



International Council of Associations for Science Education

Supporting and promoting science education internationally
The ICASE Newsletter

July/August 2022

Welcome to the ICASE July/August 2022 Newsletter!

Welcome to the ICASE July/August 2022 Newsletter! The ICASE Newsletter is a publication containing current information about ICASE initiatives conducted by ICASE and her member organisations, and topics of interest in the field of science education. The table of contents for this issue is in the right-hand column.

The International Council of Associations for Science Education (ICASE) was established in 1973 by leadership at the United Nations Educational, Scientific and Cultural Organization (UNESCO) to link national science teacher associations and to extend and improve science education for children and young people throughout the world. Today, ICASE is a network of science teacher education associations, institutions, foundations and companies, working together to promote science and technology education internationally. ICASE facilitates communication and cooperation at national, regional, and international levels. The ICASE Strategic Plan (2013-2023) calls for ICASE member organisations to adopt a position of Excellence and Leadership in Science Education.



International Council of Associations for Science Education

Over the past 49 years, more than 200 organizations have been members of ICASE. Currently, there are 32 organizations from 30 countries contributing to the financial administration of ICASE.

www.icaseonline.net/membership.htm

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ICASE Annual Membership Update

Please renew your organizational ICASE member fees!

We are updating our records, please complete the ICASE member information sheet found on our membership page: <https://www.icasonline.net/membership.html>

Membership fees are due January 1st each year and three-year options are available at a reduced rate! Membership renewal is easy and can be done totally online on the ICASE Website at: <http://www.icasonline.net/membership.html> and a receipt will be sent to you. If your organization needs to receive an invoice, please notify us to request an invoice.

ICASE provides opportunities for member organizations and their representatives to promote excellence and innovation in science teaching and learning for all through:

- connections to the members of other science organizations around the world;
- opportunities to serve in ICASE international leadership positions on standing committees and in international research initiatives;
- communication venues to disseminate information internationally to the members of international science organizations through the ICASE listserv, newsletter and peer-reviewed ICASE journal;
- collaborative funding opportunities to promote science education at regional levels; and
- organization of ICASE World Conferences, regional events, and workshops providing opportunities for professional development and networking.

How are your membership fees put to use?

ICASE membership fees are used for financial support of regional activities.

Approval for funding will be considered based on a written submission (request for funding support) to the ICASE secretary, which clearly indicates how the activity meets the following criteria.

All financial support for activities will be approved by the ICASE management committee, in consultation with the Executive Committee, and is subject to the availability of funds (generated by ICASE membership fees).

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Procedure to request financial support of regional activities

1. The applicant organisation must be a current financial member of ICASE.
2. The activity must promote science education at a regional level.
3. The applicant organisation should provide a description of the activity and the potential benefits (including the extent of benefits - number of beneficiaries, and how the activity meets the short-term and long-term goals of promoting science education in that region).
4. ICASE must be acknowledged as a sponsor on all publicity material, including the website advertising the initiative. The ICASE logo must be displayed on all materials associated with the funding.
5. Funding requests will be accepted for the following range in US dollars: \$500 – \$2,000. These funds are intended to cover special initiatives associated with activities occurring in benefit of each region.
6. The applicant organisation must provide a budget for the activity including other sources of funding.
7. The applicant organisation must have an institutional bank account for the transfer of funds.
8. The applicant organisation must nominate a person in their organisation who will take responsibility for the activity, all expenditures and reporting (via presentation and in writing) at the subsequent ICASE World Conference.

The report may be presented via video conferencing if the organization is unable to fund a member to attend an ICASE World Conference. Please note that the ICASE Management Committee reserves the right to approve funding for second and subsequent applications from the same region within a three-year period, even when the application may come from a different organisation.

BECOMING A MEMBER ORGANISATION

ICASE invites national, sub-national and multi-national organisations interested in the promotion of science and technology education to join its worldwide network. Organisations eligible to join are Science Teacher Associations (STAs), Science Societies, Institutes, Universities (or University Departments/Faculties), Industries, Companies, Centres and Museums. These organisations may have a sole interest in science education (or in one of its sub-disciplines such as biology, chemistry, physics, Earth sciences, etc.) or have wider interests, one of which is science education. Following the ICASE Constitution, requests for new members, whether full or associate, are approved by the ICASE Executive Committee.

