Hyunsook SEO Director, Korean National Commission for UNESCO

（6）Closing Ceremony（17：30－17：40）

Closing Remarks

Mr. Toshiya MIYASHITA President, Nara University of Education

②パネルディスカッション（15:15−16:35）

テーマ

・各国が抱える課題（環境・経済・社会）や良さ（歴史や財産）と教育（ESD）の効果
・次世代（ユース）の育成と参画
・今後のESDの展開と国際的な連携・協働など

コーディネーター

及川幸彦 奈良教育大学ESD・SDGsセンター副センター長

パネリスト

Mukhsinkhuja ABDURAKHMONOV氏 ウズベキスタン共和国　駐日特命全権大使

Athapol ANUNTHAVORASAKUL 氏 タイ・Chulalongkorn大学　教授

Muzailin AFFAN 氏 インドネシア・Syiah Kuala大学　国際室長

KIM Hyuncheol 氏 韓国青少年政策研究院　院長

杉村　美紀　氏 上智大学　総合人間科学部教授

フロアとのディスカッション（質疑応答）（20 分）

＜休憩10分＞

③総括セッション：セッションの全体共有と総合討論（16:45−17:30）

コメンテーター

諸橋　淳 氏　国連UNESCO本部　ESD課長

道田　豊 氏　UNESCO政府間海洋学委員会（IOC）委員長

斉藤　眞 氏　UNESCO日本政府代表部　一等書記官

SEO Hyunsook 氏 韓国ユネスコ国内委員会　国際連携部長

（6）閉会行事（17：30−17：40）

挨拶

宮下俊也 奈良教育大学　学長

Abstract Contents

Keynote Speech

Presentation from each Country and Sectors

Symposium on ESD -Show Case

Keynote Speech

Jun MOROHASHI

諸橋　淳

Chief, Section of Education for Sustainable Development, UNESCO Headquarters

Ms Jun Morohashi joined UNESCO in 1999 and started her career in Social & Human Sciences Sector (1999-2007). She then worked in Education Sector as Programme Specialist in Peace, Human Rights and Global Citizenship Education (2007-2014) before serving as Chief of Education Unit at UNESCO Port-au-Prince Office (2014-2016), and then as Head of Executive Office & Regional Programme Coordinator at the UNESCO Asia-Pacific Regional Bureau for Education in Bangkok. In April 2020 she came back to HQ-based Section of Education for Sustainable Development (ESD), and as of September 2022, she is Chief of Section for ESD. She has MA in sociology from Hitotsubashi University, Japan, and MSc in psychology from University of Derby, UK.

Abstract

ESD: trends, challenges and opportunities in “transforming education”

The ESD for 2030 framework was officially launched in the 2021 UNESCO World Conference for ESD in Berlin. On this occasion, the education and sustainable development stakeholders adopted the Berlin Declaration on ESD outlining a range of actions to transform education encompassing teaching and learning, professional training and civic engagement. Since then, global advocacy for raising awareness on the importance of ESD has been highly successful, as ESD was highlighted at several key international events, including the 2022 UN Transforming Education Summit and during the climate change and biodiversity Conferences of the Parties (COPs). ESD was reaffirmed as key to addressing planetary challenges and developing the necessary capacities for transformation at both individual and system levels.

This presentation will discuss ESD as a strategic approach in transforming education and lives of learners, and will share some interesting examples of ESD pedagogy applied in UNESCO member states. It will also highlight remaining challenges needing attention, and opportunities for further engagement. Finally, some of the key outcomes of the first ESD-Net Global Meeting organized in December in Tokyo will be presented.

Presentation

Shin SAITO

斉藤　眞

First Secretary, Permanent Delegation of Japan to UNESCO

Professional Record

April 2006	Joined Ministry of Education, Culture, Sports, Science and Technology of Japan and served as an official in Science and Technology Policy Bureau
April 2012	Deputy Director in Higher Education Bureau, Ministry of Education, Culture, Sports, Science and Technology of Japan
April 2016	Deputy Director in Headquarters for Healthcare Policy, Cabinet Secretariat
July 2017	Deputy Director in Lifelong Learning Policy Bureau, Ministry of Education, Culture, Sports, Science and Technology of Japan
April 2018	Director, Educational policy Division, Hyogo Prefectural Government
April 2020	Deputy Director, Agency for Culture of Japan
January 2023	First Secretary of Permanent Delegation of Japan to UNESCO

Former Visiting Researcher, Graduate School of Public Policy, The University of Tokyo(2015-2018)

Abstract

ESD promotion initiatives in Japan and the prospects.

Japan has taken the lead in promoting ESD in order to contribute to the achievement of the SDGs through the development of creators of sustainable societies. In this presentation, I will inquire into the history and Japan's unique good practices of ESD and compare ESD with various educational initiatives(e,g: Greening Education Partnership, SDG4 and Global Citizenship Education) in the global community in order to unravel its profound philosophy (With reference to Japan's contribution to the revision of the 1974 Recommendation).

I will also present my thoughts on the importance of bricolage in education and ESD as a means to realize independent, interactive and deep learning, including the positioning and significance of ESD in Japan's education policy, its relationship with the Courses of Study and how it can be applied to teachers development.

Furthermore, based on Japan's experience in promoting ESD, we would like to propose some tips for accurately positioning ESD in the education of each country and improving its educational effectiveness.

Presentation

Hyunsook SEO

Director, Division of Network Programme, Korean National Commission for UNESCO

Ms. Hyunsook Seo majored in Political Science and International Relations, and commenced her career at the Korean National Commission for UNESCO (KNCU) in 1999. At KNCU she has been actively engaged in various programmes on human rights, peace, ethics, sciences, Global Citizenship Education, Education for Sustainable Development, and international cooperation. She has also coordinated teacher training and youth global citizenship projects, and carried out international and regional exchange programmes aimed at embodying and promoting UNESCO values and ideals. Notably, Ms. Seo played a pivotal role in coordinating an exchange programme between Korean and Japanese teachers and has served as the UNESCO Associated Schools Network (ASPnet) National Coordinator in the Republic of Korea for over a decade. In addition to her responsibilities at KNCU, Ms. Seo is involved in various external activities. Currently, she serves as a member of Korea's Committee of Environmental Education under the Ministry of Environment, contributing to policy discussions and leading initiatives to advance environmental awareness and education nationwide. Additionally, she is a member of the UNESCO World Heritage Committee of the Jeju Special Self-Governing Province. Since 2023, Ms. Seo has been the Director of the Division of Network Programme in KNCU, as well as the ASPnet National Coordinator in Korea, demonstrating her continued commitment to fostering international collaboration and promoting UNESCO's mission.

[Summary of CV]

- 1999~Present: Korean National Commission for UNESCO (currently Director, Division of Network Programme / ASPnet National Coordinator)
- 2024-2026: Member, Committee of Environmental Education (4th), Ministry of Environment
- 2022-2024: Member, UNESCO World Heritage Committee of the Jeju Special Self-Governing Province
- 2022: Member of the ROK' s National Committee for the UNESCO IHP (Intergovernmental Hydrological Programme) / Executive Member, UNESCO i-WSSM (International Centre for Water Security and Sustainable Management)
- 2019-2022: Working Group Member, Environmental Education Promotion Committee, Ministry of Environment
- 2016-2020: Advisory Board Member, ASEAN Cyber University Project, Korea Education and Research Information Service
- 2018: Working Group Member, K-SDGs, Ministry of Environment

Abstract

Transforming the learning environment: Exploring ESD through UNESCO Associated Schools' Activities, and International Partnerships in Korea

The Republic of Korea has made, and continues to make, efforts to integrate Environmental Education and Education for Sustainable Development (ESD) into both the national education curriculum and into extra-curricular activities within the education system. Simultaneously, ESD is being implemented by learning institutions themselves, including UNESCO Associated Schools.

ESD and Global Citizenship Education (GCED) have been significantly fostered in Korea thanks both to this support from the Ministry of Education, and the collaborative efforts of the UNESCO Associated Schools Network (ASPnet) and international partnerships. The initiatives aim to integrate sustainability principles into educational frameworks, fostering a culture of sustainability among students, educators, and the wider community.

Understanding and activities related to ESD did not initially gain significant momentum in Korean schools, even after the Decade of ESD began in 2004. However, with the advent of the SDGs starting in 2016, ESD became somewhat better understood among schools and communities, and there has been growing recognition, sometimes distinguishing it from environmental education.

As of December 2023, 500 UNESCO Associated Schools in Korea have played a pivotal role in advancing ESD, actively participating in various projects aligned with the goals and principles of ESD, supported by the Korean National Commission for UNESCO (KNCU). The schools focus on incorporating sustainability-related themes into their curriculums, promoting environmental conservation, fostering global citizenship, and nurturing a sense of responsibility for sustainable development among students.

Collaboration and partnerships, both national and international, have been instrumental in enhancing the impact and reach of ESD initiatives in Korea. Partnerships between UNESCO Associated Schools and educational institutions within and outside the Republic of Korea, as well as collaborations facilitated by UNESCO, have allowed for the exchange of ideas, best practices, and resources in the realm of sustainability education.

