

Position Paper for the United Nations Educational, Scientific and Cultural Organization

The World Federation of Engineering Organizations (WFEO) is honoured to work in the United Nations Educational, Scientific and Cultural Organization (UNESCO). Recent events have shown that the implication of the International Community is essential in some regions of the world. Vital topics, such as Corruption and its Effects on Education, Preservation of World Heritage Sites, and Supporting and Accomplishing Education 2030, should be debated thoroughly in order to state long-term solutions. The WFEO deplores the state of education in many Member States and is eager to remediate the situation by undertaking concrete measures. Protecting humanity's most precious monuments is also a topic that should be treated with great attention.

I. Governance and its Effects on Education

The World Federation of Engineering Organizations strongly believes that achieving effective governance will help provide quality education in many developing countries. The fourth UN Sustainable Development Goal (SDG) aims to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” (UN, 2015). However, a study conducted by UNESCO in 2013 has shown that 115 million children and adolescents cannot read or write a simple sentence (UNESCO Background Guide, 2016). This constitutes a major obstacle to access a higher quality education, which is essential to open perspectives for all. Being an engineer is one great perspective that can be made accessible to everyone by focusing on improvement in the education field. This is why WFEO supports the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and had created the Committee on Women in Engineering (WIE) to work on that topic. Corruption is also an alarming factor that hinders achieving high quality education. Studies conducted by the WFEO have shown that, each year, 10% of total budget invested in the construction of infrastructures is lost to corruption (WFEO, 2016). Good infrastructure is key in order to facilitate access to quality education for everyone. As a consequence, concrete measures must be taken in order to provide a corruption-free environment, in the hopes of achieving equal education everywhere in the world. By establishing several initiatives like the Global Anti-Corruption Education & Training Project (ACET), the Global Infrastructure Anti-Corruption Centre (GIACC), and the UK Anti-Corruption Forum, the WFEO has demonstrated its dedicated implication in this field. Indeed, one of the main points of the mission of the NGO is to provide “the collective wisdom and leadership of the profession to assist national agencies choose appropriate policy options that address the most critical issues affecting countries of the world” (WFEO, 2016). By cooperating with the United Nations Development Programme (UNDP) and funding agencies, the WFEO has been able to provide two grants to Engineers without Borders, one of \$50,000 USD and another of \$15,000. This NGO has therefore been able to deliver twelve technical events, including six workshops. Training is a key step in order to eliminate corruption in this field. The Ministry of Foreign Affairs of the Netherlands, working hand in hand with the WFEO, also allowed \$50,000 USD to train “nascent civil organizations in Tunisia on corruption and ethics” (WFEO, 2016). Collaboration with World Justice Project (WJP) and with International Organization for Standardisation (ISO) has also proven great results. The WFEO Anti-Corruption Standing Committee (CAC) contributed to the WJO Rule of Law Index, participated in the WJP World Forum in The Hague in July 2013 and hosted the WJP workshop on Rule of Law and corruption held in Tunis in June 2012. Furthermore, the WFEO CAC possesses an observer status in a Project Committee in the ISO since its first meeting in 2013 and the Chairman of this Committee is Neill Stansbury, a member of the WFEO CAC. This Committee has been mandated to establish an anti-bribery standard. The WFEO strongly supports the new ISO standard, and passed a resolution for the creation of this standard at its meeting in Geneva in September 2011. Under those circumstances, the WFEO firmly moves to engage collective actions against this major problem. Firstly, WFEO urges Member States to generalize training workshops, since they benefit all members of civil society, especially engineers working in public and private sectors (WFEO, 2016). Secondly, the WFEO invites all Member States to provide financial and technical support for the organization of events that will bring awareness among populations and professionals on topics such as transparency, business ethics and sustainability. Finally, since engineers are the best placed to provide advice and solutions on the lack of transparency in the engineering field (education and infrastructures projects), Member States shall accord more freedom of expression on this matter. The International Community must let them lead global efforts to address an effective response to corruption in education and infrastructures.