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- to serve in ICASE international leadership positions on standing committees and involvement with international research initiatives;
- to disseminate information internationally to the members of international science organizations through the ICASE listserv, newsletter and peer-reviewed ICASE journal;

**EARLY YEARS**

S.D.Tunncliffe, ICASE EARLY YEARS, Chair CASTME

lady.tunncliffe@mac.com**Early Years has 2 distinct stages:**

1. Children -formal education- nursery school, kindergarten, and grade 1. Often from 3 years of age.
2. The earliest years birth to 3 or older which is often under the health and childcare authorities

Some informal institutions particularly museums and animal collections provide facilities for family Play and STEM sessions. Likewise, some informal institutions have been members of ICASE.

An increasing amount of interest is being shown in play ad culture as well as play in the earliest years before some governments e.g., Wales, England have curricula guidance and requirements from 3 years of age.

ICASE EARLY YEARS Group are interested to find if any Associations who are ICASE members have interaction with the early years through their members. Some universities do work with the early years in STEM understanding and interactions.

Please would you indicate to us if you have by returning the proforma below with information or just emailing s.tunncliffe@ucl.ac.uk ?

Country	ICASE Member Association and contact email	Early years organisation/venue with which you interact-name- age group- nature of interaction
Canada	CASTME (Commonwealth wide)	STEM in the Early Years (https://www.stemintheearlyyears.com/), ages 1.5 to 5 years, and website of 50+ learning experiences available in English, French, and Spanish, with German coming soon.
Bangladesh-Sreepur	CASTME (www.castme.online .)	Sreepur village. (Sreepurvillage.org) Mothers (adults 18- 50) talking Everyday Science. Helping the women residents (they for about 3 yrs. whilst rehabilitated and learn a skill e.g. sewing machining so they can earn a living when return to their community) that they are using everyday Science (STEM) in their actions and is all around and talk with children and others.



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Book | © 2022

Play and STEM Education in the Early Years

International Policies and Practices

S. D. Tunnicliffe and Teresa J. Kennedy, Editors

This edited book provides an overview of unstructured and structured play scenarios crucial to developing young children's awareness, interest, and ability to learn Science, Technology, Engineering and Mathematics (STEM) in informal and formal education environments. The key elements for developing future STEM capital, enabling children to use their intuitive critical thinking and problem-solving abilities, and promoting active citizenship and a scientifically literate workforce, begins in the early years as children learn through play, employing trial and error, and often investigating on their own.

Forty-seven STEM experts come together from 16 countries (Argentina, Australia, Belgium, Canada, England, Finland, Germany, Israel, Jamaica, Japan, Malta, Mauritius, Mexico, Russia, Sweden, and the USA) and describe educational policies and experiences related to young learners 3–4 years of age, as well as students attending formal-nursery school, early primary school, and the early years classes post 5 years of age.

The book is intended for parents seeking to provide STEM activities for their children at home and in playgroups, citizen scientists seeking guidance to provide children with quality educational activities, daycare practitioners providing educational structures for young children from birth to formal education, primary school teachers and preservice teachers seeking to teach preschool, kindergarten or children typically aged 5–8 years old in grades 1–3, as well as researchers and policy makers working in science didactics with small children.

For more information see <https://link.springer.com/book/10.1007/978-3-030-99830-1%20#affiliations>



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ICASE Spotlight: STEM Education in Pakistan

Dr. Sarfraz Aslam



Original Research

Identifying the Research and Trends in STEM Education in Pakistan: A Systematic Literature Review

SAGE Open
July-September 2022: 1–16
© The Author(s) 2022
DOI: 10.1177/21582440221118545
journals.sagepub.com/home/sgo
SAGE

Sarfraz Aslam¹, Atif Saleem², Teresa J. Kennedy³,
Tribhuvan Kumar⁴, Khalida Parveen⁵, Huma Akram⁶,
and BaoHui Zhang⁷

Abstract

Although STEM is an essential feature of 21st-century education and learning, there is a lack of awareness about it in Pakistan, especially at the K-12 and tertiary levels. Recently many initiatives have been launched across Pakistan to create more interest in STEM education. In order to assist in raising the level of STEM awareness in Pakistan, this study sought to examine the current state of research and identify recent contributions and gaps in the literature. A systematic literature review was conducted using 22 research papers from five renowned databases. Results produced limited research in this area, with the majority being descriptive and only four being interventional studies. Regrettably, no research explored the engineering component of STEM education. Trends indicate that STEM education research has experienced a downward trend in Pakistan. The observed decline may have occurred due to a lack of understanding among Pakistani researchers regarding the importance of STEM education. Additionally, we identified the current gaps in research on STEM education and subsequently provided recommendations for future research.