ESD activities in Korea's ASPnet schools encompass a wide range of endeavors, including curriculum integration, awareness and advocacy campaigns, student engagement through hands-on projects, community service activities, and international collaborations. KNCU helps ASPnet schools in Korea to connect with international ASPnet participants and facilitates exchange programmes, partnerships, and collaborative projects with them to foster cross-cultural understanding and shared learning experiences.

Teacher training is also a key component for the fostering of ESD within ASPnet schools, providing professional development opportunities and training programmes for educators to effectively integrate ESD into their teaching practices.

In summary, ESD practices in Korea are driven by the activities of UNESCO Associated Schools and aided by international partnerships, with the aim of transforming the learning environment by nurturing environmentally conscious and socially responsible global citizens capable of contributing to a sustainable future.

Presentation

Yutaka MICHIDA

道田　豊

Chairman, Intergovernmental Oceanography Commission, UNESCO

Yutaka Michida, born in Hiroshima, Japan in 1958, graduated from The University of Tokyo in 1981 and received his PhD in geophysics (physical oceanography) from the University of Tokyo in 1999. His research interest covers rather wide including not only natural science of physical oceanography, his primary academic background, but also social science such as oceanographic data management and marine policy as his extended research field for the last 20 years. After 16 years' working as a research and administrative officer in the Hydrographic Department of Japan Coast Guard since 1984, he moved to the Ocean Research Institute (presently Atmosphere and Ocean Research Institute) of The University of Tokyo in 2000. He was one of the five vice chairs of the Intergovernmental Oceanographic Commission (IOC) of UNESCO for the period from 2011-2015. Then he has been elected to the Chairperson of the IOC at the 32nd Assembly of IOC in June 2023. He has been awarded with several level of prizes, including Japan Prime Minister's Prize of promotion of ocean state in 2015. Currently Michida has been involved in several professional activities such as the Vice President of Japan Society of Ocean Policy and the President of Driftological Society.

Abstract

Roles of ESD in the UN Decade of Ocean Science for Sustainable Development

The United Nations Decade of Ocean Science for Sustainable Development (2021-2030) (the Ocean Decade, hereafter) was launched in January 2021, based on the Resolution A/RES/75/239 adopted at the 75th General Assembly of UN in December 2020. The Ocean Decade is to promote overall ocean sciences to well and effectively achieve the Sustainable Development Goals, particularly those related to SDG-14, by setting seven societal outcomes, namely, 'A clean ocean', A healthy and resilient ocean', 'A predicted ocean', 'A safe ocean', 'A sustainably productive ocean', 'A transparent and accessible ocean', and 'An inspiring and engaging ocean.' The concept of the Ocean Decade was initially presented to the 49th Session of the IOC Executive Council in 2016, and then to the 29th Session of the IOC Assembly in 2017. After long and intensive discussions at a series of governing body meeting of IOC, a finalized proposal of the Ocean Decade was submitted to the UN General Assembly in 2017, where the Ocean Decade was declared to be launched in 2021. In order to achieve the societal outcomes listed above, enhanced activities of capacity development, education, and outreach are essential as well as those promoting scientific research on the ocean. In particular, Education for Sustainable Development (ESD) should be a key component in the societal outcomes for 'A transparent and accessible ocean' and 'An inspiring and engaging ocean.' It is essentially important for us human beings to maintain and even improve global marine environment, so that we will be able to make it possible to realize sustainable use of the ocean beyond the Ocean Decade to be finished in 2030, with full engagement of next generations.

Presentation

Mukhsinkhuja ABDURAKHMONOV

Ambassador Extraordinary and Plenipotentiary of the Republic of Uzbekistan to Japan

Born on February 14, 1974, in the Fergana region, Uzbekistan.

1991 - 1996 yy.	- student of Tashkent State University of Economics
1994 - 1995 yy.	- internship at the California State University Chico(USA)
1996 - 1998 yy.	- listener of courses at the Academy of State and Social Construction under the President of the Republic of Uzbekistan
1998 - 2001 yy.	- Master' s at Otaru University of Commerce (Japan)
2001 - 2004 yy.	- PhD student at Hokkaido University (Japan)
2004 - 2006 yy.	- "Coca-Cola Uzbekistan LLC" sales manager
2006 - 2008 yy.	- Researcher at Hokkaido University (Japan)
2008 - 2017 yy.	- Director-General at the "MTRUST Co. Ltd." (Japan)
2018 - 2021 yy.	- Vice Governor of the Fergana region - Head of the Regional Department of Investments and Foreign Trade
April 2021 y.	- Head of the Investment Department of the Ministry of Foreign Affairs of the Republic of Uzbekistan
From July 2021 y.	- Ambassador Extraordinary and Plenipotentiary of the Republic of Uzbekistan to Japan

Speaks Japanese, English, Russian, Tajik and Arabic.
Married with four children.

Abstract

Uzbekistan's policy on reaching education SDGs

Introduction

The Uzbek Government adopted resolutions "On measures to implement the national sustainable development goals and targets until 2030" (dated October 20, 2018) and "On additional measures to enhance the implementation of the national sustainable development goals and targets until 2030" (dated February 21, 2022). The implementation of the SDGs in Uzbekistan is accompanied by large-scale reforms within the framework of the "Action Strategy of Uzbekistan for 2017-2021" and the ongoing "Development Strategy of New Uzbekistan for 2022-2026".

National SDG Implementation Coordination System

Our basic principle "In the name of human honor and dignity". The Uzbek Government set measurable goals to be achieved by 2026: halving poverty, increasing coverage of preschool education and higher education to 80 and 50%, respectively. Government decree of February 22, 2022 created the monitoring system regarding the implementation of 16 goals and 126 objectives. The system includes 190 indicators, 128 of which are published on the Statistics Agency portal (nsdg.stat.uz). A special "Roadmap" was developed to ensure the achievement of the national sustainable development goals and targets in 2023-2024. On the initiative of the President of Uzbekistan on December 14, 2022, the UN General Assembly unanimously approved the resolution "On strengthening the role of parliaments in accelerating the achievement of the Sustainable Development Goals." The first international forum "Inter-parliamentary global cooperation in achieving Sustainable Development Goals" (Bukhara, June 23-24, 2021)

Education

Improving the quality of education is the only correct way for the development of New Uzbekistan H.E. Shavkat Mirziyoyev – President of the Republic of Uzbekistan. As a result of the reforms, the coverage of children with preschool education increased from 27.7% in 2017 to 70% in 2022, the number of preschool education institutions increased from 5,211 to 27,609 (SDG 4). According to the Development Strategy of New Uzbekistan, the goal is to increase the coverage of preschool education to 80% by 2026.

Higher Education

In 2019-2022, the number of higher education institutions increased from 108 to 199, and the quota for admission to higher education institutions was nearly doubled and increased to 38 percent. The rate of coverage of young women with higher education in 2015-2021 improved by 5 times, but compared to the coverage of men, it is still lower by 1.64%.

Financial assistance

Educational loans with preferential terms and conditions for training women on a fee-contract basis. Starting from 2021, individual grants have been allocated annually for more than 3 thousand girls.

Special educational needs

In the 2021-2022 academic year, 21,685 children with special educational needs were educated in specialized schools, of which 6,474 in sanatorium-type boarding schools for children with tuberculosis and bone diseases and 14,059 individually at home. On June 7, 2021, the Law of the Republic of Uzbekistan "On Ratification of the Convention on the Rights of Persons with Disabilities" was signed to ensure the right of every child to inclusive education. As of December 2022, 204 inclusive classes were organized for the education of students in 195 schools of the country.

Modern Skills

The share of the population that has information and communication technology skills increased by an average of 1.6 percentage points in 2021 compared to 2019. The share of schools with access to the Internet and computers for pedagogical purposes increased to 92.5% in 2021.

Further Steps

- -to continue emphasizing the priority of education as a key sector of the socio-economic development of the country, paying attention to qualitative and inclusive education;
- -to develop Internet infrastructure in remote regions;
- -to shape an exact goal among young people about the supposed future profession;
- -to promote self-education of the population;
- -to continue efforts to ensure the accessibility and inclusiveness of education;
- -to expand public-private partnerships and attract private investment in education;
- -to digitalize education and create digital educational content, as well as promote interactive and distance learning methods;
- -introduce a national assessment system in order to objectively assess the knowledge, skills and qualifica tions of schoolchildren.

Presentation

Tim JONES

Manager, Gladney Farm in Hokkaido

(Former High School Teacher in USA)

Experience
26 years teaching in Texas, USA
58 years raising cattle in the USA and Japan

Education
Degrees:
Saint Jo High School 1969
A.A. North Central Texas College 1971
B.S. Ed. University of North Texas, 1976
Special Education Certification, Texas Woman's University, 1992
M. Ed. Texas Wesleyan University, 2004

Fellowships:
Japan Fulbright Memorial Fund Teacher Program, 2003
Japan Fulbright Memorial Fund Master Teacher Program, 2005
Japan Fulbright Memorial Fund Master Teacher Program, 2006
Japan Fulbright Memorial Fund Master Teacher Program, 2007
National Endowment for the Humanities Workshop on Pearl Harbor, 2009

Honors
House Resolution No. 904 The State of Texas House of Representatives and Senate Resolution No. 541 Recognizing "Educators from Callisburg ISD and schools in Kesennuma, Japan, and their inspiring exchange of ideas enhancing the quality of education for students in both countries…a remarkable collaboration between Japanese and American educators that furthers cross-cultural learning and the development of international curricula and allows students of different nationalities to work together in researching important issues…"
2014 Japan America Society of Dallas/Fort Worth Bridges to Friendship Award

Abstract

Ruminations of an Old Cowboy
ESD, a Lifelong Quest for Better Days through Better Ways

Maya Angelou said, "Do the best you can until you know better. Then when you know better, do better." For those of us who put our faith in Education for Sustainable Development, we also teach others to do better every chance we get, even after we close the doors to our classroom.

