

AAAS Science and Human Rights Coalition Meeting

Report

July 11-12, 2013
AAAS Headquarters
Washington, DC

Article 15 of the International Covenant on Economic, Social and Cultural Rights guarantees everyone the right to enjoy the benefits of scientific progress and its applications. Since the launch of the AAAS Science and Human Rights Coalition in 2009, its core activities have focused on engaging scientists and engineers in an international process to define this right and create opportunities to integrate the right into the activities of scientists, engineers and their professional organizations. The aim of this meeting was to enrich the Coalition's contributions to ongoing discussions about the right to enjoy the benefits of scientific progress in regional human rights bodies and at the United Nations by exploring challenging conceptual questions about the meaning of the right and its application in practice.



ADVANCING SCIENCE, SERVING SOCIETY

Table of Contents

Session Reports

Meeting Introduction	4
Plenary: Contributions of Scientists and Engineers to Defining Article 15	5
Plenary: International Scientific Cooperation and Article 15	8
Workshop: R&D Budget Analysis for Article 15	9
Workshop: Scientific and Engineering Societies Influencing the United Nations	10
Plenary: "Conserving, Developing and Diffusing Science:" Article 15 and Open Access	11
Closing Remarks	12

Working Group and Committee Reports

Working Group Report: Welfare of Scientists	14
Working Group Report: Ethics and Human Rights	15
Working Group Report: Service to the Human Rights Community	17
Working Group Report: Education and Information Resources	20
Committee Report: Outreach and Communication	22

Appendices

Appendix: Session Evaluations	23
Appendix: General Meeting Evaluations	29

Acknowledgements

The [AAAS Science and Human Rights Coalition](#) is a network of scientific and engineering associations, professional societies, academies, and other formal networks of scientists, engineers and health professionals. The Coalition is devoted to facilitating communication and partnerships on human rights within and across the scientific and engineering communities, and between these and human rights communities. The Coalition strives to improve human rights practitioners' access to scientific and technological information and knowledge and to engage scientists, engineers and health professionals in human rights issues, including those that involve the conduct of science. Launched in January 2009, the Coalition is currently comprised of 51 professional associations and scholarly societies and 70 affiliated individuals.

The AAAS Science and Human Rights Coalition
thanks the

American Educational Research Association

American Statistical Association

Kean University

National Center for Science and Civic Engagement

for their support of this meeting

Meeting Introduction

Jessica Wyndham ([AAAS Scientific Responsibility, Human Rights and Law Program](#)) began the meeting with an overview of the Coalition's recent work and that of its members. The [American Mathematical Society](#) has joined the Coalition, bringing to 51 the total of Member and Affiliated Organizations. Realizing a major goal of the Coalition's Outreach and Communication Committee, student delegates have been appointed by nine Member and Affiliated Organizations. The students will attend Coalition meetings, participate in Coalition activities and work with the Coalition Secretariat and their sponsoring organization to develop and implement a plan to engage fellow students in the Coalition's work and in issues of science and human rights generally.

Two other major accomplishments of the Coalition in the past six months were highlighted. First, the Ethics and Human Rights Working Group together with AAAS developed and disseminated a questionnaire aimed at learning how scientists and engineering view their responsibilities to society. Over 2500 people from around the world responded to the questionnaire. A report of the findings will be prepared and made publicly available. Secondly, the Service to the Human Rights Community Working Group together with AAAS organized a series of trainings for human rights organizations. For example, on June 21, a workshop on implementing strong program evaluations was conducted in New York and was attended by over twenty human rights practitioners.

In addition to the activities of the Coalition itself, Coalition Member Organizations and Affiliated Individuals have also been active in support of the mission and goals of the Coalition. Wyndham highlighted the following: an [article](#) by three Coalition members on the role of Sociologists Without Borders in the Coalition; the American Anthropological Association wrote a [letter](#) to the President of Guatemala concerning the human rights situation of indigenous people in that country; the Council of the American Educational Research Association adopted a [statement](#) on human rights which explicitly recognizes the right to enjoy the benefits of scientific progress among other rights of particular importance to the scientific community; the Association of American Geographers awarded a prize to a student for his work in applying remote sensing techniques to human rights questions; and the Chair of the American Statistical Association Committee on Scientific Freedom and Human Rights has published widely on concerns about human rights violations against statisticians in Argentina.

