

NEWSLETTER



INSTITUTION OF INCORPORATED ENGINEERS, SRI LANKA - UAE BRANCH

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September 2021

15th AGM of IIESL-UAE Branch



IIESL-UAE Branch will hold its 15th Annual General Meeting on Friday, 29th October 2021. Due to the current pandemic situation the AGM will be conducted online by Zoom platform. The voting for the election of the new Committee of Management will also be conducted online.

The Returning Officer has called Nominations for the Executive Committee of the UAE Branch for the session 2021-2022. Members of the UAE Branch can nominate members for the Excom before 14th October 2021.

[Click here](#) to download the Invitation for Nomination

[Click here](#) to download the Nomination Paper



Members of the IIESL-UAE

You are cordially invited to attend the

Annual General Meeting of the IIESL- UAE

Friday, 29 October 2021

5:00PM- 6:30PM

through Zoom Platform

Contact us:iiesluae@gmail.com

Online Processing of IIESL Membership

IIESL is currently processing applications for Membership of IIESL online, due to prevailing situation of Coronavirus pandemic.

Interested candidates can obtain details and application forms from [here](#).

Publication
Committee

- Eng. Sisira Walaliyadde – Past Chairman, IIESL UAE,
- Eng. Nishan Karunaratne – Treasurer, IIESL UAE

- Eng. Anura Jagodage – Chairman, IIESL UAE,



A Member Association of the
SRI LANKAN PROFESSIONALS ASSOCIATION
UNITED ARAB EMIRATES

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Fifteen Years of Professionalism

IIESL UAE Branch is celebrating its fifteenth-year anniversary in 2021. Celebrating a fifteen-year anniversary milestone is a significant achievement in itself. It's a celebration for all who have been a part of the Institution through all those years.

IIESL UAE Branch, over the past 15 years has taken part in the continuing professional development of the professionals in the UAE and the Gulf region. Among many, following actions taken by the IIESL-UAE are helping the members of the Branch and the professionals at large to upgrade their professional status.

- Donated over Rs 2,000,000.00 for the IIESL Headquarters Fund in 20027.
- By our Membership Drive, facilitated to conduct PREs in the UAE with the presence of senior members of IIESL, specially arrived from Sri Lanka to elect Members and Associate Members. (From 2005 onwards.) Increased the total membership (Members and Associate Members) to 142, by 2007.
- Extended the membership drive process to Oman and Qatar and arrangements were made to conduct PREs and elect members. -2007 onwards.
- Made arrangements with the guidance of the IIESL Council of Management for the IIESL members to obtain Memberships of C&G Institute of UK.
- Establishment of the PIM International Center in the UAE helping the professionals to obtain the post graduate degree of the PIM, Sri Lanka. PIM International Center in the UAE was the first Sri Lankan University on foreign soil. - 2007
- Facilitated the IT professionals to obtain Bachelor of Information Technology (BIT) external degree. - 2007
- By partnering with the IIESL facilitated the IIESL members to obtain membership of the City & Guilds Institute, London - 2007
- Facilitated the IIESL Members to obtain membership of the Chartered Institution of Civil Engineering Surveyors, UK (CICES) - 2009
- Drafted the Competency Based Membership Assessment process in the year 2008. IIESL passed a resolution and established the competency based professional assessment process. - 2009
- Conducted an Examiner Training session in the UAE (by senior Members of the IIESL) and appointed 12 Corporate Members of the UAE Branch as certified examiners.
- Initiated the process for establishing the "Sri Lankan Professionals Association (SLPA)" in the UAE with a few other professionals. Finally, the SLPA was formally established in 2018
- Contributed to the initiatives taken by the Sri Lankan Consulate and Sahana for helping Covid affected Sri Lankans in the UAE.

Please do join us in celebrating our fifteenth-year anniversary as we always ensure Professionalism Beyond Boundaries...

Engineering Council of Sri Lanka has published the following:

1. Notice to Members of IESL and IIESL not Registered for the year 2021

It has been noted that, some members of IESL or IIESL have not registered so far, with ECSL for the year 2021.

Please be informed that, according to the section 14(1) of Engineering Council Sri Lanka Act no. 4 of 2017, no engineering practitioner shall engage in the practice of engineering profession without being registered in ECSL.

2. Issuing Certificates of Registration

Electronic certificate has been issued to all Engineering Practitioners who have paid registration fees for the year 2020 and registered under the categories of Chartered Engineer, Associate Engineer, Affiliate Engineer, Incorporated Engineer and Engineering Diplomate. The soft copy of certificates have been sent to the individual Engineering Practitioner via email.

3. Circular issued by the ECSL.

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[\(Click Here\)](#)

ECSL will not issue printed certificates. Corporate Members and Associate Members of the IIESL-UAE Branch, if not obtained your ECSL registration yet, please apply for the registration to enable you to practice as engineering practitioners in Sri Lanka as defined under section 15 and 18 of the Engineering Council, Sri Lanka Act No 4 of 2017.

- [Download the Act No 4 of 2017](#)
- [How to Register](#)

43rd Annual General Meeting of the IIESL

43rd Annual General Meeting of the IIESL – Session 2020-2021 was held on 31st July 2021. In view of the current Covid Pandemic situation, the session was held online by Zoom platform. The election of the council members was held during the meeting session by voting online.

IIESL Council of Management elected for the Session 2021-2022.