Citation: Aslam, S., Saleem, A., Kennedy, T. J., Kumar, T., Parveen, K., Akram, H., & Zhang, B. (2022). Identifying the Research and Trends in STEM Education in Pakistan: A Systematic Literature Review. *SAGE Open*. <https://doi.org/10.1177/21582440221118545>

This paper provides an overview of Research and Trends in STEM Education in Pakistan. STEM is an essential feature of 21st-century education and learning, there is a lack of awareness about it in Pakistan, especially at the K-12 and tertiary levels. Recently many initiatives have been launched across Pakistan to create more interest in STEM education. In order to assist in raising the level of STEM awareness in Pakistan, this study sought to examine the current state of research and identify recent contributions and gaps in the literature. Trends indicate that STEM education research has experienced a downward trend in Pakistan. The observed decline may have occurred due to a lack of understanding among Pakistani researchers regarding the importance of STEM education. Additionally, the study identified the current gaps in research on STEM education and subsequently provided recommendations for future research.

For more information see <https://doi.org/10.1177/21582440221118545>

Please send your information to: Dr. Sarfraz Aslam, ICASE Secretary, at miansarfraz@hotmail.com. We began this Spotlight series in July/August 2021. We look forward to receiving your information for inclusion in future Spotlights.



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Collaboration between JSSE and ICASE

Dr. Manabu Sumida, ICASE Asia Regional Representative

sumida.manabu.mm@ehime-u.ac.jp

The Japan Society for Science Education (JSSE) and the International Council of Associations for Science Education (ICASE) has been active in an academic collaboration since 2021.

Dr. Sue Dale Tunnicliffe, Dr. Teresa J. Kennedy, and Dr. Manabu Sumida delivered a special session on STEAM education for the early years with JSSE members including Dr. Asami Ohnuki and Dr. Erkki Lassila at the 46th annual conference of JSSE on September 15, 2021. Professor Ohnuki had proposed a research fund on the topic for the Japan Society for the Promotion of Science (JSPS); she won the grant and began the project this year.

The JSSE has been running six mini conferences hosted by its branches and special groups such as a young scholars' group. A new mini-conference was launched for all English presentations on October 2, 2021. The theme of the conference was "Science Education from International Perspectives: 1st Mini Conference," and Dr. Steven Sexton, Editor of Science Education International (the official journal of ICASE), gave a special lecture entitled, "Myths, Misconceptions, and Misunderstandings in Writing Research Articles." We encourage JSSE members to apply to present at the ICASE conference and to submit articles to the ICASE journal.

Another mini-conference was hosted by Ehime University on June 4, 2022. The theme was "STE (A) M Education in the Post/With COVID-19 Era" in a hyflex setting. Dr. Teresa J. Kennedy was invited as one of the three keynote speakers, and she delivered a speech entitled "Student Solutions in Response to the Pandemic: The COVID-19 Engineering Design Challenge."

All these collaborations were conducted virtually during the COVID-19 pandemic, but they were quite fruitful for both JSSE and ICASE. We hope to see each other in person and to share visions of what united, open, and transformational science education environments for facing challenging times can be.

一般社団法人
日本科学教育学会
Japan Society for Science Education



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News from Australia: *Dr. Leah Moore, Australia/Pacific Regional Representative* Leah.Moore@canberra.edu.au

Australasian Science Education Research Association (ASERA) recent and future (annual) meetings

The Australasian Science Education Research Association (ASERA) successfully held its 53rd Conference in Perth from 28th June to 1st July at Curtin University and was well attended with persons participating both on-line and face to face. We were pleased to welcome the President from NARST Gillian Roehrig and international participants from Germany, Canada, Philippines, United Arab Emirates, South Korea, Hong Kong, Taiwan, USA, Singapore, Denmark, Sweden, Norway, Spain, Japan, Thailand, and the UK. Further, our next conference, ASERA 54, is planned for Cairns in Queensland from June 27th to June 30th. Submissions from international participants are most welcome.