My generation of agriculturalists has damaged the ecosystem as much as the fossil fuel industry. I am truly sorry. My father taught me to leave a place cleaner than I found it. At 14 years old I adopted the Future Farmers of America Creed and have clinged to the idea that we can have "Better Days through Better Ways." So, at 73 years old, I wake up every morning and spend the day trying to clean up the mess my generation created.

Even an old cowboy living in wild Hokkaido can be involved in ESD. At Gladney Farm we often host groups interested in learning about regenerative grazing, our tool for restoring Soil Health.

The UN FAO says **"Soil Health is the prerequisite for ALL Sustainable Development Goals."** The key to soil health is soil regeneration. The greatest barrier to restoring soil health is the way we feed ourselves. The current food industry is depleting soil, providing us with less nutritional foods, and burdening society with human health problems such as obesity, diabetes, cancer, heart disease, and high blood pressure. Healthy soils will result in lowering atmospheric carbon, restoring the water cycle and nutrient cycle.

- We have an ethical obligation to restore the planet to a condition better than existed when we were born. No one can do it alone, but there are paths to reaching the goal. Regenerating soil is key to restoring carbon cycle, water cycle, and nutrient cycle.
- Society will be sustainable if we can reduce atmospheric carbon to 300 ppm. Several pathways can help us reach the goal of 300 ppm CO2, and soil health is essential to every option.
- Restoring soil health is not a problem just for farmers; we can all contribute by changing the way we feed ourselves. We need to regain our nutritional wisdom and teach our children nutritional wisdom.
- At Gladney Farm, we believe healthy soil produces healthy foods, healthy humans, and healthy communities. ESD is a pathway. Please join us.

Ruminations of an Old Cowboy

ESD, a Lifelong Quest for Better Days through Better Ways

I'm an old cowboy. I've been a cowboy for 58 years. I was also a teacher. Having two jobs is not unusual for teachers in the United States.

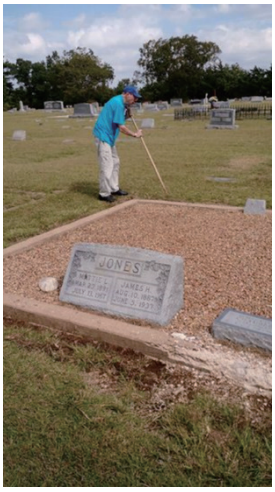
My father was an oil field worker in Texas in the United States and also a cattle farmer. There was a sand and gravel mine on the farm and most of the products were used to make concrete for construction.

Oil, agriculture, and concrete related mining are three of the most environmentally harmful industries in today's world, (Climate Change News, 2023) but they are the industries that put food on our family table and provided us with shelter and clothing.

My father loved the earth. He cared about the environment even though he supported our family by working in those industries.

In the summers he would take us on two-week-long camping vacations to national parks in the Rocky Mountains.

At every campsite, Dad would have us pick up the litter left by previous campers. We picked up cigarette butts, beer cans, food wrappers, and all types of waste. We complained about picking up someone else's trash, but Dad insisted. It was our job to leave the campsite in better condition than we found it.



That was my father's ethic and he lived by it throughout his life. Even after he could no longer drive himself, he would have me take him to clean around the graves of his parents.

My wife Chie and I moved from the United States to Japan about four years ago. We bought unused farmland in Kuromatsunai, Hokkaido, on Japan's most northern island. We try to live our lives following my father's ethic. Previous owners left tons of debris, collapsed buildings, agricultural plastic waste, old tires, etc. We did not make the mess, but we aim to clean it up.

We, and all consumers, are responsible for environmental damage caused by the production of things we consume. In fact, household consumption contributes more than 60% of global GHG emissions and between 50% and 80% of total land, material, and water use. (Diana Ivanova, 2015). But because we are farmers, we have the means to restore the ecosystem through regenerative agriculture. There are hundreds of definitions of regenerative agriculture, (Newton P, 2020) but Chie and I define it as "farming in harmony with nature." Basically, we use our cows as tools to restore carbon to the soil, which will rebuild the water, nutrient, and energy cycles, and increase biodiversity.

I attended public schools in a small town in the USA. All the boys were expected to join Future Farmers of America (known by its acronym FFA) and take agriculture classes. The girls joined Future Homemakers of America (FHA) and took homemaking classes.

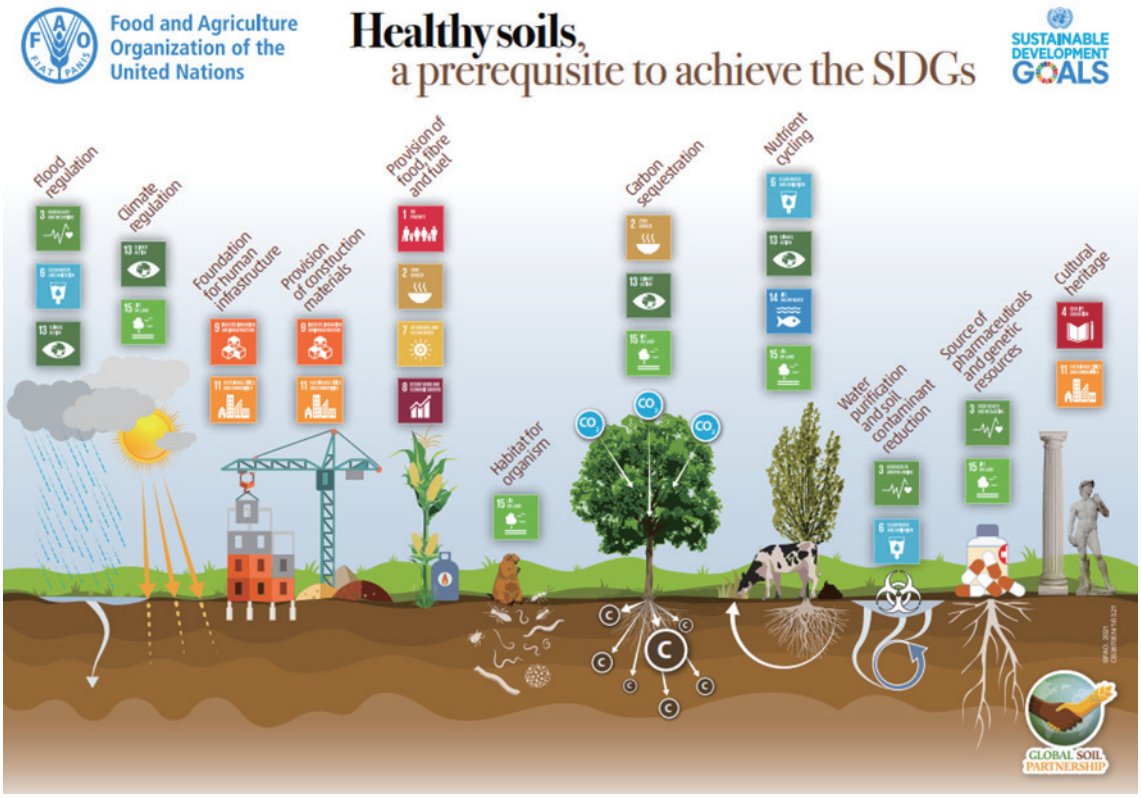
During the first week of my first year of high school, I had to memorize and recite the FFA Creed. I still remember the first paragraph:

I believe in the future of far
with a faith born not of wor
of deeds — achievements w
the present and past gener
of farmers; in the promis
better days through better
…. (Connors, 2008)

In 1965, when I recited the creed, I truly believed new technologies would "feed the world." These "better ways" were so successful they were referred to as "The Green Revolution" and Norman Borlaug was awarded the Nobel Peace Prize in 1970 for his role in it. (Haberman, 1972) It turns out that the better ways of the 20th Century paved the road to today's global warming. (FAOSTAT, 2020)