IIESL Council 2021-2022



Eng. M. R. W. Jayawardhana – President

Eng. W. D. Fonseka - Immediate Past President
 Eng. K. M. S. B. Rekogama - Past President
 Eng. W. A. Upali Gunawardana - Past President
 Eng. (Mrs.) P. R. Jinadasa - President Elect
 Eng. Frankie Perera - Vice President
 Eng. D. Hettiarachchi - Vice President
 Eng. K. S. P. Nonis - Vice President
 Eng. J. E. L De Silva - Vice President
 Eng. M. P. Ananda Gunawardena - Vice President
 Eng. E. A. Upali Hemachandra - Hony. Secretary
 Eng. K. Prabhath C. Jayawardena - Hony. Treasurer
 Eng. Dr. (Mrs) Bhadranie Thoradeniya - Editor
 Eng. R. S. G. Punchihewa- Hony. Assistant Secretary
 Eng. Upali Jayasekara - Hony. Assistant Treasurer

Council Members

Eng. W. G. F. Jayasuriya
 Eng. Prof. W. A. Wimalaweera
 Eng. Upali A. Gunasekara
 Eng. B. Nalin P. Mendis
 Eng. T. S.P. Thalagala
 Eng. S. B. G. C. P. Sampath Bandara
 Eng. A. Kasthuriarachchi
 Eng. H. H. C. Piyadasa
 Eng. A. S. M. Silva
 Eng. A. A. Rupasinghe
 Eng. S. D. Meedeniya
 Eng. (Mrs) Harsha A. Mohottala
 Eng. H. K. Hettiarachchi
 Eng. (Mrs.) T. A. D. Priyanti Thambugala
 Eng. W. B. Damitha Abeykoon
 Eng. W. M. Sarath B. Walisundara
 Eng. D. Gamini Liyanage
 Eng. U. K. S. Hettige
 Eng. S. M. Thenuwani Lakmal De Silva
 Eng. M. Preemal C. Kumara
 Eng. K. M. I. P. Anuruddha Bandara
 Eng. (Ms.) L. V. Chathurani Gunathilaka
 Eng. M. M. U. P. Abhayagunawardane
 Eng. K. G. Indika Deshpriya
 Eng. V. H. Mahesh S. Babalagama
 Eng. K.A.S. Thilakaratne

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Sri Lanka Pavilion takes shape for Expo 2020 Dubai



Expo 2020 Dubai, one of the largest and most prestigious global events of its kind originally set to take place last year, is now rescheduled to be held for a period of six months starting 1 October until 31 March 2022.

The Expo, spanning over a 438-hectare area (1,083 acres) is portrayed to be a gathering place, where the world comes together to create a better tomorrow. The event will be enclosed by three large thematic districts of Opportunity, Mobility and Sustainability. Sri Lanka will be participating at a specially designed and dedicated pavilion in the 'Opportunity District' of the Expo Village in a 300 square meter space.

The pavilion with its water-based theme was designed by a team from the University of Moratuwa and has been recognized as one of the best designs at Expo 2020 Dubai resulting in the Sri Lankan pavilion being constructed on a complimentary basis by the Expo organizers.

The pavilion showcases the hydraulic civilization in a touristic perspective bringing out the three positioning pillars of Authenticity, Compactness and Diversity while taking visitors on a journey through history, culture, nature, people, and many facets of the destination through storytelling to inspire and showcase Sri Lanka to the world.

Silent display screens at the pavilion will feature the unique facets of the island in all its wonder and awe and Sri Lanka Tourism is in the process of developing the required video and digital content for the pavilion thereby creating digital content for Sri Lanka.

Sri Lanka is also to be represented at an auxiliary venue at the 'Souq', a market place which will function as a sales outlet for many local arts, crafts, and culture. This outlet will be managed by Laksala for the duration of the event. The Sri Lankan pavilion will additionally have a Tea Corner, which will be managed by the Sri Lankan Tea Board and a Retail Corner facilitated by the Export Development Board.

Sri Lanka Tourism has built a collision in presenting Sri Lanka strong and vibrant at Expo 2020 Dubai in partnership with the Sri Lanka Embassy in UAE and the Consulate in Dubai, Gem and Jewellery Authority, Export Development Board, Sri Lanka Tea Board, Laksala, Board of Investment, Port City, SriLankan Airlines, and the National Chamber of Exporters. Fun Time Events together with VFS Global supports as the Event Management Partners selected through the government tender process.

Key highlights from the Sri Lanka Pavilion will include a gem auction, a fashion show featuring traditional batik designs, a wedding show positioning Sri Lanka as a wedding and honeymoon destination, a cultural dance show, drum festival showcasing Sri Lanka's rich cultural heritage through dance and music and a Children's Story Telling session featuring Sybil Wettasinghe's 'Sun, Rain and Fox Wedding' portraying Sri Lanka's rich literature and culture.

Events and activations at the pavilion will include gem cutting, mask carving, traditional weaving to name a few. SriLankan Airlines will additionally organize a raffle draw with a social media engagement drive to boost Sri Lanka's digital presence at the Expo.