Plenary: Contributions of Scientists and Engineers to Defining Article 15

[Article 15](#) of the [International Covenant on Social, Economic, and Cultural Rights](#) (ICESCR) guarantees everyone the right to enjoy the benefits of scientific progress and its applications. Article 15 requires states to:

1. recognize the right of everyone to enjoy the benefits of scientific progress and its applications
2. conserve, develop, and diffuse science
3. respect the freedom indispensable for scientific research, and
4. recognize the benefits of international contacts and co-operation in the scientific field.

Since the launch of the AAAS Science and Human Rights Coalition in 2009, its core activities have focused on engaging scientists and engineers in an international process to define this right and create opportunities to integrate the right into the activities of scientists, engineers and their professional organizations. The aim of this meeting was to enrich the Coalition's contributions to ongoing discussions about the right to enjoy the benefits of scientific progress in regional human rights bodies and at the United Nations by exploring challenging conceptual questions about the meaning of the right and its application in practice.

Jessica Wyndham began with the basic premise that in order for the right to enjoy the benefits of scientific progress to have practical significance and meaningful impact on real-world outcomes, a universally-accepted definition of Article 15 must be adopted. Wyndham pointed to the [United Nations Committee on Economic, Social and Cultural Rights](#) as the body responsible for articulating such a definition through, what is known as, a General Comment. The widely-shared perception that Article 15 lacks clarity, and therefore meaning, is attributed to the fact the Committee has not yet adopted a General Comment on the right to benefit from scientific progress. This meeting is intended to build on the Coalition's work to help define Article 15 by engaging the scientific and engineering communities, the results of which will be presented to the UN and before the Committee in an effort to encourage them to develop a General Comment.

Wyndham identified three core questions when defining Article 15. The first question examines how the benefits of science are defined. The second question looks at what fields of study are encompassed by the term 'science' for the purposes of Article 15. The third question, perhaps the most challenging, addresses the question of who are the intended beneficiaries of this right? Wyndham considered these three questions from the perspective of existing literature and official statements on Article 15, including: the United Nations Educational, Scientific, and Cultural Organization (UNESCO) 2009 Venice [Statement](#) on Article 15, a 2010 [statement](#) adopted by the AAAS Board of Directors, a compilation of periodic state party [reports](#) to the UN Committee on Economic, Social and Cultural Rights, and the 2012 [report](#) on Article 15 by Farida Shaheed, the UN Independent Expert in the field of cultural rights. In addition, Wyndham made reference to several [scholarly](#) works on the right.

Rather than being comprehensive, efforts to articulate the precise meaning of Article 15 represent preliminary steps to define the right. The Venice Statement, for example, makes no attempt to define the "benefits of scientific progress and its applications," instead providing examples in the areas of health, agriculture and information technology. Wyndham discussed Audrey Chapman's assessment that the definition is limited to material benefits of science and contrasted that to arguments made by Jacques Havet, a representative of UNESCO who, during the negotiations leading to the adoption of the ICESCR expressed support for a broader conceptualization of benefits to include scientific knowledge and its potential to influence thought and attitudes, referring specifically to the capacity of science to diminish social prejudice. Further expanding the "benefits of scientific progress," Shaheed referred to "the scientific process." Finally, Wyndham presented the results of an analysis of periodic reports by governments to the UN Committee on Economic, Social and Cultural Rights. Using "research areas of priority" as a proxy for priority "benefits of scientific progress" requiring funding, Wyndham reported that governments emphasize the environment as well as agriculture and health.