II. Preservation of World Heritage Sites

The WFEO firmly stands for the protection, the identification and the preservation of World Heritage Sites. The mission of the NGO seeks to provide the wisdom and the leadership necessary to help national agencies and make “appropriate policy options that address the most critical issues” (WFEO, 2016). The SDG 11 also states in its fourth clause to “strengthen efforts to protect and safeguard the world’s cultural and natural heritage”. This is why the WFEO supports the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict and its two (1954 and 1999) Protocols (Hague Convention 1954). The implementation of the Committee on Disaster Risk Management (CDRM) demonstrate WFEO’s implication in this field. This Committee has been helpful in preventing damages caused to World Heritage Sites by natural hazards or manmade incidents (climate change or war). This Committee deals with all steps of disaster risk management, from preparedness programs to disaster response, including also disaster damage assessment, reconstruction, and rehabilitation. It also states the risk level and provides advice on measures to be taken by concerned Member States. As an illustration of that, publication of advisory documents, policy papers, guidelines, reports, and booklets provide concrete measures that relate to all implied fields; economy, social activities and environment. Indeed, it is very important to keep in mind that, above everything, human lives are also implied in the equation. Disasters can affect them and the environment can be heavily impacted too. In addition, the CDRM also coordinates international efforts, conferences and workshops on disaster risk management. The WFEO expects the International Community to take a closer look into this problem under a new perspective. Firstly, Member States must consider the advice given by the CDRM, because engineers have proved possessing the wisdom and leadership to provide knowledge related to innovative approaches to disaster damage reduction well as useful practices and lessons to promote sustainable development in this area (WFEO, 2016). Secondly, WFEO firmly moves to conduct conferences, events and workshops about this issue all around the world. The WFEO aims “to exchange, share, and transfer knowledge, technology, and expertise in order to reduce disaster risks.” It also pursues researches and investigations in order to come up with the best practices and easy implementation steps catered to every Member State (WFEO, 2016). Access to this crucial information about technology implementation steps must be given to the largest number of people. Finally, the opportunity to improve the societies and ways of living in devastated regions of the world should be seized by the International Community and determination on this topic should also be achieved. Measures on the ground shall be taken by UN. For example, UN must provide adequate accompaniment to Member States in democratic transition to ensure the good care and protection of World Heritage Sites during tumultuous times like that.

III. Supporting and Accomplishing Education 2030

The WFEO clearly believes that education is the most powerful tool to develop the potential of each individual in order to achieve a creative and innovative society. The UN also shares this point of view. In fact, article 26 of the Universal Declaration of Human Rights (UNDHR) states that “Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit” (UN, 1948). SDG 4 also urges Member States to take actions in this field. It sets a goal to “ensure inclusive and equitable education and promote lifelong learning opportunities for all” (UN, 2015). The Incheon Declaration (Education 2030) also advises that every country should increase the budget allocated to education. Since one of the main goals of the WFEO is to ensure the correct implementation of technology in order to foster socio-economic security and sustainable development and to reduce poverty among all countries of the world (WFEO, 2016), the NGO has implemented the Committee on Education in Engineering (CEIE) to review and improve the training given all around the world to future and current engineers. The goal of this Committee is to achieve excellence in engineering education, so that the profession may attain higher levels in every field related: research, development, mobility, sustainability and globalization of the engineering profession around the world. Many steps have been taken in this direction in recent years. For example, the 10th World Congress on Engineering Education has been hosted in 2013 by the Federation of Lebanese Engineers (FLE) in Beirut with the organizational help of Universities and national engineering societies such as the Federation of Arab Engineers (FAE), the American Society for Engineering Education (ASEE), the American Society of Civil Engineers (ASCE), the European Network for Accreditation of Engineering Education (ENAE) and the European Federation of National Engineering Associations (FEANI). The Committee has also set a strategic plan (the WFEO-CEIE Strategic Plan for 2015-2019) which is a living document that is constantly amended as work evolves to seize the best opportunities of progress. The work of the NGO is also documented in the “ideas” journal which can be consulted online on our website. Each article of the journal is reviewed by two (2) professors from recognized universities to ensure the accuracy of every single information. Finally,

cooperation with several institutions and universities for establishing educational policies for engineering in each country is also a great success of our Committee. However, the efforts cannot stop here. The need to develop and promulgate engineering programs, and to enhance mobility of engineers through national and international accreditation of these university programs is pressing. Consequently, WFEO recommends the establishment of international standards in this field. Keeping the same international perspective in mind, further Congresses on engineering should be organized. Therefore, Members States should facilitate cooperation in this field, since these events play a key role in the chain that ensures the circulation of the latest information on engineering and technology topics in order for engineers to serve societies with the best guidance and leadership to ensure human and environmental wellbeing. These conferences also facilitate communication between nations on important and critical issues, such as infrastructure development while also caring about the preservation of nature, that requires further investments from Member States to improve education for engineers in the future.

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