Smithsonian Science Education Centre (SSEC)

In June of 2021 the Smithsonian Science Education Centre (SSEC) formed the inaugural Advisory Committee for NESST, The Network for Emergent Socio-Scientific Thinking. Together this Advisory Committee designed a roadmap for a network made up of Advisors from a variety of backgrounds, geographic locations, disciplines, and years of experience, genders, and ages in order to form a group that represents the diversity necessary for STEM Education for Sustainable Development in the 21st Century and beyond. As this first Committee's term comes to a close, and some Advisors are rotating off, we have a few openings on the committee, and seek enthusiastic, committed professionals from all fields to fill these openings. Please feel free to share this opportunity with colleagues who may be interested.

The 2022-2023 Advisory Committee will work together to continue to build an emergent network based on the key areas of focus that were defined by the 2021-2022 Advisory Committee: Engaging Youth, Growing the Network, Scholarship & Research, Resources & Curricular Materials, and NESST as a Professional Learning Community. To carry out this work, we seek advisors from a variety of disciplines, backgrounds, geographic locations and ages who share a dedication to supporting young people to tackle the world's most pressing issues through the lens of STEM education. In addition to building on the existing work of NESST, the 2022-2023 Advisory Committee will specifically:

Identify and define expectations for network membership

Develop messaging and informational materials to support the growth of the network

Identify and take part in opportunities to share the work of NESST through academic and professional avenues

Commit to engaging their own local communities in the work of NESST

To learn more about the work of the current NESST Advisory Committee, please see the attached one-pager, visit our NESST and STEM4SD web pages or read this position paper. You may also contact Katherine Blanchard at BlanchardKP@si.edu or Alexa Mogck at MogckA@si.edu with question or to express interest in joining NESST.



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UPDATE ON 7TH ICASE WORLD CONFERENCE ON SCIENCE AND TECHNOLOGY EDUCATION DUBAI, UAE 27 – 30 MARCH 2023

Dr. Ben Akpan, Chair World Conferences, ben.b.akpan@gmail.com



Conference Theme: STEM Education Solutions to Complex Global Challenges

Conference Strands

- A. STEM Education Policy
 - A1. Public - Private partnerships in STEM education
 - A2. Curriculum development, evaluation, and assessment
 - A3. STEM education policy trends and reforms
 - A4. International comparative programs (PISA, TIMSS, ROSES, etc.)
- B. STEM Education Impact
 - B1. Innovation and entrepreneurship in STEM education
 - B2. Sustainability and environmental education
 - B3. Career awareness in STEM-related fields
- C. STEM Teaching Practices
 - C1. Teacher education and professional development
 - C2. STEM teachers and the role of professional associations in promoting 21st century skills
 - C3. Textbook's standards in STEM education
 - C4. Cultural, social and gender issues
 - C5. Digital technologies in STEM education
 - C6. Best STEM education practices
- D. STEM Education Pedagogy and Projects
 - D1. Collaboration between formal and non-formal STEM learning contexts
 - D2. STEM education funded projects (NSF, European Union, National Agencies, Erasmus Plus, etc.)
 - D3. Engineering education research and practice
- E. Others. We welcome creative topics that are relevant to the conference theme.

Register to Attend!

<https://www.buid.ac.ae/conferences/international-council-of-associations-for-science-education/registration/>

**Early bird before
October 31, 2022**

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Keynote speakers

Dr. BaoHui Zhang, Shaanxi Normal University, China

Dr. Hassan Hamid Tairab, The United Arab Emirates University, UAE

Dr. Khalid Al Marri, The British University in Dubai, Dubai, UAE

Dr. Fazal Malik, Amity University, Dubai

Dr. Sibel Erduran, ESERA President, University of Oxford, UK

Dr. Christiana Omoifo, University of Benin, Nigeria

Dr. Piet Kommers -UNESCO, Holland

Dr. Joseph Krjacik, Michigan State University, USA

Dennis Chisman Oration

Dr. Jack Holbrook, University of Tartu, Estonia Proposals

2000 - 3000-word proposals should be submitted on or before 31 October, 2022

Conference Fee

USD 180. =

Conference Webpage

For more information, please visit:

<https://www.buid.ac.ae/conferences/international-council-of-associations-for-science-education/>

Site Visit

The site visit took place on 13th and 14th June, 2022. Teresa Kennedy, Bulent Cavas and I represented ICASE. We met with the Vice Chancellor of the British University in Dubai, Professor Abdullah Al Shamsi, and the Provost of Amity University, Professor Fazel Malik. Those present at the meetings included Mohammed Ahmed, Samar Al Khafibi, Sheila Emquis, Khalael Ghouse, Dana Dannawi, Hind Abou Nasr Kassir, Anand Kumar, and Sufian Forawi. The team also inspected conference facilities at Amity University and some hotels. The auditorium and all the breakout rooms are located in one building.