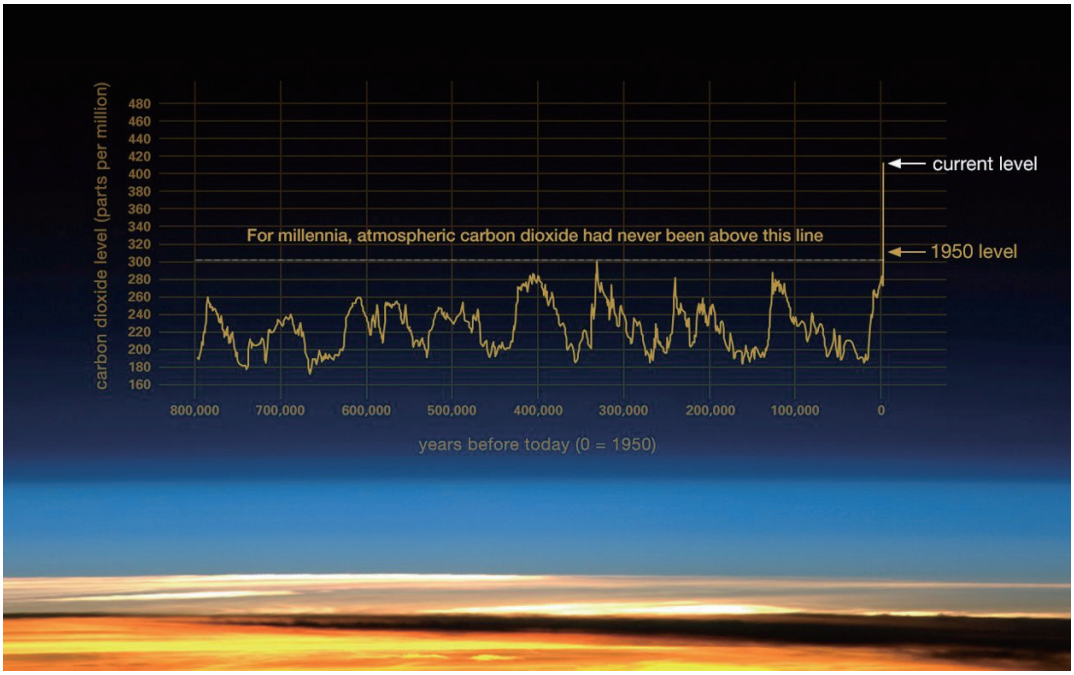
In 1949, two years before I was born, Aldo Leopold wrote "We abuse land because we see it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect." (Leopold, 1949) He also exhorted us to teach the vital role soil plays in our society. "There is value in any experience that reminds us of our dependency on the soil-plant-animal-man food chain […] Civilization has so cluttered this elemental man-earth relation with gadgets and middlemen that awareness of it is growing dim. We fancy that industry supports us, forgetting what supports industry. Time was when education moved toward soil, not away from it". (Leopold, 1949)

It is time for education to move back toward soil. According to the Food and Agriculture Organization of the United Nations (FAO), healthy soil is a prerequisite to other SDGs. (FAO, 2016)



Some of you may be thinking that if I am raising cows, then I am a big part of the problem. Cows get blamed for greenhouse gas increases, especially CO2 and methane. Indeed, modern agriculture is a major contributor. But as my friend and noted author Nicolette Hahn Niman is fond of saying, “It’s not the cow, it’s the how.” (Niman, 2014)

In fact, grazing ruminants are essential to regenerating soil health. (W.R. Teague, 2016)



How much CO2 was in the atmosphere the year you were born? (nature.org) (How much carbon was in the atmosphere when you were born?, 2024)

The first time I saw this graph I was stunned. In 1951, my birth year, the average ppm CO2 was **311.8**. In 2023, the average was **421.55** CO2 ppm. That's an increase of 109.75 ppm during my lifetime thus far. As a comparison, carbon only increased 21.70 ppm during the 72 years **before** my birth. Clearly, today's ways are not sustainable.

Jim Laurie, my friend and teacher (yes, I'm still taking classes) is a restoration ecologist. He says that enteric methane produced by cows is not a problem. "When atmospheric carbon goes down, methane will go down four times faster." Focusing on soil health will give us a healthy population of fungi. "If you have healthy mycorrhizae you don't need to worry about methane because there will be a healthy bacteria population that loves to eat methane." (Laurie, Biodiversity for a Liveable Climate, 2023)

We are committed to year-round grazing even here in Hokkaido where snow accumulation on the pastures is more than a meter. We try as best we can to mimic the grazing habits of the wild herds from preindustrial times. This style is nothing new to us. We have been practicing our style of grazing since 1982. We are convinced it works.

The big problem, according to FAO, is that if most farmers stick to conventional agriculture, 90 percent of our soil will be degraded by 2050. (UN, 2022) We need more farmers engaged in regenerative agriculture and more consumers buying their products.

I suspect some of you are saying that it is already too late. You've read the headlines saying that the earth has already passed the thresholds and the best we can do is to try to cope with the coming disasters and eventual demise of our planet.

Laurie, a biologist who spent his career restoring ecosystems damaged by the chemical industry in Texas before becoming a founder of Biodiversity for a Livable Climate in Boston, Ma., has devised **Scenario 300.** According to his calculations, we can restore atmospheric CO2 to a level lower than it was when I was born.

Road Map to 300 - Several Pathways

(Half Earth Plan - 5% to 10% wetlands is essential in grasslands, farms and forests.)

Ecosystem Land Type	Potential Billions of Acres	"Half Earth" Billions of Acres	Yearly Carbon Capture (tons/acre)	Billion Tons (per year)
Grasslands & Semi-Deserts (degraded but restorable)	13	6	x 1	6
Regenerative Farms Permaculture	6.3	3	x 2	6
Forests	7.1	3	x 2	6
Wetlands	2	1	x 6	6
Living Shorelines (Rising Sea Levels)	1	0.5	x 4	2
Arctic Permafrost (Azolla and Grazing Herds)	→			Part of Grasslands Total
Total	~ 29	13.5		↓ 26 GT C

Potential Billions of Acres Source: Robin White et al, *Pilot Analysis of Global Ecosystems: Grasslands*, WRI, p.51

Slide #3 - January 2018

"While there are potentially 29 billion acres to work with, this scenario uses only about half of this potential. If half of the available land is managed well in a holistic way, the Earth still has plenty of capacity to do this." Laurie says. (Laurie, 2018)

Laurie proposes several steps to achieve Scenario 300. They are achievable if we also reduce fossil fuel burning by 20%. (Laurie, 2018) The good news is that while regenerating our food system, we will also be reducing fossil fuel consumption.

2020's	By 2029 - 40% Fire Reduction - 40% Ag Chemical Reduction 40% Trawling Reduction - 10 million in Global Restoration Corps	405 ppm
2030's	By 2039 - 1 billion grazing animals reversing desertification (half are wild herds) - 30 million beaver in North America & 20 million in Asia	380 ppm
2040's	By 2049 - Living Shorelines & Permafrost Restoration Programs are in full gear. Oceans still rising but ice forming in higher altitudes.	340 ppm
2050's	By 2059 - Rising Water tables refill Aral Sea & Great Salt Lake. 200 million Beaver on 4 continents. Fungi help restore deep soils to 20 billion acres	300 ppm

Chie and I are committed to doing the best we can to restore the atmospheric CO2 level to 300, which we believe will also restore nutritional levels in foods, repair the water cycle, reverse desertification, and restore biodiversity in the degraded soils. In the words of my father, we will clean up our campsite and leave it better than we found it.

This is how.

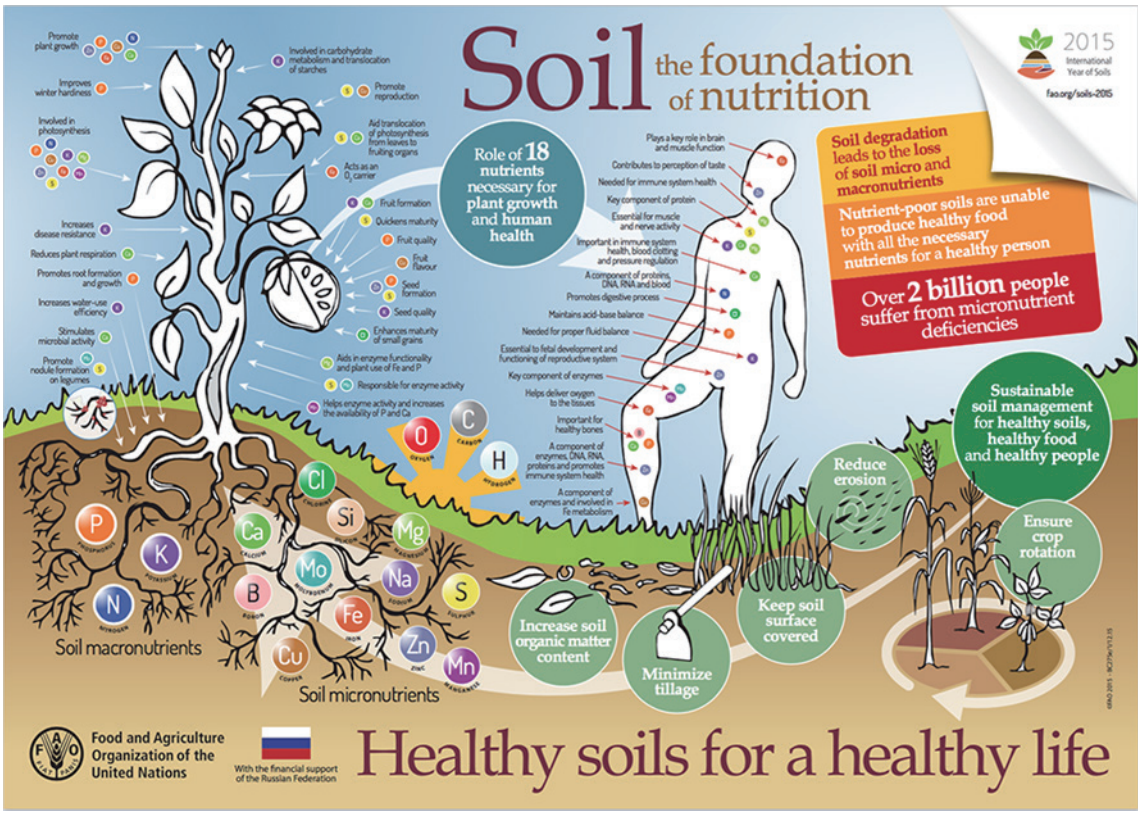
According to a global study of grazing published in 2023, on average our style of grazing can drawdown and sequester 10.03 t/ha/yr. (Soil4Climate, 2023)