When addressing the issue of the breadth of "sciences" recognize for the purposes of the right, the Venice Statement and Shaheed's report contend that all disciplines are included, including engineering and the social sciences. In contrast, government reports on the right focus on the life and physical sciences, rarely mentioning the social sciences. Finally, as to the question of who are the beneficiaries of this right, the Venice Statement

and Shaheed's report both argue that it applies to the general population, but some academics, such as Pierre Claude, interpret the right as primarily relevant to the work and rights of scientists and engineers. The state reports include reference to the right's significance to both the general public as well as the scientific and engineering communities specifically. Wyndham concluded her remarks by echoing the AAAS Board statement of 2010, calling for greater engagement by the scientific and engineering communities in articulating the meaning of the right and identifying innovative and effective ways to use Article 15 to create real-world outcomes.

Margaret Vitullo ([American Sociological Association](#)) followed this introduction with a discussion of the results of the Coalition's focus group study that was aimed at establishing a preliminary empirical basis for determining the scientific and engineering communities' understanding of Article 15. Vitullo explained that it is essential to bring the voices of scientists and engineers to interpreting Article 15. To accomplish this, the Coalition utilized a focus group process to build a bridge for scientists and engineers between their distinct areas of disciplinary expertise and international legal concepts of human rights. She noted that the interaction between participants is one of the key strengths of the focus group methodology. Participants in each focus group shared a common disciplinary background. They were asked to answer a set of ten open-ended questions about the benefits of scientific progress and its applications and to discuss the core responsibilities of governments as they relate to scientific freedom, international cooperation, and the conservation, development and diffusion of science. The focus group sessions were recorded and transcribed. The comment sheets were also transcribed. A total of 16 focus groups were held with 145 participants, which resulted in 700 pages of textual data that were analyzed using qualitative coding.

Vitullo then discussed the views of scientists and engineers within the framework of Wyndham's three questions on the definition, scope, and intended beneficiaries of the right. She found that participants shared many of the same views on the benefits of their discipline even before beginning their discussion. The most commonly cited benefit across all focus groups was "health." By way of illustration, Vitullo shared one participant's comments on the benefit of mechanical engineering in transferring technological advancements from the developed world to the developing world. The second-most common benefit was the advancement of knowledge. Vitullo underlined the widespread reference to the fundamental role that the process of scientific thinking plays in effective citizenship. She also highlighted the agreement among focus group participants that science provides an empirical basis for policy which was the fifth-most commonly identified benefit. From these results, Vitullo concluded that, despite the disciplinary-specific context of discussions within each focus group, there was still a consensus across disciplines about their primary benefits to society.

In response to the question on the disciplines of science encompassed by the right, the study participants generally agreed that the social sciences are as pertinent to Article 15 as are the life and physical sciences and engineering. Their opinions mirrored that of Shaheed, who pointed out in her report that an understanding of everyday life is key in the 21st century.

In order to address the question of the beneficiaries of the right, Vitullo found that the views of scientists and engineers can be best described through the creation of a fluid, bi-directional "continuum of access." This concept places the general public and the scientific and engineering communities on opposite ends of a spectrum and uses individuals' technical expertise, motivation and interest to determine their place on the continuum. Moving along the continuum from the general public towards the scientific and engineering communities indicates an increasingly high level of technical knowledge, motivation and interest in science and technology and may also suggest a growing risk of abuse and misuse of scientific knowledge and tools. According to this continuum of access, the foundations for increasing access to science are provided by education and training, official information clearinghouses, and open access.

Though Vitullo recognized the limitations of a study that used a convenience sample and covered a limited number of disciplines, the findings offer a solid starting point for determining the scientific and engineering communities' perspectives on how Article 15 should be interpreted. Further discussion is needed in the future on the tension between sharing the benefits of science and allowing innovators and researchers to profit from their work, as well as the balance between human rights and national security.

The questions and discussion that followed centered around three issues: international human rights law generally and the official US perspective specifically; the focus group methodology; and practical concerns related to the implementation of Article 15. Wyndham explained that the US has historically considered that economic, social and cultural rights cannot be conceived of as legally binding. Nonetheless, former Secretary of State Clinton and others have made several statements in favor of economic, social and cultural rights and efforts continue within the US to work towards implementation of the rights to water, adequate housing, healthcare and so forth, even without ratification.