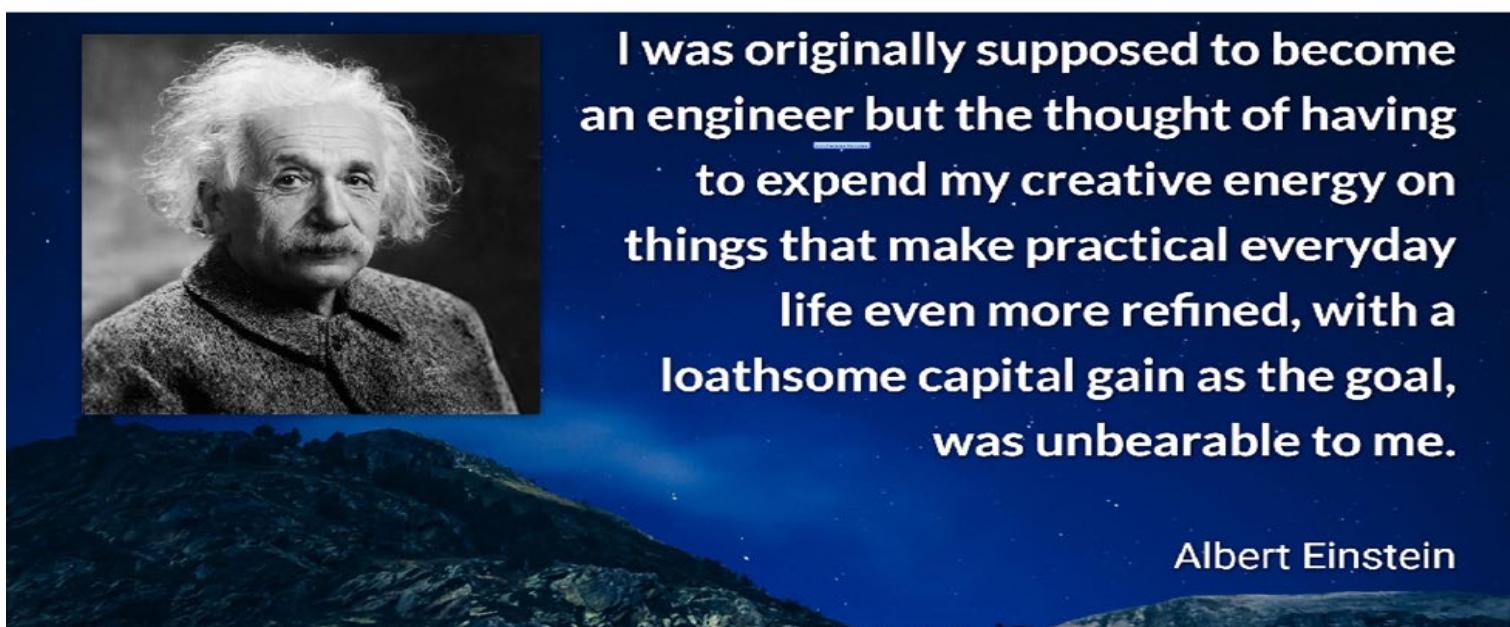
The Sri Lankan contingent will also host a Trade and Investor Forum under the leadership of BOI, Tea Tasting and Trade Forum under Tea Board and a Travel and Tourism Forum. These forums are expected to generate trade and investment opportunities for Sri Lanka and to create growth opportunities for the Sri Lankan industry.

Sri Lanka Tourism Chairperson Kimarli Fernando said: "Sri Lanka Tourism has had very little time and resources to prepare for Expo 2020 Dubai, however despite the challenges we have curated a spectacular pavilion and offering and are ready for Expo 2020 Dubai. Our unique pavilion will communicate to the world the multitude of experiences available for travelers to explore.

"We are in the process of developing some amazing digital content which will be showcased at the Expo. Most importantly we have partnered and built a collision with other line agencies to ensure we yield growth opportunities for Sri Lanka where the BOI will lead with the investment drive, the Tea Board will showcase our tea heritage and the Gem and Jewellery Authority will promote our world-famous sapphires."

Source:

<https://www.ft.lk/front-page/Sri-Lanka-Pavilion-takes-shape-for-Expo-2020-Dubai/44-721696>



Opening Ceremony - Expo 2020 Dubai



Expo 2020 Dubai has now been officially opened. On 30th September 2021, Dubai warmly greeted the world by way of Expo 2020 opening ceremony broadcasted live to 430 locations across the UAE.

The Crown Prince of Dubai, His Highness Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, officially announced the opening of the first World Expo in the Middle East in an opening ceremony enlightened by glittering light shows and lighting effects in Al Wasl Plaza; a futuristic dome-shaped enclosure serving as the grounds for the opening ceremony of Expo 2020 Dubai.



Sri Lankan community attended the opening ceremony of the Sri Lankan pavilion at Expo 2020 on 1st October 2021. Representatives from professional and social groups attended the ceremony with Hon Consul General of Sri Lanka.

Mr. Nalinga Hanadapangoda, Asst Treasurer of the IIESL- UAE Branch attended the opening ceremony of the Sri Lankan Pavilion representing the IIESL-UAE Branch.

IIESL UAE - Events and Webinar Log 2021

#	Date	Topic	Conducted by	Presenter	Venue
1	17/04/2021	Technical and Economical Challenges to Integrate more Renewable Energy to National Grid of Sri Lanka	IIESL-UAE	Dr. Tilak Siyambalapitiya	Webinar on Zoom
2	02/05/2021	The Monthly progress Report & Updated Programmes	CICES/IIESL-UAE/IQSSL	Mr. Gary Beamish and Mr. Mohamed Salah Mohamed	Webinar on Zoom
3	April/May 2021	APC Winter Session- Mock Interviews for RICS Candidates	IIESL-UAE		Zoom App
4	29/05/2021	Efficient Procurement Techniques (Selection by Two Stage Tendering and EPC Approach)	IIESL-UAE	Mr. Lokitha Karawita	Webinar on Zoom
5	5/7/2021	Dispute Management in Construction	CICES/IIESL-UAE/IQSSL	Eng. Dhammadika Gamage	Webinar on Zoom

IIESL UAE - Events and Webinar Log 2021 (Upcoming CPD Events)

6	TBA	Contractual Letter Writing	IIESL-UAE	Eng. Dhammadika Gamage	Webinar on Zoom
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Membership Development

IIESL-UAE Branch has launched a Membership Development Program to recruit new members to the Institution.