Numbers for Regenerative Grazing - Technical Brief

	tCO2/ha/yr			
2.00	7.23	La Primavera municipality, Vichada, Colombia	Costa (2022)	"improve grasslands (IG) pursuing a sustainable intensification, such as a rotational grazing system with improved grass pasture species"
2.07	7.6	Mississippi, Alabama, Tennessee and Kentucky	Johnson (2022)	based on 20% SOM increase in Adaptive Multi-paddock (AMP) grazing paddocks to 10 cm. 1 m estimate made by Soil4Climate.
2.29	8.4	Clay County, Georgia, USA	Rowntree (2020)	"multispecies pasture rotation (MSPR) ... holistic planned grazing methodology"
2.10	7.71	Corrientes Province, Argentina	Kurtz (2020)	conversion from continuous grazing to Holistic Management
3.59	13.8	Missaukee County, Michigan, USA	Stanley (2018)	"AMP grazed pastures"
3.00	11.01	Cooke, Parker and Jack counties, Texas, USA	Teague (2016)	Adaptive Multi-paddock (AMP) grazing
AVG: 2.73 tC/ha/yr = 10.02 tCO2e/ha/yr				

We have 81 hectares of land. If we manage all of it properly, including areas designated as forests, wetlands, and wilderness areas, we can sequester 834.3 tons of atmospheric carbon per year. Estimates published in 2021 say people living in rich countries produce an average of 16 t/year CO2. (Hannah Ritchie, 2020) The emissions in Hokkaido are 7.6t/person/year. (National Institute for Environmental Studies, 2023) Using either of these estimates, we can claim that we have a significant negative carbon footprint on Gladney Farm. In other words, we are drawing down and storing more carbon than our lifestyle produces.

You can also reduce your carbon footprint and improve your health through agriculture. If you eat, you are involved in agriculture. Every time you put food in your mouth think about where the food came from, how it was grown, and who grew it. If it is produced regeneratively and organically and it comes from a farmer within driving distance, then you are probably helping reduce CO2 emissions.
Most importantly, avoid ultra-processed foods.



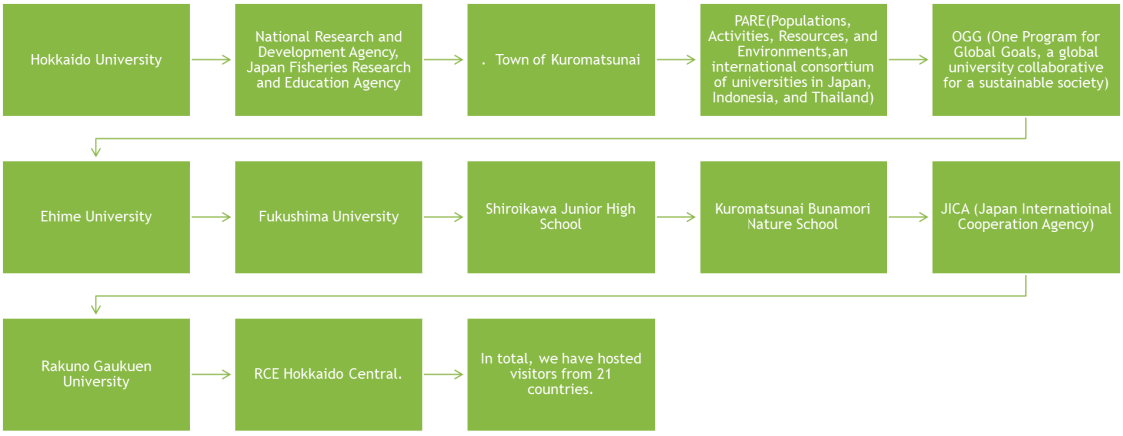
“On an immediate day-to-day level, the food we eat is only as good as the soil from which it springs. In part because of soil nutrition, most food raised today is less nutritious than that of most previous eras,” said Judith Schwartz. “Breeding crops for high yields accelerated the dilution of nutritional content.” Swartz also said, “Every purchase we

make matters."

Another big problem is the decline of rural communities. Small farms are disappearing rapidly with larger farms taking over.
"And it's not just biodiversity: Food supply is also at risk," Swartz says.

ESD can play a crucial role in teaching the importance of restoring our soil to create healthy foods for healthy humans and communities. And ESD can help us recruit enough small-scale farmers to restore our food system and revitalize our communities.

We are engaged with numerous individuals and groups to teach the principles of regenerative agriculture and we are always looking for more partners.



At Gladney Farm, we still believe in better days through better ways. What we have learned is that the better ways are based on being in harmony with nature and not on new technologies that will have unknown and unforeseen consequences like those we embraced in the 20th Century.

I am just an old cowboy with not so many years left to finish restoring the earth to a condition better than it was when I was born. But I am confident that through ESD, we can recruit enough of the coming generations to join us and that we will succeed by the middle of this century.

Bibliography

National Institute for Environmental Studies. (2023). *Carbon Footprint and Savings Databook*. Retrieved from National Institute for Environmental Studies: https://lifestyle.nies.go.jp/html/databook.html

Bazaar, H. (2017). 21 Of Maya Angelou's Best Quotes To Inspire. *Harper's Bazaar*.

Bell, A. (2021, July 5). *The Guardian*. Retrieved from Sixty years of climate change warnings: the signs

that were missed (and ignored): https://www.theguardian.com/science/2021/jul/05/sixty-years-of-climate-change-warnings-the-signs-that-were-missed-and-ignored

Climate Change News. (2023, May 11). *The World's Most Poluting Industries*. Retrieved from Climate Change News: https://climatetrade.com/the-worlds-most-polluting-industries/

Connors, J. &. (2008). The Contributions of E.M. Tiffany and The FFA Creed to Leadership Development Within the FFA. *Journal of Agricultural Education*, 49.

Diana Ivanova, K. S.-O. (2015). Environmental Impact Assessment of Household Consumption. *Journal of Industrial Ecology*.

FAO. (2016, 1 26). *Healthy soils, a prerequisite to achieve the SDGs.* Retrieved from Food and Agriculture Organization of the United Nations: https://www.fao.org/3/cb3670en/cb3670en.pdf

FAOSTAT. (2020). *FAOSTAT ANALYTICAL BRIEF 18 Emissions due to agriculture 2000-2018*. Retrieved from FAO. 2020. Emissions due to agriculture. Global, regional and country trends 2000–2018. : https://www.fao.org/3/cb3808en/cb3808en.pdf

Guandong, S. (. (2018). *Spatial Pattern of Farmland Abandonment in Japan: Identification and Determinants*. Retrieved from https://www.researchgate.net/publication/328278915_Spatial_Pattern_of_Farmland_Abandonment_in_Japan_Identification_and_Determinants/citation/download

Haberman, E. F. (1972). *Nobel Lectures, Peace 1951-1970,*. Amsterdam: Elsevier Publishing Company.

Hannah Ritchie, M. R. (2020). *"CO_2 and Greenhouse Gas Emissions"*. Retrieved from OurWorldInData.org: https://ourworldindata.org/co2-and-greenhouse-gas-emissions'

How much carbon was in the atmosphere when you were born? (2024, January 19). Retrieved from The Nature Conservancy: https://www.nature.org/en-us/get-involved/how-to-help/carbon-footprint-calculator/carbon-by-birth-year/

KYODO. (2023, August 7). Japan's food self-sufficiency rate near record low in fiscal 2022. *Japan Times*.

Laurie, J. (2018). *Scenario 300.* Boston: Biodiversity for a Livable Climate.

Laurie, J. (2023, November). Biodiversity for a Liveable Climate. (C. lecture, Interviewer)

Leopold, A. (1949). *A Sand County Almanac.* New York: Oxford University Press.

Mueksch, N. (2023, May 11). *CU Boulder Today*. Retrieved from University of Colorado Boulder: https://www.colorado.edu/today/2023/05/11/number-farms-world-declining-heres-why-it-matters-you

Newton P, C. N.-G. (2020, October 26). What Is Regenerative Agriculture? A Review of Scholar andPractitioner Definitions. *Frontiers in Sustainable Food Systems*.

Niman, N. H. (2014). *Defending Beef (Revised and Expanded Edition) .* White River Junction: Chelsea Green Publishing.

Provenza, F. D. (2023). Nourishing Earth, Nourishing Ourselves. *Journal of the American Holistic*

Veterinary Medical Association , 10-17.