Regarding the focus group methodology, Vitullo acknowledged the limitations of the US-centric composition of the focus groups, as well as the challenges in achieving significant diversity among participants given the lack of meaningful diversity within the scientific community generally. Vitullo expressed her hope that the focus group process could be built upon in some way to reach a broader international audience, including in the developing world, to elicit the views of a broader disciplinary, geographically and demographically diverse range of scientists and engineers. Finally, both speakers acknowledged the highly complex nature of the right, agreeing with participants who identified the tension between this right and the patent system, the importance of acknowledging the potential negative impacts of scientific progress while promoting the benefits, and the value of giving focus to practical concerns about access, for example, to the internet, mental health services and scientific information that is meaningful to the public.

Plenary: International Scientific Cooperation and Article 15

This plenary addressed the importance of international cooperation and collaboration for assuring access to the benefits of scientific progress. Speakers were E. William Colglazier, (Science and Technology Adviser to the Secretary of State, [US Department of State](#)), Frank La Rue, (United Nations [Special Rapporteur](#) on the promotion and protection of the right to freedom of opinion and expression), and Herman Winick ([Stanford University](#)). The plenary was moderated by Sharon H. Hrynkow ([Global Virus Network](#)).

Science and technology are increasingly at the core of many societal and global issues. Consequently, utilizing the best researchers and the most advanced technologies, regardless of their location, is critical in producing the best outcomes for all involved. The speakers identified at least three important outcomes derived from international scientific cooperation: taking advantage of expertise from around the world may make it possible to solve social issues more rapidly; international cooperation, including south-south cooperation, can enhance the global economy; and building bridges across scientific communities can even be used as a tool for public diplomacy as scientific collaborations can be an important facilitator in building constructive international partnerships.

Several of the speakers noted the strong connections between international cooperation and human rights, as recognized by Article 15, which requires States parties to that agreement to “respect the freedom indispensable for scientific research” and to “recognize the benefits of international contacts and cooperation in the scientific field.” Colglazier said that while the United States has not ratified the International Covenant on Economic, Social and Cultural Rights, “as a policy matter,” the government upholds the “values and principles” of Article 15, “envisioning a world that promotes the ability of everyone to share in scientific advancement and its benefits.” In his remarks, La Rue added that freedom of expression, including the free exchange of information across borders, is necessary not only for full enjoyment of the right to enjoy the benefits of scientific progress but for many other human rights as well. For example, he said, the right to clean, potable water cannot be enjoyed without scientific understanding of how to purify water.

While the potential benefits are clear, the panelists identified several impediments to a successful system of international scientific collaboration. Countries of higher socioeconomic status have greater access to scientific benefits and more opportunities for collaboration, while less developed countries may struggle for access to information and lack the ability to participate in research endeavors. Even among those countries with greater economic freedom, limited money and effort are invested in collaborations, and regulations may actually encourage research segregation over the pursuit of partnerships. In the United States, for example, visa and travel restrictions can limit the ability of international researchers to engage with US scientists. Security concerns are also obstacles to inter-governmental and non-governmental collaborations with scientists outside the United States. However, even in situations where a country does not have diplomatic ties to the United States, non-governmental scientific and engineering organizations, such as professional societies, can still work to foster relations across countries.

Notwithstanding the challenges identified above, the speakers highlighted contemporary examples of how governments and scientific communities have worked towards the protection, promotion and facilitation of scientific research. Examples included: the [International Visitor Leadership Program](#); the [Digital Science Library for the Maghreb](#); [SESAME](#), a cooperative synchrotron-light research facility in the Middle East; and the [Daya Bay Reactor Neutrino Experiment](#), a multinational particle physics project. The Daya Bay Reactor Neutrino Experiment is the first major equal-partnership physics project between the United States and China, also including input from researchers in Taiwan, Russia, and the Czech Republic. Additional suggestions for increasing international collaborations between the United States and other countries include restructuring visa policies to facilitate scientific education and exchange, improved intellectual property regulations to increase efficiency of dissemination of new technologies, and decreased restrictions that impede travel between countries for conferences or short-term research.