IIESL-UAE has done a survey and collected the information of potential members, working in the UAE and guiding them to obtain IIESL Memberships. IIESL-UAE has planned to do a presentation for the potential members.

Current members can direct anyone processing an engineering diploma and looking for obtaining IIESL memberships, to this presentation where the potential candidates will be briefed regarding the requirements and advice as to how they should proceed to apply for IIESL memberships:

Date and Time: TBA

Venue: through Zoom platform

For further details, please contact:

Eng. Anura Jagodage-055 7705168

Eng. Priyanga de Mel- 050 7169974 or

Email to: iiesluae@gmail.com

Selection of Sustainability Materials for Civil Works during Design Stage

By Ramanathan Arisanan

Abstract

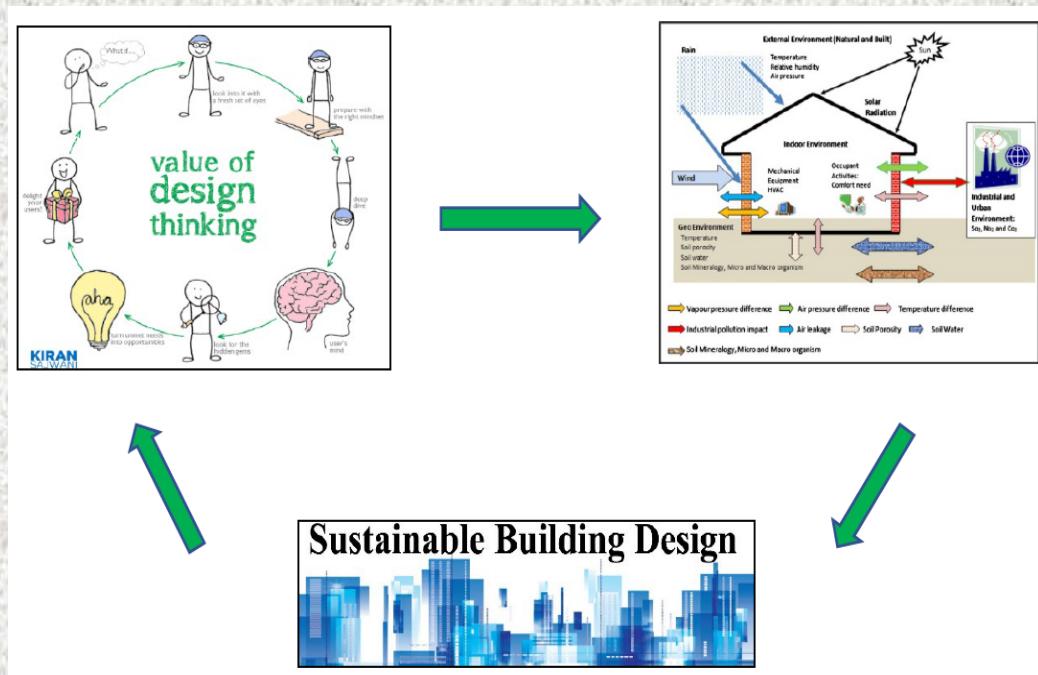
Sustainability has become a familiar subject in engineering practice. In this process, the critical area is achieving sustainability in front of the client with respect to cost and construction industry challenge. The article focuses on sustainability strategies that can be incorporated in practice and design process in selection of civil works for a building project.

Introduction

Sustainable development, which 'meets the needs of the present without compromising the ability of future generations to meet their own needs'. Most of the construction projects in the UAE, green buildings are designed to minimize their environmental footprint and, at the same time, improve the well-being of the persons who live, work and play in those buildings. The green building regulations are applied from design stage to selection of material in construction of the building. The selection of appropriate materials is very important for an environmentally friendly project.

Environmental

Sustainable buildings are structures that are built in an environmentally responsible manner by maximizing use of materials, minimizing use of resources and ensuring the health and well-being of occupants and the surrounding built environment both today and for generations to come. Indoor environmental quality to enhance the well-being of occupants, design should be used to lower emitting materials in construction.



Material Selection for Design Stage – Civil Works

✓ Smart Glass

In the winter months, bright sunlight streaming through the windows can be the best thing in the world. But in the summer, that same sunlight streaming in can be invasive, harsh, and uncomfortable — not to mention the increase in electricity bills from a heavy dependence on air conditioning. Smart Glass windows offer a solution to this problem. Smart glass (or smart windows) refers to glass or glazing whose light transmission properties change depending on how light or heat is applied. In general, the glass becomes translucent in the summer months to block certain wavelengths of the sun, and transparent in the winter to let in the warming rays. This translates to yearly cost savings in terms of both heating and cooling, as well as avoiding the cost and hassle of installing light screens or blinds. Smart glass can even reduce fabric fading, as it blocks up to 99% of harmful UV light.

✓ Atmosphere Purifying Paint By ECOS

ECOS Paints are not only no-VOC (volatile organic compounds) paints, free of that “new paint” odor (polyurethane) that can cause headaches, nausea, and respiratory issues, their Atmosphere Purifying Paint has advanced VOC-filtering technology which absorbs and neutralizes chemicals, pollutants, solvents, and VOCs for improved indoor air quality. This amazing paint contains a molecular sieve, designed to adsorb a targeted range of volatile organic compounds (VOCs) from the atmosphere. The sieve (a non-toxic, crystalline tube) is sized to allow small molecules such as nitrogen, or oxygen to pass unimpeded, while larger molecules (organic compounds) become trapped.