Sekine, Y. (2023, December 4). *Regional revitalization starts with small-scale agriculture*. Retrieved from JAcom: https://www.jacom.or.jp/noukyo/tokusyu/2023/12/231204-71004.php

Soil4Climate. (2023, February). *Soil Carbon Drawdown Numbers for Regenerative Grazing - A Soil4Climate Technical Brief*. Retrieved from Soil4Climate: https://docs.google.com/document/d/1WMBvBvP9-IAKEIkFBTbHiA8ly83bM7mBkzZmH4z4RO8/mobilebasic?fbclid=IwAR2J8XQIcDHdrAh1ASttbG3U2B_B14hrmaU7Bo9TWf_AqGLc2OAnkHNcZkA

UN. (2022, July 27). *FAO warns 90 per cent of Earth's topsoil at risk by 2050*. Retrieved from UN News: https://news.un.org/en/story/2022/07/1123462#:~:text=FAO%20warns%2090%20per%20cent%20of%20Earth%E2%80%99s%20topsoil,to%20the%20UN%20Food%20and%20Agriculture%20Organization%2C%20FAO.

W.R. Teague, S. A. (2016). *The role of ruminants in reducing agriculture's carbon footprint in North America*. Retrieved from Journal of Soil and Water Conservation: https://www.jswconline.org/content/jswc/71/2/156.full.pdf

Show Case

Athapol ANUNTHAVORASAKUL

Assistant professor, Chulalongkorn University in Thailand

Assistant Professor Athapol Anunthavorasakul is a Head of Teaching Social Studies Division and a Director for Research and Development Center on Education for Sustainable Development (ESD Center), Faculty of Education, Chulalongkorn University in Thailand. His ESD Center has been selected by Asia-Pacific Center of Education for International Understanding (APCEIU) to be Global Citizenship Education Co-operation Center (GCC) since 2021. In Thailand, he has played significant roles to promote policies and innovations in education such as Global Citizenship Education, Democratic Citizenship Education, Media, Information and Digital Literacy through Basic Education, and Teacher Education. He has involved in School As Learning Community (SLC) movement for seven years. Until now, he and his colleagues support many schools' transformation with SLC philosophies via the concept of teacher learning together to escalate quality learning for all students.

Abstract

Rethinking on a New Journey of Education for Sustainable Development in Thailand: Case of ESD Center Chulalongkorn University

Education for Sustainable Development (ESD) have been implemented in Thailand for decades via many projects such Eco-school and Sufficiency Economy School. ESD Center at Chula has contributed in mainstreaming ESD nationwide with stakeholders including UNESCO Bangkok, UNICEF, UNDP, Ministry of Education and Ministry of Natural Resource and Environment (DEQP). Since 2015 ESD Center has pilot new approaches on Learning School based on School As Learning Community (SLC) to facilitate school change towards quality learning for all learner. Until now 22 schools, primary and secondary, in Bangkok and Nakaornrachasima have worked collaboratively with ESD center as SLC Frontline Schools and now we are on the process to scaling up the network. At the same period ESD center has been selected to be Global Citizenship Education (GCED) Co-operation Center by Asia-Pacific Center of Education for International Understanding along with 5 centers in ASEAN Countries. For years GCED as an innovation for ESD has been introduce to pre-service teacher preparation program and in-service teacher development network at provincial, regional and national level. Within GCED approach, various topics and innovation such Climate Change Education, Social Justice, Inclusive City, Intercultural Understanding and Gender Equality also be integrated and introduced to teacher, teacher students and teacher educators. This presentation will be illustrated some practices and lesson learned from our ESD journey to the audience.

Show Case

Muzailin AFFAN

Director, International Office, Syiah Kuala University in Indonesia

Dr. Muzailin Affan is an Associate Professor at Faculty of Natural Science Syiah Kuala University Indonesia. With a Ph.D. in Environmental Science from Tohoku University, he boasts over 15 years of experience in academia and has become expert in disaster mitigation. Dr. Muzailin also works on international collaboration partnership for more than 10 years. His research interest is on post-disaster recovery and disaster education. After 2004 Indian Ocean Earthquake and Tsunami and also 2011 Great East Japan Earthquake and Tsunami, Dr. Muzailin has been working together with researchers from Japan for recovery programs of the both disasters affected areas. He has received Award from Japan ministry of foreign affair for his contribution to strengthen collaboration between Indonesia-Japan in disaster mitigation. He also actively engages in regional partnership under Indonesia Malaysia Thailand Growth Triangle University Network (IMT-GT Uninet) which he serves as head of secretariat maintaining the network among 30 universities. Dr. Muzailin also actively involved in local government as technical advisor for Disaster Risk Reduction activities at Aceh Tsunami Museum and also supporting JICA JPP project on capacity building on DRR for museum staffs and school teachers in Aceh in collaboration with Kamaishi city, Japan.

Connect with Dr. Muzailin via email (muzailin@usk.ac.id)

Abstract

Learning Lessons from Disasters: Sharing Experiences from Sumatra and Great East Japan Earthquake and Tsunami to Build Partnership on Education for Sustainable Development focusing on DRR.

This topic explores the imperative to glean insights from two devastating natural disasters – the Sumatra Earthquake and Tsunami of 2004 and the Great East Japan Earthquake and Tsunami of 2011 – and underscores the critical role of education for sustainable development with a focus on disaster risk reduction (DRR). The disasters not only caused immense human suffering and economic losses but also revealed vulnerabilities in existing disaster preparedness and response mechanisms. This is to delve into the importance of sharing experiences and lessons learned from these calamities as a catalyst for creating international partnerships in education that prioritize sustainable development and DRR.

The Sumatra Earthquake and Tsunami of 2004 and the Great East Japan Earthquake and Tsunami of 2011 were watershed moments that underscored the need for global collaboration to address the multifaceted challenges posed by natural disasters. Both events resulted in staggering loss of life and infrastructure damage, prompting a re-evaluation of existing disaster management strategies. By examining the experiences of these two regions, this topic seeks to draw parallels and distinctions, providing a nuanced understanding of the complexities involved in disaster response and recovery.

Education emerges as a key component in building resilience and fostering sustainable development, with a particular emphasis on DRR. Lessons learned from the aftermath of these disasters emphasize the need for comprehensive and culturally sensitive educational programs that equip communities with the knowledge and skills to mitigate risks and respond effectively to future calamities. The study presents the exchange of experiences between Sumatra and Japan that can serve as a foundation for collaborative initiatives in education for sustainable development, acting as a bridge between communities that have faced similar challenges. Some activities related to DRR by local communities in the two regions resulted to strengthen the ESD in the future.

Furthermore, it highlights the role of partnerships in enhancing global resilience to natural disasters. By creating a platform for cross-cultural exchange, education systems can become instrumental in promoting international cooperation and solidarity towards a more resilient and sustainable future.

Show Case

Miki SUGIMURA
杉村 美紀

Professor, Sophia University in Japan

Miki SUGIMURA is a professor of Comparative and International Education, Faculty of Human Sciences of Sophia University. She received M.Ed. and PhD from University of Tokyo. She is also a visiting professor of the United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS), a research fellow of Japan International Cooperation Agency Ogata Institute, a senior program officer of Research Center for Science Systems at Japan Society for the Promotion Science, and Vice Chair of Promotion of Sustainability in Postgraduate Education and Research (ProSPER.Net). She was appointed to a member of the International Expert Group on the revision of the 1974 Recommendation by UNESCO in 2022. She was also a member of Japanese National Commission for UNESCO, President of Japan Comparative Education Society (JCES) and a co-opt member of executive board of World Council of Comparative Education Societies (WCCES). Her research topics are international higher education, multicultural education, and Education for Sustainable Development (ESD).

Abstract

ESD through International Cooperation and Partnership in Japan

There are more than 1,100 UNESCO associated schools in Japan, about 10% of the world's total. In addition, the current Courses of Study include the goal of fostering the creation of a sustainable society, and it is recommended that all schools, not just UNESCO associated schools, engage in ESD. In this context, various practices have been accumulated. At the annual National Conference of UNESCO associated schools, educators and practitioners gather to share their experiences and learn from each other. Meanwhile, there is a movement to share such domestic practices and activities not only with those in Japan but also with overseas institutes, and to jointly create curricula and educational methods.

They are also creating opportunities for creative learning by promoting educational collaboration with foreign countries. This presentation introduces some schools' examples in Japan that are developing ESD through international cooperation and partnerships, as well as a higher education network centered on sustainability, and report on the significance and challenges of these efforts.

Ina Gakuen Junior High School in Saitama Prefecture is an example where English teachers a takes the lead in developing curriculum and practices of ESD with a global perspective through teacher networking activities between Korea and Japan. The practice at Kurashiki Kojoike High School in Okayama Prefecture is an example of ESD that also considers contributing to the local community through the practice of supporting a children's cafeteria in which students are voluntarily involved. The Asian Teacher Educators for Climate Change Education (ATECCE) Network organized by Okayama University has contributed to tackling the challenges of climate change education through mutual exchanges of expertise on ESD among nine countries. Shizuoka University creating a consortium with overseas partner institutions to develop practical ESD research and Sophia University's efforts to build an education and research network with overseas research institutions illustrate the potential of ESD through partnerships.

What these examples have in common is that both learners and educators learn from each other's multiple perspectives and practice critical thinking together by collaborating with foreign educational institutions. This is a learning opportunity made possible by the fact that each participant has a different socio-cultural background. At the same time, these practices share the significance of solidarity and collaboration and form a network of people who are responsible for a sustainable future. This is precisely what ESD seeks to achieve. As the significance of ESD is now widely recognized around the world, the future of ESD is required to developed through such international cooperation and partnership.

