

**Science communication, a matter of partnerships.
Reporting on the Science Centre World Summit 2014**

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Abstract

Citizen engagement in emerging global scientific and technological issues is crucial to the advancement and welfare of all. Numerous organizations all over the world share this same concern. Collaborative partnerships worldwide need to be formed in order to further the public opinion across cultural, political, economic and geographical boundaries, that science holds the key to emerging global issues.

At the Science Centre World Summit 2014 (Technopolis[®], Mechelen, Belgium, 17-19 March 2014), representatives from different fields met and discussed topics that concern all parties. To promote strategic discussions and the search for significant partnerships, the Science Centre World Summit divided its themes into three strands: “Research and communication of research”, “Engaging learners in all settings” and “New technologies for learning and engagement”. A Science Centre CEO Forum preceded the Summit, which ended with the Mechelen Declaration as a collective vision and a commitment to advance the field and take science communication and citizen

engagement to the next level. In the next Science Centre World Summit (Japan 2017) the regional science centre networks will meet again to continue the development of common vision, evaluate the advances and opportunities, and continue innovating, together with the other key players in science communication for development. This paper presents the history of the international collaboration for the development in the field, the results of the Science Centre World Summit Belgium 2014, the paths opened to new alliances and partnerships and the critical issues in science communication at large.

Science centres come in many sizes and shapes, from well-known large institutions in major cities, to ‘science centres without walls’ that reach out to regions in their countries. In its evolution from ‘collection based’ museums, and its development of engagement and interactive approaches, the science centre movement decided to hold triennial congresses from 1995, mirroring the tradition of the International Council of Museums, ICOM. The global science centre community met for the first time at the Science Centre World Congress in 1996 in Finland, hosted by the Finnish Science Centre Heureka, as an initiative of the Association of Science Technology Centres (ASTC) and the European Collaborative for Science, Industry and Technology Exhibitions (ECSITE). More than four hundred participants from different regions of the world gathered to consider the theme: *Learning for Tomorrow*.

“From that first congress, and continuing through the ensuing congresses, science centre leaders have come together to discuss issues facing science centres around the globe and the important role that science centres can play in increasing public engagement in science and technology. While academic researchers and others outside the science centre world have often attended, the focus until 2011 remained on senior decision makers from science centres.” Lewis (2010) Science Centre World Summit Terms of Reference (unpublished).

With the purpose of bringing together science centre leaders from around the globe, Science Centre World Congresses were held in different regions every three years: Europe, Asia, Oceania, Latin America, North America and Africa/Middle East.

“Catalysts for a Better Tomorrow” was the theme for the 2nd congress held in Calcutta, India in 1999 by the National Council of Science Museums (NCSM) and Science City. In 2002, *“Science Centres: Inspiring a New Generation”* was the theme for the 3rd congress hosted by Questacon, Australia’s National Science and Technology Centre in Canberra, supported by the Asia Pacific Network of Science and Technology Centres (ASPAC). The 4th congress was held in 2005 in Rio de Janeiro, Brazil, by Museo Da Vida and Fundação Oswaldo Cruz, with the support of the Latin American Network for The Popularization of Science and Technology (RedPOP). The theme was *Science Centres: Breaking Barriers, Engaging Citizens*. The 5th congress was hosted by the Ontario Science Centre in Toronto and Science North in Sudbury, Canada (2008), focusing on *Science Centres as Agents of Change – Locally, Nationally and Internationally*. The 6th congress was held in 2011 in Cape Town, South Africa, hosted by the Cape Town Science Centre, and supported by the Southern African Association of Science and Technology Centres (SAASTEC) and the North Africa and Middle East Science Centres Network (NAMES), with the theme: *Science Across Cultures*.

The 5th and the 6th congresses produced a Declaration that stated the number of people impacted by science centres globally and presented a collective agenda, with action-oriented strategic goals and commitments for the following three years.

The 2008 Toronto Declaration stated the need to “form strategic partnerships with associations and institutions outside the science centre field to help address important local, national and global challenges” and included the commitment “to work together to overcome cultural, physical, social, economic and geographic barriers to engage and connect people through science.”

The critical need for collaboration was taken a step further in the 2011 Cape Town Declaration, addressing the need to “partner with formal education, arts, business, policy makers and media”, to “continue to develop partnerships to promote science awareness and engagement across cultural, political, economic and geographical boundaries” and to “further promote dialogue between scientists and the general public so

that public opinions on science and technology can be heard and incorporated into decision-making processes.”

Over time, the international science centre community moved from an inward to an outward-looking state of mind, connecting with other key players in education, development and communication at a global level. This helped to position the field as a vital agent in the social and economic fabric of society, working with others to engage communities, particularly new audiences, to foster lifelong learning in science and technology.

In 2010, the International Programme Committee (IPC) with representatives from regional science centre networks, agreed to move from the world congress model to a Science Centre World Summit format by 2014, to grow global strategic partnerships and collaborations. The Summits would take place in Europe (2014), Asia Pacific (2017), Latin America (2020), North America (2023) and Africa/Middle East (2026).