The following hotels are recommended but participants are free to stay in any other hotel of their choice:

1. Premier Inn, Dubai Dragon Mart <https://mena.premierinn.com/en/hotel/dubai-dragon-mart>
2. Ibis Styles Dragon Mart Al Awir Road E44 Hatta Road, Dubai [ibis.com-accorhotels.com](https://www.ibis.com-accorhotels.com)
3. Conrad Dubai, Sheikh Zayed Road, Dubai <https://www.hilton.com/en/hotels/dxbcdci - conrad-dub ai/>

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In the course of the visit, the newly-established **Mathematics and Science Teachers Association (MSTA)** in the UAE was inaugurated by ICASE. Here is the address of the President of ICASE at the ceremony.

Address of the President of ICASE, Professor BaoHui Zhang, at the Inauguration of the Mathematics and Science Teachers Association in the UAE at the British University in Dubai on Monday 13th June, 2022

{Protocols}

It is my privilege to welcome all of you to this important ceremony marking the inauguration of the Mathematics and Science Teachers Association (MSTA) in the United Arab Emirates. I, on behalf of the International Council of Associations for Science Education (ICASE), thank you all for attending this important historic and educational event. I would like to express my appreciation to the Government of Dubai represented here by officials of the Ministry of Education and Dubai Tourism for the support provided for the formation of this fledgling association and for their support for science, technology, engineering and mathematics (STEM) education generally. We are most especially grateful to Dubai Tourism for supporting ICASE officials on the ongoing site visit as well as its support for the forthcoming ICASE World Conference in March next year. Special thanks are also due to the British University in Dubai and Amity University Dubai for co-hosting the conference. I also extend my gratitude to Professor Sufian Forawi, the founding

President of MSTa and Chair Local Organising Committee, and his colleagues for their effort in bringing the dream of establishing the MSTa to fruition.

The goal of ICASE is to enhance the quality of, and provide support for, STEM education for all; provide and support STEM education opportunities that enhance formal and non-formal educational experiences internationally; promote, facilitate and support collaboration between all members and their affiliated organizations throughout the world; and encourage and support the establishment and development of professional educational organizations focusing on STEM-related initiatives on a global scale.

As we all know, access to high-quality education is a fundamental right for all. So, in times of global vulnerability, there is an overarching need for sustainability, health, peace, poverty alleviation, gender equity, and biodiversity conservation to be at the forefront of thinking, planning, and actions related to STEM education. Indeed, all people including children and youth around the world must be provided with opportunities to develop 21st century skills: basic competencies that help the next generation to become future leaders during this era marked by rapid adoption of new technologies. These skills and competency areas include collaboration, communication, creativity, critical thinking, character, citizenship, computational thinking, among other important skills needed to succeed in today's workplace and the global economy. ICASE believes that our collective work as STEM educators is to prepare students for successful futures, and that we must place priority on providing students with opportunities to strengthen skills in STEM. Planning and implementing effective STEM education includes emphasizing the development of life competencies such as problem-solving and decision-making skills and working collaboratively in teams. Developing confident lifelong learners with skills and attitudes to thrive in complex societies is a high priority. In furtherance of this, relevant big ideas in STEM should be introduced to students at an early age in ways that are in tandem with their cognitive developmental levels. Similarly, health and safety are integral and essential to our collective future.

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In closing, I would like to express my most profound appreciation again to the Government of Dubai, the British University in Dubai that is hosting this ceremony, the staff of the local municipalities who facilitated the establishment of MSTA, and all other parties concerned for their kind cooperation. We hope MSTA will wisely use the platform of ICASE, with our nearly 50 years of history and experience working with the worldwide STEM community; and will continue fulfilling its mission and serve its members' needs. In my capacity as President of ICASE, and on behalf of the Executive Committee and the entire membership of ICASE, I am delighted to formally inaugurate the Mathematics and Science Teachers Association (MSTA) in the United Arab Emirates and hereby do welcome her into ICASE family on this 13th day of June 2022. Thank you all.