Show Case

Hyuncheol KIM

President, National Youth Policy Institute in Korea

Dr. Kim is the president of the National Youth Policy Institute in Korea(NYPI), the Asian Regional Association for Career Development (ARACD) and the ARACD in Korea. Dr. Kim majored in chemical engineering in college and was granted master's and doctoral degrees in education from graduate school. Dr. Kim also completed a doctorate in sociology at Keio University in Japan. Dr. Kim is co-editor of 'Social Consciousness' in Japan.

Today: Family, Children, and Gender' from Keio University Press in Tokyo and 'Learning and Places to be: Comparison of School and Family in Korea and Japan' from Keisoshobo in Tokyo.

Dr. Kim has organized '2021 Youth Voice Festa for P4G (Partnering for Green Growth and Global Goals 2030)', aiming to increase the influence of youth by gathering and spreading their voices and actions on climate change where 112 numbers of Youth from 11 countries, including the Republic of Korea, Vietnam, Kenya, Japan, India, Madagascar, Haiti, Taiwan, and Mexico, participated in. Dr. Kim has organized youth workers network for climate change and has ensured that the institute continues to pursue research on climate change and has introduced ESG management faster than any other public institution in Korea.

Abstract

What to do and what must be done regarding youth action for climate change in Korea.

Will Korean youth's climate change actions take a new turn? And can Can it be the driving force that creates a new phase? In the meantime, environmental education has been continuously been emphasized in Korea. However, international youth movements, including Greta Thunberg's one, have brought about a new phase of change. More Korean youth are participating in this movement than in the past. Changes at school have also become more active. The Korean government is demanding that ecological education be linked to all subjects through national curriculum reform. In fact, many educational programs linked to climate action are being operated. It is clear that climate change has become an important trend in education. The climate crisis has been incorporated into a new area of knowledge that needs to be learned. However, it is not enough to make people agree that humanity is truly heading towards a real 'risk society' (by Ulrich Beck) due to climate change. One practice may lead to sustainable practice or raise awareness of the severity of the climate crisis obviously, but the problem is that the climate crisis is rapidly becoming more serious, and the effect of education is too gradual. Of course, there are examples of schools that go beyond operating climate action programs and school wide behavior curriculum, but these are only a few. The climate crisis more likely be most likely is not a problem that can be solved even by school wide behavior curriculum. This is a problem that cannot be guaranteed to be resolved even if the country wide responds with all its might. In most cases, national responses to climate crisis are limited to declarations or do not respond seriously, and global responses are ultimately only fragmented. Most public institutions and private companies in Korea are introducing ESG management, but in some ways, this is nothing more than a fad. In other words, the problem is very complex and very urgent, but practice is fragmented. There are also youth groups, like Greta Thunberg, who criticize the government's response without any hesitation in Korea. Their voices are very urgent, but politicians who seriously respond to their voices are rare. Thanks to many practices, climate change is clearly forming a social value. However, it will take too much time to share this value, and even if value sharing spreads successfully, it is questionable whether it will be possible to achieve the 2030 NDCs as well as to prevent future disasters. There are small countries and people whose survival is threatened by the climate crisis, but it will be difficult for most people to become aware of the climate crisis without an irreversible disaster already approaching. Therefore, it is difficult to avoid disaster by moving people and the nation by relying on reason and efforts to form social values, including the current educational response. There will be no effective response other than imposing stronger penalties or stronger incentives. To emphasize the educational aspect, we need to find a way to provide stronger incentives.

Show Case

Toshiya MIYASHITA
宮下　俊也

President, Nara University of Education

After serving as a professor, Director, and Vice-President for Academic Affairs of Nara University of Education, he assumed the roles of Executive Trustee of the Nara National Institute of Higher Education and Research and President of Nara University of Education in April 2022. His specialty is music education.

奈良教育大学教授、理事、副学長（教育担当）などを経て、令和４年４月に奈良国立大学機構統括理事、奈良教育大学長に就任。専門は音楽教育学。

Shizuo NAKAZAWA
中澤　静男

Director, Center for ESD and SDGs at Nara University of Education

Born on April 1, 1960, in Osaka City, Japan, he graduated from the Master's Program in Social Studies Education at Nara University of Education. After working as a teacher in a public school and as a teachers' consultant on the Board of Education, he has been with Nara University of Education since 2011. In April 2022, he assumed the position of Director of the Center for ESD and SDGs at Nara University of Education. He has been researching ESD through historical and cultural heritage, based on the belief that Todaiji Temple, Gankoji Temple, and other temples, which have been handed down uninterrupted for 1,300 years, are components of the World Cultural Heritage "Ancient Capital of Nara" and contain the elements for creating a sustainable society.

1960 年４月１日、大阪市生まれ。奈良教育大学教育学研究科社会科教育専修修了。公立学校教員・教育委員会指導主事を経て、2011 年より奈良教育大学に着任。2022 年４月、奈良教育大学ＥＳＤ・ＳＤＧｓセンター長に就任。

世界文化遺産である「古都奈良の文化財」の構成資産である東大寺・元興寺等は、1300 年前から途切れることなく受け継がれている、そこには、持続可能な社会づくりの要素が内包されていると考え、歴史文化遺産を通したＥＳＤを研究する。現在は、人の行動の変革のシステムについて、脳科学の知見を援用したＥＳＤ学習プログラムの研究に取り組んでいる。

Abstract

Development and Training of Teachers who will Contribute to the Development of Creators of Sustainable Society: Initiatives at Nara University of Education

Nara University of Education, established in 1888 as a national teacher training university, holds the distinction of being the first university in Japan registered as a UNESCO Associated School. A key focus of our education is “to cultivate teachers capable of contributing to the creation of a sustainable society”.

Our affiliated kindergarten, elementary school, junior high school, as well as university are also registered as UNESCO Associated Schools, actively participating in collaborative teacher training and classroom practices centered around ESD. In April 2022, we inaugurated the ESD/SDGs Center, dedicated not only to providing training for both pre- and in-service teachers on ESD themes but also to promoting ESD in collaboration with companies and local governments.

Our university’s approach to ESD is characterized by three key features.

Firstly, we have implemented a nationwide ESD teacher program for in-service teachers. In 2015, we worked on developing the “ESD Teacher Program.” After clarifying the qualities and abilities required for teachers who can appropriately teach ESD, we created a five-part consecutive training program. This year, training sessions were conducted at 12 locations across the country.

Secondly, we are actively involved in the development of the Kinki ESD Consortium project. This initiative engages UNESCO Associated Schools, companies, social education facilities, and others, primarily in the Kinki region. The consortium conducts lesson planning seminars in collaboration with institutions such as the Nara Prefectural Manyo Cultural Museum and the Kawakami Village Forest and Water Source Museum. Additionally, it facilitates connections with ESD teachers nationwide, hosting achievement presentations and practical exchange sessions.

Lastly, the UNESCO Club, a student organization that enjoys promoting ESD, started in 2011 with four students. Today, it boasts over 100 members actively participating in various ESD-related activities.

持続可能な社会の創り手の育成に資する教員の養成と研修：奈良教育大学の取組

奈良教育大学は国立の単科教員養成大学として 1888 年に設立された。本学は日本で最初にユネスコスクールへの加盟登録が認められた大学として、大学教育の特色の１つに「持続可能な社会づくりに貢献できる教員の養成」を掲げている。また附属幼稚園・小学校・中学校・大学がすべてユネスコスクールに加盟登録され、ESD を核とした連携した教員研修や授業実践に取り組んでいる。特に 2022 年４月に ESD･SDG ｓセンターを設立し､ESD をテーマとした教員養成と現職教員の研修はもちろん、企業や自治体とも連携した ESD の推進に取り組んでいる。

本学の ESD の特徴は 3 つある。

１つは ESD を指導できる力量形成を目的とした現職教員を対象とした ESD ティーチャープログラムの全国展開である。2015 年に「ESD ティーチャープログラム」の開発に取り組み、ESD を適切に指導できる教員に求められる資質・能力を明らかにした上で、５回の連続した研修プログラムを開発した。今年度も全国 12 カ所で研修会を実施した。

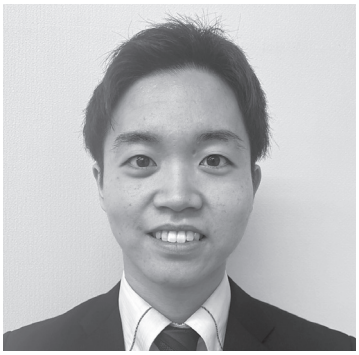
２つ目が近畿地方を中心としたユネスコスクールや企業、社会教育施設などを巻き込んだ近畿 ESD コンソーシアム事業の展開である。近畿 ESD コンソーシアムでは奈良県立万葉文化館や川上村の森と水の源流館と連携した授業づくりセミナーを展開する他、全国におられる ESD ティーチャーとつながり、成果発表会・実践交流会を開催している。

３つ目は ESD を楽しく追究する学生団体であるユネスコクラブの活躍である。2011 年度に４人の学生からスタートしたユネスコクラブだが、今は 100 名を超え、様々な活動を展開している。

Show Case

Shota NAWASHIRO
苗代　昇妥

**Former Representative,UNESCO Club,
Nara University of Education**



Former Representive of UNESCO Club, Nara University of Education
From Osaka, Japan
Educational Background
Nara University of Education, Nara, Japan. April 2021- present:
English Education Course
Kokoku high school, Osaka, Japan. April 2018- March 2021
Hiraoka Junior High School, Osaka, Japan. April 2015- March 2018

UNESCO Club at NUE focuses on learning and practicing ESD. The key word of our club is 'Nara'. All our activities are basically associated with Nara. For example, we have -ESD hiking- where we visit cultural and historical heritage sites in Nara and learn many things through our direct experiences there.