✓ Recycled Steel

Steel can be used for the framing process, in place of wood, increasing the durability of a structure against earthquakes and high winds. Steel is 100% recyclable and significantly reduces the ecological impact of new construction. Mining, heating and shaping products made from aluminum and steel requires a lot of energy, but properly and efficiently reusing or recycling them into new products, lowers the energy used, and makes the material more sustainable, the recycled metal is long-lasting and does not require frequent replacements. It does not burn or warp and is therefore perfect for roofing, building facades and structural support. Additionally, recycled steel is water- and pest-resistant.

✓ Insulated Concrete Forms

Insulated concrete forms contain two insulation layers with some space in between them. This space contains some arrangement for holding reinforcement bars, after placing reinforcement, concrete is poured into this space. They are light in weight, fire resistant, low dense and have good thermal and sound insulation properties.

✓ Structural Insulation Panels (SIPS)

Structural insulated panels (SIPs) are one of the most airtight, well-insulated building systems on the market today. Because of the tight seal, SIPs are great for eco-friendly building. An airtight requires less energy for heating and cooling and allows for better control over air quality. Some SIPs are FSC-Certified, ensuring that the wood used for the panels comes from sustainably-managed forests. There are many advantages to building your home with SIPs.

✓ Terrazzo

This is a mosaic style of flooring where small pieces of marble or granite are set in polished concrete or epoxy resin. When well maintained, terrazzo floors can last up to 40 years without losing their brilliance.

✓ Ravenwindow

Smart Glass transitioning technology is at the heart of Raven Window smart windows. The Raven Window thermochromics filter is applied to the inside surface of the exterior glass pane of a double pane window. An air chamber separates the filter from both the interior glass pane and the standard Low-E coating. It's an unbeatable combination to keep buildings energy efficient year round.

✓ **Plant-based Polyurethane Rigid Foam**

Rigid foam has for long been used as insulation material in building. It was first used after a top manufacturer of surfboard material, was [fined by the EPA](#), and subsequently put out of business, for using a toxic material. The new surfboard material was made from plant-based polyurethane rigid foam, which came from bamboo, kelp and hemp, rejuvenating the surfboard industry. It is now in use in the manufacturing process including that of turbine blades and furniture. The material is rigid and relatively immovable, meaning it can be used for insulation. Additionally, it offers protection against mould and pests. It is also heat resistant, protects against mould and pests, and can be perfect as sound insulation.

✓ **Timbercrete**

This is an interesting building material and is made from a mix of sawdust and concrete. It is lighter than concrete and reduces transportation emissions. The sawdust also reuses a waste product and replaces some of the energy-intensive components of traditional concrete. Timber concrete could also be formed into traditional shapes like pavers, bricks and blocks

✓ **Fiber Cement**

Fiber cement boards are made of cement, sand and wood fibers. For exterior siding, fiber cement boards are good choice because of their cheap price,

✓ **HempCrete**

It is a concrete-like material created from the woody inner fibres of the hemp plant. The fibres are bound with lime to create concrete-like shapes that are strong and light. Hemp concrete blocks are lightweight, dramatically reducing the energy used to transport the blocks. Hempcrete is sturdy, has good thermal and acoustic insulation qualities and is fire resistant. Additionally, its biggest sustainable property is that it is CO₂ negative, meaning it absorbs more CO₂ than it emits. Hemp itself is a fast-growing and renewable resource.

✓ **Ferrock**

It is a relatively new material and it uses recycled materials such as steel dust from the steel industry, or ferrous rock leftover from industrial processes, usually sent to the landfill. It creates a concrete-like building material, stronger than the concrete itself. It traps and absorbs carbon dioxide as part of its drying and hardening process. This makes ferrock carbon neutral and a lot less CO₂ intensive as compared to traditional concrete. It is a viable alternative to cement and can be mixed and poured to form driveways, staircases, pathways, and more structures. Ferrock is more resilient to weather than concrete.

✓ **Slate Roofing**

Slate is naturally formed rock which is used to make tiles. Slate tiles have high durability and they are used as roofing materials. Slate roofing is preferred when it is locally or cheaply available.

✓ **Composites**

Roof panels made of composite materials such as foam or cellulose layer sandwiched between two metal sheets or two plastic sheets also come under green building materials. They are light in weight, inexpensive and provide good insulation for the structure and save energy.

✓ **Fiberglass / Natural Fiber Floor**

Fiberglass is also used for insulation purposes in the form of fiberglass batts. Even though it contains some toxic binding agents, because of its super insulation property at low cost it can be considered as a green building material. Naturally occurring materials like bamboo, wool and cotton fiber carpets, cork etc. can be used for flooring purposes.

Conclusions

Building construction is of very importance to economic and social growth. It therefore makes sense to ensure that building is designed to high levels of sustainability to prevent deficiencies in their durability or strength necessitating repair or replacement that would lead to considerable disruption for their users. The material selection is every important for sustainable construction. A sustainable building is a structure that has been built quickly, but efficiently to last a long time, with optimal use of resources as well as minimal disruption of the surrounding environment and minimal wasted materials. Building designers around the world are seeking high performance materials that can be used in the construction of building and which offer extended service life, lower energy requirements and simplified deconstruction at end-of-life.

REFERENCES

Kosmač2, N. B. (n.d.). *Sustainable Duplex Stainless Steel Bridges*. Ascot, United Kingdom: The Steel Construction Institute, .