Picture 1: Auditorium, Amity University Dubai



Picture 2: Auditorium Amity University Dubai

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ICASE President delivered keynote speech and hold a workshop at the Science Education Branch of Chinese Society of Education (CNASE)

Prof /Dr Zhang BaoHui

The Science Education Branch of the Chinese Society of Education (CNASE) is currently the oldest and most influential organization of Chinese science education researchers, science teacher educators, and education researchers. The 2022 Academic Annual Conference of the Science Education Branch of the Chinese Society of Education was held in Changsha, a famous city of the Chu and Han Dynasties, from July 18 to 21, 2022. This academic conference was sponsored by the Science Education Branch of the Chinese Society of Education and organized by Changsha Normal University. A total of 246 people from 22 provinces (cities) participated in the offline conference in addition to hundreds of online participants by invitation.

Prof. ZHANG BaoHui, President of ICASE, and former dean of the School of Education, Shaanxi Normal University, was invited as one of the keynote speakers. He delivered a talk on "science teacher educators' career development opportunities, challenges, and coping strategies". This is a timely topic when China is trying to train more science teachers. Based on his domestic and international experience as a science teacher educator, Prof. Zhang proposed the core qualities that science teacher educators should possess and calls for attention to the current situation of anxiety and pre-service training of science teacher educators. He also discussed the strategies and paths for science teacher educators' growth (Fig. 1).



Fig. 1 Prof. Zhang is delivering his keynote speech



Fig. 2 Prof. Zhang is presiding a workshop on STEM education

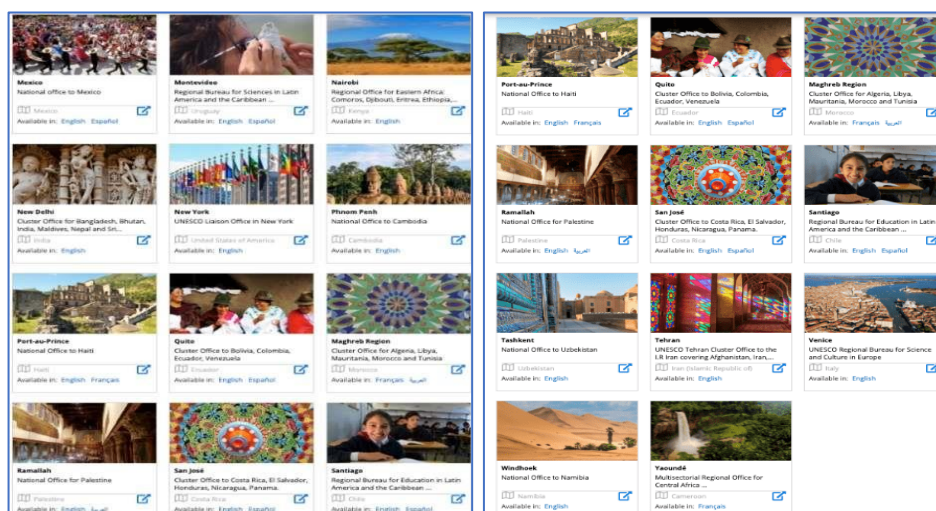
Prof. Zhang and his team also hosted a workshop on "Interdisciplinary and Integrated (STEM) Education: Theory and Practice". The workshop attracted 106 delegates to participate in the exchange and discussion. The workshop ran through field tests, discussion, and interpretation. The hosts and participants exchanged ideas about the misconceptions, challenges in practices, and coping strategies of interdisciplinary and Integrated (STEM) education in some areas in China. The content of the workshop was based on a MOOC "Fundamentals of Interdisciplinary and Integrated (STEM) Education" developed by Prof. Zhang's team (Fig. 2).

UNESCO FIELD OFFICES

Through its field offices, UNESCO develops strategies, programmes and activities in consultation with national authorities and other partners. UNESCO also operates a number of specialized institutes and centers. Check the list below to see the location of the UNESCO Field Offices.