The first Summit was held in March 2014 in Mechelen, Belgium, hosted by Technopolis[®], the Flemish Science Centre in cooperation with the Museum of Natural Sciences in Brussels, with a programme thematically divided in three strands:

1. Research and communication of research. Today, a growing number of museums of science of all types are accelerating their positioning as beneficial bridges between current research, schools and society. This is one of the more conspicuous dimensions of the museum field's “nice to necessary” trend to be more relevant to contemporary issues. As science centres, science/technology and natural science museums better position themselves as integral to educational innovations, societal advances and environmental stewardship, how can they become strong partners with the scientific research community? What role does the scientific community foresee for science museums that aspire to not only illuminate science to the public but also to assist schools and engage society about the scientific method and use that knowledge to shape attitudes and motivate actions towards a better world? These were key questions for this theme area. Keynote speaker Anne Glover, Chief Scientific Adviser of the President of the European Commission, stated: “*Research not communicated is research not done*”.
2. Engaging learners in all settings. Knowledge, education and learning are key to the future well-being of individuals and nations alike. What collaborations and partnerships

The 2014 Science Centre World Summit brought together 464 CEOs, managers, decision makers and experts from within and beyond the science centre field. Participants came from 58 different countries with 38% coming from outside the science centre field, including three former astronauts, two Nobel laureates, CERN's Head of Education, the Senior Minister for Scientific Affairs of Sri-Lanka and the Executive Director of the International Council for Science (ICSU).

The aim of the Summit to be more strategic and to provide a platform to build future partnerships beyond the science centre field was realized through three years of strategic planning which negotiated alliances, brought together key players in research, policy development, cultural institutions, science communication and formal and informal education, and structured dialogue and interactions between them to advance collaborations, to reach agreements and to frame future possibilities. Summit sessions such as *Science centres and industry: a strong team* showcased the win-win outcomes of collaboration between science centres and industry.

The following partnerships were acknowledged at the closing of the Summit:

- A cooperation between the global science centre community and the UN leading to a cooperative programme for the 70th Anniversary of the UN in 2015, addressing UN sustainable development goals, and working towards the UN declaring 2019 as the International Year of Science Centres.
- A cooperation agreement between the Chinese Association of Natural Sciences Museums (CANSM) and the Association of Science Technology Centers (ASTC) to translate the award winning magazine "Dimensions" into Chinese.
- A cooperation agreement between the Association of Science Technology Centers and the Organization of American States (OAS) to develop science centres in the region.
- The Human Brain Project, a new flagship EU initiative, announced a global collaboration with science centres.

The Mechelen Declaration

Building on the 2008 Toronto and 2011 Cape Town Declarations, the Mechelen Declaration sets out a plan for the international science centre field and its strategic partners to commit to seven concrete actions for the enhancement of public engagement for a better world. Each declaration has been developed in close consultation with the regional science centre networks.

The day prior to the Summit, 78 science centre CEOs met to prioritize key actions and suggestions for implementation of the Mechelen Declaration. This will form the basis for developing a guide for science centres and partner organizations to plan and measure their contributions to the advancement of the Declaration goals.

The Mechelen Declaration was signed not only by the science centre regional networks but also by other international organizations such as the Organization of American States (OAS) and the International Council of Museums (ICOM). The chief scientific adviser to the head of the European Commission also endorsed the Declaration. At the end of the Summit, participants signed the Declaration to personally commit to bring the seven goals into reality.

By presenting the Declaration at the beginning of the Summit, session presenters and participants were able to reflect on its messages throughout the Summit programme.

Discussions about the Declaration resolved that:

- The Mechelen Declaration is to be viewed as a starting point and a framework for discussion. Although it was meticulously prepared by an editorial committee and approved by the regional networks, it will be supplemented by a memorandum to guide science centres, networks and partner organizations in their followup to the Declaration goals.
- Although needing to work together as a global science centre community, it is important for science centres to implement the Declaration in their own localities as appropriate to their local contexts and opportunities.

Summit participants reached consensus on the following two goals as highest immediate priority within the Declaration:

- Investigate how to engage even more effectively with local communities and increasingly diverse audiences, and keep the focus on gender differences in engagement.
- Take the lead in developing the best methods for engaging learners and optimizing their education in both formal and informal settings using appropriate technologies in widely varying contexts.



Figure 2

Conclusion

The Science Centre World Summit 2014 achieved the transition from the former world congress format to bring about effective dialogue with organizations beyond the science centre field and new opportunities for collaboration and partnership to strengthen science engagement and communication at large.

The Mechelen Declaration provides the roadmap forward.

“Science centres are rightly celebrated as beacons of our civilisation. Global development presents this community with a new, clear opportunity for growth.”

Nick Ishmael Perkins, SciDev.Net

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