London, M. O. (July , 2013). *sustainable design and construction* . London : Greater London Authority .

Machado A. 1937. *En Antología poética*. España: Planeta; 1989.

Municipality, G. O. (2016). *Al Safat Dubai Green Building Evaluation System*. Dubai: Government Of Dubai.

Smiciklas, J. (2012). *Go to green Sustainable buildings*. the International Telecommunication Union (ITU),.

UK Green Building Council: Pinpoint: [Data base of sustainability resources, training and tools](#).

V.M. Malholtra ,*Sustainable developement and concrete technology* ,Ncrete International, 24 (7) (2002), p. 22



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Member's Achievements

Name of the Member	Achievements	Awarding Body, Institution or University	Year
Eng. Dhammadika Gamage	President's Medal award for the "Outstanding Contribution to the Institution, Profession and to the Construction Industry at large".	Chartered Institution of Civil Engineering Surveyors, UK.	September 2021
Eng. Kingsley Devendra	MSc Construction Project Management.	University of Birmingham City.	June 2021

Covid-19 Vs development of virtual education in Sri Lanka: A review

By Eng. Sunil Jayantha Hettiarachchi

“Covid-19”, the pandemic, which turned the planet upside down. Hope everybody will agree with above statement. No doubt, it is a challenging time for everybody to think differently without any time lose. Table 1 is an example of innovative and critical thinking of contemporary scholars. For instant, mankind took 3296 years to develop a vaccine for smallpox. In contrast modern scientist around the globe produced vaccines to control the present pandemic within four months (Table 1).

Negative effects of the present calamity are unquantifiable, however there are many positive developments in human life under the situation. Many professions which were considered unsuited for remote working are now adopting to the situation through goodwill and situation. For example, law enforcements are acclimating to do hearing through teleconferencing. Virtual education is fast developing. Employers are discovering that prioritizing outputs rather than inputs, whereas personnel are working from home or anywhere is not important if they get the job done. Moreover, reduced pollution, noise levels, less use of fossil fuel are a few indirect benefits for the eco-system among many. Delhi residents had the opportunity to witness a clear sky without smog under their horizon after many decades.

Table 1. Timeline to develop treatment for contagious diseases throughout the history. Reference: Treatment of contagious diseases in perspective, (2020)

Contagious disease	First evidence of disease	Vaccine/ drug developed	Duration
			years months
Smallpox	1500 BC	1796 AD	3296
Polio	1400 BC	1948 AD	3348
Cholera	460 BC	1885 AD	2345
Measles	500 AD	1971 AD	1471
Rubella	1619 AD	1971 AD	352
HIV/AIDS	1980 AD	1995 AD	15
Ebola	2014 AD	2019 AD	5
	2019 -	2020 -	
Covid - 19	December	March	4

Today, online learning, distance learning or virtual education are common among everybody, albeit pre-Covid era these are limited to a few countries in developed and western world. As usual some cyber based outfits used these technologies to provide fake higher education certificates, thus degrading the value of genuine online education among general public. Blackboard-collaborate, Moodle, Haplo, Webinar-jam are a few among many online platforms popular with universities and higher education institutes worldwide. The temporary closure of educational institutions during the pandemic has abruptly transform the global education landscape in favor of online/distance education. This radical shift saw a surge in the use of numerous virtual platforms, live video communication, massive open online courses (MOOCs) and tools for creating learning content. Some platforms like Zoom, MS Teams, Google Classroom have offered free access for basic services, especially under this situation, which educational institutions used extensively, particularly among academic staff and students with digital experience.

For example, 90.3% universities in Japan were providing distance learning as of 1st June 2020, in upper – middle income countries 88% youth continue to manage learning, including 54% by video conferencing/ lecturing and 44% by online testing (ADB Briefs – Sept. 2020). In this context Sri Lanka did impressive transition to par with developed countries like Japan to have \approx 90% of students have been able to access tertiary online education compared to < 10% of pre Covid era utilization (UNESCO, Institute of Statistics, Sri Lanka – Aug. 2020). The achievement was possible, because of the free internet access provided by all internet providers in Sri Lanka from March to August 2020. Arranged through the collaboration between Telecommunication Regulatory Commission of Sri Lanka (TRCSL), University Grant Commission (UGC) and the Lanka Education and Research Network (LEARN) to provide free access for university webservers for learning management systems and remote learning facilities under the initiative from political leadership of Sri Lanka (ADB Briefs – Sept. 2020).

Besides, elementary, and secondary education followed the suit, initially by creating WhatsApp groups and sending textbook activities, notes, exercises etc., via WhatsApp images to their pupils by class teachers using smart phones, with their own broadband access. Some academics volunteered to upgrade the digital skills of their colleagues to face the situation and to conduct virtual classes through digital platforms available with. However, in Sri Lanka, computer based first smart class was started on 7th Jan. 2017, at “Sri Jayewardenepura Maha Vidyalaya”, Kotte (ft.lk – 8th Feb. 2019). Nevertheless, there were many hurdles to overcome and are still remaining. For example, poor connectivity and unstable internet connections specifically in rural areas, lack of smart devices (Figure 1), household income and computer literacy, digital skills or knowledge of virtual systems are fundamental, in-addition to altering curriculums, assessments, and pedagogy to suit virtual or blended education etc. Sri Lankans are buoyant with highest literacy rate in South Asia, albeit with poor computer and digital literacy compared to neighboring countries. Academics of tertiary education are more digital and computer literate than secondary and elementary teaching staff. In Sri Lanka, computer literacy and digital literacy in 1st six months of 2019 was 30.1% and 44.3%, which rose to 32.3% and 50.1% by end of 2020 respectively (statistics.gov.lk – 2020), which indicates the adaptability of island nation according to the situation.