Also, we work together and propose new projects for promoting ESD. Many of our activities derive from what we want to learn and what we are interested in. Through trials and errors, we learn how to cooperate with each other for successful accomplishments of our projects.

In this presentation, I would like to provide two examples of activities of our club. One is an activity associated with traditional aspects of Nara. The other is disaster prevention and reduction education, a task we have tackled on for several years.hrough repeated trial and error, we learn how to cooperate with each other and feel a sense of accomplishment when we have completed an activity.

In this presentation, I am going to introduce two typical activities. One is activity which utilize Nara. The other is related to disaster prevention and reduction education that we have tackled on their own initiative for several years.

大阪府出身、奈良教育大学教育学部教科教育専攻英語教育専修３年
2018年3月東大阪市立枚岡中学校、2021年3月興國高等学校卒業
奈良教育大学ユネスコクラブ代表

ユネスコクラブは、学生が ESD について学び、実践する活動を行っています。活動の特徴は、「奈良」を活かした取り組みをたくさん行っていることです。例として、「ESD ハイキング」があります。奈良の文化遺産などを訪れ、実際に見学したり体験したりでしか感じ取れないことを学んでいます。

また、もう一つの特徴は、多くの活動は学生が主体的に発案、実施していることです。そのため多くの活動は、私たちが学びたいことや関心あることが出発点になっています。私たちは、活動を通して試行錯誤を繰り返しながら私たちは互いに協力しながら活動する方法や活動を終えたときの達成感を体験的に学んだり感じ取ったりしてます。

今回の実践発表では、奈良を活かした取り組みと学生が主体的に取り組み始めた防災・減災に関わる取り組みの二つを紹介します。

Abstract

“Participation of Youths in ESD in Japan: Activities of Nara University of Education UNESCO Club

1. Introduction

UNESCO Club at NUE has two objectives: “to enjoy learning ESD with fun” and “to train ourselves to be a good teacher who can implement ESD successfully”. Our activities are roughly divided into two categories: learning ESD and SDGs, and sharing our experiences in practicing ESD with children and learn together.

2. Representative Activities of UNESCO Clubs

(1) Project on Traditional Cultural Education

In this project, club members create and implement study plans for social studies field trips for 3rd and 4th graders of elementary schools in southern Nara Prefecture. The theme was “Nara Writing Brush and Yakushiji Temple” This program is divided into three stages,i.e. a preliminary lesson, social studies field trip and follow-up lessons.

(i) A Preliminary Lesson: pupils learn about Nara Writing Brush and Yakushiji Temple in classroom.

(ii) Social Studies Field Trip: Pupils take part in Nara Writing brush-making workshop. They also visit Yakushiji Temple.

(iii) Follow-up Lessons: Pupils give a presentation on what they learn.

(2) Education for Natural Disaster Prevention and Reduction Project

Disaster prevention is among important themes in ESD because it is directly related to the goals of the SDGs. Disaster prevention education has a high priority in Japan, a nation which is susceptible to many natural disasters. Our UNESCO Club also puts much emphasis on education for preventing and reducing natural disasters, and has worked on it for more than five years, focusing on how to implement disaster prevention education effectively.

In September 2023, we participated in Disaster Reduction Education Program conducted by National Federation of UNESCO Associations in JAPAN (NFUAJ) and AXA Life Insurance Co,. Ltd. In this program, we learned theoretical background of disaster prevention and reduction in the framework of ESD. Our experience there gave us a chance to make a presentation on what they learned from this program at Nara Women’s High School. In February 2024, one of our club members participated in the Disaster Reduction Education Forum, and he made a presentation.

3. Future Prospects

UNESCO Club at NUE is a place where students themselves act as creators of a sustainable society. It is also a place where future teachers can learn and experience hands-on practice on ESD.

Hopefully, we would like to cooperate with youths inside and outside Japan and work together for improving the world.

日本における ESD へのユースの参画：奈良教育大学ユネスコクラブの取組

１. はじめに

奈良教育大学ユネスコクラブは、「ESD を楽しく追究する」「ESD を実践できる教員になる」という二つの目的を持って、活動しています。活動内容は「学生自身が ESD・SDGs について学ぶこと」「大学生ならではの視点で、ESD・SDGs について子どもたちに伝え、ともに学ぶこと」の二つに大別されます。

２. ユネスコクラブの代表的な取り組み

（１）未来事業

この活動は、奈良県南部の小学校３、４年生の社会科見学での学習プランを大学生が中心となって作成、実行するものです。今年度は、「奈良県の伝統工芸品の奈良筆と薬師寺」をテーマに事前学習･社会科見学･事後学習の三日間にわたって行いました。

①事前学習：奈良筆や薬師寺についての知識・技能を広げる。【認知的学習】

②社会科見学：奈良筆づくり体験や薬師寺の見学を通して、文化遺産が生き続ける背景と市民協力の重要性に触れる。【社会的・情緒的学習】

③事後学習：地域へ貢献するためにできることを具体的に考え、発表します。一人ひとりの行動が地域や社会に与える影響を考えることで、社会貢献意識を育む。【行動的学習】

（２）防災・減災に関わる取り組み

SDGs の幅広い目標と関わらせやすい点で ESD のテーマとして、防災は有用といえます。特に、日本において防災・減災への取り組みは優先順位が高く、実際に、ユネスコクラブでも防災に関わる取り組みを 5 年以上行っており、実践を中心に学んでいます。

2023 年 9 月には、部員が「アクサユネスコ協会減災教育プログラム」に参加し、防災を軸とした ESD の実践やその方法などの理論的な面を学びました。その後、防災教育を実施する奈良女子高校において、本プログラムで学んだことの発表などを実施。また、2024 年 2 月には、本プログラムの「減災教育フォーラム」へ参加し全国に向けて発表しました。

３. 今後の展望

ユネスコクラブは、ESD を学び、実践することを通して、学生自身が持続可能な社会の創り手として活動するとともに、将来、ESD が実践できる教員が育つ場としても機能しています。

今後は、国内外のユースとも連携を深め、ユースによるユネスコ活動をより良いものとすることを目指したいと考えています。

Moderator

Yukihiko OIKAWA

及川　幸彦

Deputy Director, Center for ESD and SDGs at Nara University of Education in Japan

The major of Dr. Yukihiko OIKAWA is global environmental study, mainly Education for Sustainable Development (ESD) from the perspective of SDGs including Climate Change Education (CCE), DRR education and Ocean Education. Since 2002, he has promoted ESD as a pioneer in Japan, in formal education mainly, collaborating with diverse sectors and international institutions such as UNESCO, UNU and OECD at local and global level. He has also played a leading role of ESD promotion in Japan as the Chairperson of ESD Round-table Meeting in Japan and the Chair Advisor of ESD Resource Center as well as a member of Japanese National Commission for UNESCO. On the other hand, after the Great East Japan Earthquake and Tsunami in 2011, he engaged in post-disaster education recovery and the improvement of education utilizing the ESD network as a vice principal at school and an administrator in Kesennuma City. After that he was former Principal Researcher of the Center for Ocean Education at The University of Tokyo from 2016 to 2022. He is now researching CCE and DRR Education as a crucial approach to ESD for SDGs. He has PHD in Global Environmental Studies from Kyoto University.

地球環境学博士（京都大学）。前東京大学大学院海洋教育センター主幹研究員。

2002 年から教員及び指導主事として気仙沼市の学校を中心に地域や大学、政府、国際機関と連携して ESD を推進する。2011 年に発生した東日本大震災の際には、気仙沼市の学校及び教育委員会の管理職として危機対応にあたり、ESD の視点から教育再生・復興と防災教育の改革に取り組み、世界に発信する。その後、宮城教育大学を経て、2016 年から東京大学海洋教育センターで主幹研究員として ESD の視点からの海洋や防災の学際的な教育研究に取り組み、昨年 4 月には、奈良教育大学 ESD･SDGs センターに赴任し、副センター長として ESD のナショナルセンターの事業展開と国内外とのネットワークを構築している。

国レベルでは、日本ユネスコ国内委員会委員、ESD 関係省庁連絡会議 ESD 円卓会議議長、ESD 活動支援センター企画運営委員等など文科省や環境省、外務省の ESD/SDGs 関連の委員を歴任して政府の ESD/SDGs 推進施策に貢献するとともに、日本ユネスコ協会連盟理事、認定 NPO 法人 SEEDS Asia 理事を務め、民間レベルでも全国的に防災・減災教育の推進に努める。

国際レベルでも、2014 年「国連 ESD の 10 年世界会議」（名古屋）や 2015 年「国連防災世界会議」（仙台）、2017 年「オタワ会議」（カナダ）、2021 年「ESD に関するユネスコ世界会議」（ベルリン）等で日本の ESD や防災教育を世界に発信する。

Memo

Memo