For more information see:

https://en.unesco.org/fieldoffice?field_country_reference_target_id=All



For all UNESCO Offices by Region see: <http://www.unesco.org/new/bfc/all-offices/>



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Up Coming Events

Call for abstracts
To submit your abstract: seaact.act.edu.au



New Date
25-28 September 2022

<https://www.asta.edu.au/programs/events/conasta/>



ASE Annual Conference 2023 at Sheffield Hallam University

05/01/2023 to 07/01/2023

<https://www.ase.org.uk/events/ase-annual-conference-2023-sheffield-hallam-university>



National Conference on Science Education
Atlanta • March 22-25, 2023

<https://www.nsta.org/conferences-and-events>



Irish Science Teachers' Association
Coil-Oidí na hÉireann

ISTA Annual Conference Branch Rota
Date: March 31, 2023
The ISTA Annual Conference 2023 is planned to take place in TUS (Technological University) of...

<https://www.ista.ie/events/event/ista-conference-branch-rota/>

Send your announcements of upcoming events to Sarfraz ASLAM, ICASE Secretary, miansarfraz@hotmail.com

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ICASE Journal - Science Education International (SEI)

Steven Sexton – Editor

College of Education, University of Otago, Dunedin, New Zealand,

steven.sexton@otago.ac.nz

June, 2022

Since we have been using the Open Journal System (2017), Science Education International (SEI) journal has had 438 articles submitted. Of the which 50.5% have been published. Some statistics about our Journal: Authors from 45 different countries have submitted articles, of these 45 countries, 14 countries have had only one article submitted. The top eleven countries in order from most publications to least are: Turkey, USA, Ghana, Nigeria, Thailand, Philippines, Brazil, Greece, and Germany/Mexico/Malaysia (all three have had the same number of article). Earlier this year, SEI journal applied for and is now under evaluation for inclusion in SSCI. This process takes about 6 months. As editor, I would hope to hear a positive result in the next month or two.

The June issue published 13 articles. The third article of Volume 33, Issue 2 was from Nigeria's Oloyede Solomon Oyelekan and South Africa's Johnson Ereno Upahi report on how disadvantaged pupils' ability to learn in school is impeded by their family, social, or economic situations. Oyelekan and Upahi argued that education is the right of every human being and as such society must therefore be structured in a such way that ensures its access. They, unfortunately, note how some have their access to education impeded and this limits their potentials for successful living and having a fulfilled life. Oyelekan and Upahi reviewed the circumstances around Nigeria's nomadic and Almajiri children. After describing the living conditions of both nomadic and Almajiri children, Oyelekan and Upahi concluded their article with ten challenges facing science education of these two groups then offered recommendations, so these groups of disadvantaged children are not further denied basic education.

*SEI also welcomes new reviewers. If you are interested, please contact **Dr. /Prof. ZHANG BaoHui**, Chair, ICASE Research and Publications Standing Committee at icase2017bhzhang@163.com*

(Note: Prof. Zhang is curious about why he seldom receives information from ICASE member organizations or science education colleagues in general. ICASE regional representatives, executive committee members, and any representatives of our member organizations, please reply to Prof. Zhang's email so that he might have a better understanding of this situation; he hopes to serve ICASE members better. Thank you for your attention to this.)

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ICASE Executive Committee 2020-2023

ICASE membership spans the world led by an Executive Committee, with a Management Committee (President, President-Elect, Immediate Past President, Secretary, and Treasurer) responsible for the day-to-day administration and working closely with Appointments Co-opted to the Management Committee, Regional Representatives, and Chairs of Standing Committees. Presidential terms are noted below.

Management Committee (2020-2023)

	<p>President (2020-2023) Dr. ZHANG BaoHui Qujiang Scholar Professor, Shaanxi Normal University, Xi'an, China E-mail: icase2017bhzhang@163.com (Member Organization: National Association for Science Education, The Chinese Society of Education - CNAE) *Also Chair of Research and Publications Committee</p>		<p>Immediate Past- President Dr. Bulent Cavas Professor, Department of Science Education , Dokuz Eylul University Izmir, Turkey E-mail: bulentcavas@gmail.com *Also Chair of Web Communications Committee (Presidential Term: 2017-2020)</p>
	<p>President-Elect Dr. Declan Kennedy Senior Lecturer in Science Education Department of Education, University College Cork, Ireland E-mail: d.kennedy@ucc.ie (Member Organization – Irish Science Teachers Association – ISTA) *Also World Headquarters Coordinator</p>		<p>Treasurer Ms. Mary Mullaghy Eureka Secondary School, Kells, Co Meath Dublin, Ireland E-mail: mmullaghy@gmail.com (Member Organization: Irish Science Teachers Association -ISTA)</p>
	<p>Secretary Dr. Sarfraz Aslam Associate Professor, Yulin University, Yulin, China E-mail: miansarfraz@hotmail.com (Member Organization: National Association for Science Education, The Chinese Society of Education - CNAE) *Also ICASE Newsletter Editor http://www.icaseonline.net/news.html</p>		 International Council of Associations for Science Education ICASE Website http://www.icaseonline.net/index.html