Moreover, during a videoconference held in Colombo recently, organized by the Institution of Engineers Sri Lanka (IESL), prof. Kapila Perera, the secretary to the department of education, revealed their progress and future plans to develop virtual education in Sri Lanka. Including, construction of internet signal booster towers in rural areas, new 2000 smart centers around the country, specifically in remote areas where many children without smart devices, and twenty fulltime tv channels dedicated to education in all three languages. Telecommunication giants SLTMOBITEL, DIALOGUE are the fundamental donors of above projects. In-addition, department of education create many websites like gurugedera.lk, e-thaksalawa to access curriculums, teacher's guides, textbooks, learning guides, activities, pass papers, etc., for all grades (grade 1 – 13) and education channels like “DP Education” through You-tube by private benefactors with free access to enhance the situation. Also, regular tv channels dedicate some time in between for educational programs, whereas national telecaster “Rupavahini” dedicated one channel with extended telecast time for educational programs.



Figure 1. Hurdles for virtual education in Sri Lanka, a) children share a smartphone to receive online lessons, b) poor accessibility and unstable internet. Reference: aljazeera.com (2021)

Nevertheless, a survey by Southeastern University of Sri Lanka observed that < 50% students prefer online education while 19.6% favored conventional in-classroom learning (Nafrees, ACM., et al., 2020). Perhaps, following facts need to be considered to enhance online education such as, loss of peer and social interaction and extra-curricular activities, digital skills of students and teachers, teacher student interactions, Access to distance learning programs, respect for student data privacy, teaching new lessons and enhancing previous knowledge and examinations and assessments.

Examinations and assessments are the most crucial part, which determines the student's education levels for advancement to a new level or certification/ convocation, where traditional closed book examinations are not possible. Alternatives are open book or take-home examinations, student portfolios, online/timed quizzes, online presentations, debates, viva, continuous assessments, mini projects with presentations are a few among many recommended by the UGC.

Above all are a brief review on how Sri Lanka adapted to virtual education because of Covid-19 pandemic. With this experience, educational professionals are thinking of blending approach for post Covid-19 education, combination of online distance learning with classroom education. Consider accessing pre recorded lessons at student's will with their free time and doing subject activities, exercises or tutorials at school classroom with respective teachers rather than attending lessons at school and doing homework without teachers' guidance when student is in need of an assistant. New concept, different thinking isn't it. Can we accept the change?

References:

1. *Hayashi, R., et al., (2020), Online learning in Sri Lankas higher education institutions during Covid-19 pandemic. ADB Briefs – 151.*
2. *Uis.unesco.org (2020), UNESCO Institute of Statistics, Sri Lanka*
3. *Ft.lk (2019) Sri Lanka launches first grade-wide smart classroom*
4. *Statistics.gov.lk, (2020), Computer literacy statistics – 2020 9annual). Department of Census and Statistics, SRI LANKA.*
5. *Nafrees, ACM., et al., (2020), Awareness of online learning of undergraduates during Covid-19 with special reference to Southeastern University if Sri Lanka. Journal of Physics: Conference series – 1712012010.*
6. *Lucas, G., (2020), Covid-19 pandemic and school education. Sri Lanka Journal of Child Health, Vol. 49(3), pp 207 – 209.*
7. *Priyadarshani, HDC., Jesuiya, D., (2021), Teacher's perception on online teaching method during Covid-19: With reference to school level teachers in faculty of education, The Open University of Sri Lanka. International Journal of Education, Vol. 9(2), pp 132-140.*
8. *UGC (2020), Guidelines for conducting alternative assessments in Universities and HEL. University Grant Commission.*



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How to Conduct Effective Meetings

By Eng. Shantha Senarath

Preamble

Running an effective business meeting can help your organization produce results and meet important goals. To make sure you have an effective meeting, here are some tips.

Every business, whether it has 2 employees or 2,000, has meetings as a regular part of getting things done. Although employees can communicate with one another in an organization in many different ways, business meetings — if they are conducted the right way — can be incredibly effective and efficient.

Meetings are not only one of the most important ways for employees or members of the organization to communicate within organizations, but they're also the way that teams get their work done. Although individual team members work on tasks outside of meetings, team meetings give members the opportunity to come together to determine the team's goals, its plans for achieving its goals, and who will do what — and *when*.

Take a close look at what makes meetings productive and find out how to conduct better business meetings.



The good news (and the bad) about meetings

We've all experienced more than our share of both good and bad meetings. What makes some meetings terrific, while others are simply the pits?

Employees benefit in several ways when a meeting is well run. Here's the good news about business meetings that fall into this category:

- Meetings are empowering.
- Meetings are a great way to communicate.
- Meetings develop work skills and leadership.
- Meetings are morale boosting.

Unfortunately, meetings are prone to fall into nonproductive pitfalls. Here's the negative side of meetings:

- Meetings may not have focus.
- Companies have too many meetings.
- Attendees may be unprepared.
- Most meeting time is wasted.

Although this bad news may seem bleak, there is hope. For each of these problems, and for the many other kinds of problems that often plague business meetings, solutions are available. You simply need to be open to changing the way that meetings are conducted in your organization. You may even need to take on a leadership role, if necessary, to make your meetings work better.

Purpose

- Identify the purpose and desired outcomes of the meeting.
- Determine if the meeting is necessary or if the issues can be addressed outside of a meeting.
- Should only use meetings for brainstorming, delivering information or gathering information.

People

- Identify and invite only the necessary and appropriate people for the meeting.
- Make sure all attendees can contribute.
- Communicate the meeting's purpose and desired outcomes to all attendees.
- Schedule guests who don't need to be at the entire meeting, which can be an incentive (by way of getting their inputs) to stay within the meeting's time limits.

Preparation

- Organize meeting venue, if it is a physical meeting.
- Provide the agenda and any other supporting documentation (e.g. reports, handouts and spreadsheets) to the attendees (hard copies or soft copies) at least 24 hours prior to the meeting time.
- Ensure the comfort, quietness and set-up of the space before the meeting.
- Provide water or other refreshments when possible.
- If the meeting is a virtual meeting, check the availability of all necessary equipment and data facilities with the participants. Send the meeting LINK well in advance to all participants electronically. Host of the meeting should be ready with the documents to be shared on line. If any participant needs to share any document on line on his own, he or she should be provided with co-hosting facilities.

Agenda

- Include items to be discussed, and then for each item specify the person leading the discussion, the desired outcome, and the estimated time.
- Provide meeting evaluation time and documentation (if applicable).
- Limit number of items to a reasonable amount for the meeting's timeframe
- Be realistic about the timeframe for each item.
- Schedule breaks periodically for longer meetings.

Meeting Leader

- Designate a meeting leader who understands meeting principles, is familiar with the agenda and is a skilled facilitator.
- If any new item is to be included in the agenda it should be done at the beginning of the meeting with the consent of the majority.
- Rotate facilitators for regularly scheduled meetings.
- Open meeting with setting or reviewing ground rules and reviewing the agenda, making changes when appropriate.
- Clarify roles within the group.
- Maintain focus and keep meeting moving at comfortable pace.

Meeting Leader (Cont,d)

- Clarify roles within the group.
- Maintain focus and keep meeting moving at comfortable pace.
- Cover one item at a time.
- Encourage the meeting participants to add feedback and input.
 - Ask questions and let people at the meeting volunteer answers. Do not force participation, but gently encourage them to give input. If 1-person comments, guide the others by saying something like, "Well done. Does anyone else have something to contribute," or "Let's hear a suggestion from someone else."
 - Do not call upon those that rarely speak as this may make them feel uncomfortable. Encourage them indirectly by saying, "I value the opinion of everyone here. Does anyone else want to add something?" and glance at the person you want to speak up. He may be encouraged to share his thoughts, and if he isn't, then he hasn't been embarrassed from being called upon.⁶
- Summarize discussion and recommendations at the end of each logical section.
- Make a note of any follow-up actions that can be resolved outside of the meeting and move on to next point.
- Manage discussion and encourage participation, even explicitly inviting everyone to participate.
- Use parking lot list for issues or questions that need to be dealt with outside of the meeting and review at end of meeting.
- Review issues discussed at the meeting and identify each action step with those responsible for the step and the timeframe.
- Solicit agenda items for the next meeting.
- Review time and place for next meeting, if applicable.
- Lead evaluation discussion or collect written evaluations.
- Thank the attendees at the end of the meeting and announce the date of the next meeting.

Time

- Designate a timekeeper who will work with the meeting leader to keep the pace.
- Start and end on time, regardless of late attendees.
- Periodically check the time estimates for each item to see how close they were to the time actually spent.
- Allow flexibility in the schedule when the need arises.

Ground Rules

- Request that all cell phones be turned to silent or vibrate.
- Establish a policy disallowing electronic communications during the meeting.
- If it is a virtual meeting, request the participants to identify themselves through the chat box for purpose of taking attendance and keep their mics muted when not speaking to avoid any disturbances. If any participant needs to express any view he/she should indicate that by using the RAISE HAND facility.

Ground Rules (Cont'd)

- Start and stop on time.
- Determine that each participant's opinion should be respected.
- Encourage participation and openness.
- Ask questions for clarity.
- Don't interrupt.
- Be careful about tangents – stay focused.
- Invite and give meaningful feedback.
- Honor commitments.
- Be present.
- Talk about difficult topics within the team at the table.
- Give each other the benefit of the doubt.
- If there is a debate on any item and there is a division try to convince everybody to accept the item that the majority has agreed upon. If it does not work, you may have an election, which should be the last option.

Minutes

- Designate a minute-taker.
- If available, arrange to record the meeting proceedings using an electronic recorder to enable the minute-taker to produce a more accurate report. Also, this would facilitate the participants to verify any missing points in the minutes.
- Make detailed minutes when the record is important and simple lists of decisions made and actions to be taken (with responsible person identified) when the exact record is not as important.
- Capture key points for each item, highlight anything that will be deferred until a future meeting.
- Include timeframes for action steps.
- The items that could not be discussed due to time constraints should be taken up at a special meeting later.
- Include parking lot issues with follow up information.

Evaluation

- Have each attendee evaluate the meeting, using a round-robin, written, or open discussion approach.
- Ask questions such as "what can we do better next time?" and "what parts of the meeting worked well?"

Follow Up

- Return readable or typed minutes to attendees within 24 hours if possible (same day is even better). This would facilitate the attendees, who have been assigned to attend to any matter, to commence their work immediately.
- Be consistent with meeting habits.

Summary

Meetings can be a useful communication tool. Planning will help a meeting to accomplish more in less time. Everyone will not always agree on the best way difficulties should be solved, but friendly disagreements about solutions can be beneficial. The meeting will be a waste of time, however, unless concrete action plans are made to solve problems. Specific dates for goal accomplishments can be set and followed up later.



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When a frustrated civil-engineer,



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