Appointments Co-opted to Management Committee (2020-2023)

	<p>Editor, Science Education International The Official Journal of ICASE Dr. Steven Sexton Senior Lecturer, Science Education, College of Education, University of Otago Dunedin, New Zealand E-mail: steven.sexton@otago.ac.nz (Member Organization: New Zealand Association of Science Educators - NZASE) *Also Chair of Pre-secondary & Informal Science Education Committee</p>		<p>Representative to UNESCO Dr. Teresa Kennedy Professor, Bilingual STEM Education University of Texas at Tyler Tyler, Texas USA E-mail: tkennedy@uttyler.edu (Member Organization: National Science Teachers Association of the U.S. - NSTA) *Also Past President and North America Representative (Presidential Term: 2014-2017)</p>
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Regional Representatives (2020-2023)

	<p>Africa Regional Representative Mr. David Itamah Director of Education, Chair of the STAN Board of Trustees; Chair of the Board of Directors of The STAN Place Ltd, the official publishers of STAN books Abuja, Nigeria E-mail: daitamah@yahoo.com (Member Organization: Science Teachers Association of Nigeria - STAN)</p>		<p>Europe Regional Representative Dr. Manuel Filipe Pereira Cunha Martins Costa Professor, Departamento de Fisica, Universidade do Minho, Campus de Gualtar Braga, Portugal Email: mfcosta@fisica.uminho.pt (Member Organization: Hands-on Science Network – HSCI)</p>
	<p>Asia Regional Representative Dr. Manabu Sumida Professor, Faculty of Education, Ehime University Bunkyo-cho, Matsuyama City, Japan E-mail: msumida@ed.ehime-u.ac.jp (Member Organization: Japan Society for Science Education - JSSE)</p>		<p>Latin America Regional Representative Dr. Cesar Mora, Professor Titular Posgrado de Física Educativa, Centro de Investigación en Ciencia Aplicada Tecnología Avanzada Unidad Legaria del Instituto Politécnico Nacional (CICATA-IPN) Del, Miguel Hidalgo, CP, México D.F. E-mail: ceml36@gmail.com (Member Organization: Latin American Science Education Research Association - LASERA)</p>
	<p>Australia/Pacific Regional Representative Dr. Leah Moore, Associate Professor University of Canberra Canberra, Australia E-mail: Leah.Moore@canberra.edu.au (Member Organization: Australian Science Education Research Association - ASERA)</p>		<p>North America Regional Representative Dr. Teresa Kennedy Professor, Bilingual STEM Education University of Texas at Tyler Tyler, Texas USA E-mail: tkennedy@uttyler.edu (Member Organization: National Science Teachers Association of the U.S. - NSTA) *Also Past President and Representative to UNESCO (Presidential Term: 2014-2017)</p>

Chairs of Standing Committees

	<p>Early Years STEM Education Dr. Sue Dale Tunnicliffe Senior Academic, UCL Institute of Education Leadership, Commonwealth Association of Science, Technology and Mathematics Educators - CASTME, United Kingdom E-mail: lady.tunnicliffe@mac.com (Member Organizations: Commonwealth Association of Science, Technology and Mathematics Educators - CASTME and the Association for Science Education of the UK – ASE)</p>		<p>International Projects Dr. Jack Holbrook Visiting Professor, Centre of Science Education, University of Tartu Past President and Newsletter Editor Tartu, Estonia E-mail: jack@ut.ee (Member Organization: Hong Kong Association for Science and Mathematics Education - HKASME) *Also Past President (Presidential Term: 2008-2011)</p>
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Chairs of Standing Committees



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