Workshop: R&D Budget Analysis for Article 15

The workshop introduced participants to potential approaches for using R&D budget analysis to assess whether governments are meeting their obligations under Article 15 according to budget allocations and priorities. Ann Blyberg, a human rights lawyer, described her holistic approach to human rights-oriented budget analysis as attempting to link real-world outcomes with budget inputs. Since government budgets work with limited funds in an effort to address a boundless number of issues, they express value judgments on the importance of different possible services. By referring to human rights law, Blyberg explained that it is possible to see if the money allocated and spent by governments is in accordance with a country's human rights obligations. Such an assessment, she emphasized, should not be conducted in the abstract but focus on the impact of budgetary measures on people and their rights.

Blyberg laid out a multiple step process for conducting a human rights budget analysis. The first step in this analysis is to identify clearly the specific human rights guaranteed by a country. The fulfillment of these legal obligations involves various components: the *availability* of products, services and/or information, the *accessibility* of these products, services and/or information, and their cultural *acceptability* and *quality*. The next phase is an assessment of the situation as it exists, accompanied by an evaluation of how government actions or inaction contribute to the situation. By comparing commitments and actions, it is possible to determine what a government needs to change in order to meet its obligations. One particular issue to consider with regard to the right to enjoy the benefits of scientific progress and any budget analysis conducted with respect to that right is that, according to Article 2 of the International Covenant on Economic, Social and Cultural Rights, governments are required to devote the "maximum available resources" to the realization and protection of the rights recognized in the treaty. One implication of this is that the nature of the obligations on one country may differ from another based on their financial strength.

Matt Hourihan ([AAAS R&D Budget and Policy Program](#)) noted that the applying the concepts of R&D budget analysis in the context of human rights would be challenging. Speaking specifically on the situation in the US, Hourihan noted several complicating factors: opaque budget reporting practices; inconsistent classification of types of research; and inadequate levels of data granularity. However, when budget analysis is used in combination with tools like case studies, hindsight studies, and surveys, it may be possible to create the conditions for connecting budget decisions to outcomes. In addition, since 75% of all R&D funding is located in the combined budgets of the United States, China, Japan, Germany, France, the United Kingdom, and South Korea, there is a limited amount of material to analyze. The speakers concluded that, though it will continue to be difficult to analyze R&D budgets to monitor implementation of the right to benefit from scientific progress without a clear definition of its meaning, with appropriate knowledge of the situation, the topic, and the field, it is possible to use budget analysis in support of human rights.

At the conclusion of the workshop, one specific topic that many participants expressed an interest in focusing on in a follow-up training is a human rights budget analysis applied to STEM education.

Workshop: Scientific and Engineering Societies Influencing the United Nations

The purpose of this workshop was to address the various questions related to engaging individual societies with the United Nations. The workshop was moderated by Theresa Harris (AAAS Scientific Responsibility, Human Rights and Law Program), and included a panel comprised of Roseanne Flores (NGO Representative of the [American Psychological Association](#) at ECOSOC), Sally Leverty ([American Psychological Association](#)), and Corann Okorodudu (NGO Representative of the [Society for the Psychological Study of Social Issues](#) at the United Nations). The workshop focused on how individual societies can best advocate at the UN on behalf of their members.

The panel first addressed the role that individual organizations and societies can play in influencing human rights decisions at the United Nations. Speakers emphasized the importance of disparate disciplines and NGOs with varying agendas working together in order to achieve common goals, and the impact that different NGOs can have through cooperation and the organization of side events. For example, during the meeting of the Commission on the Status of Women, the speakers worked with other NGO representatives to organize a panel entitled "Prevention of violence against women and girls across the lifespan: Psychological perspectives," that highlighted the contributions of psychology to solving some of the challenges on the Commission's agenda.

The panel also addressed the reciprocal roles that NGO representatives to the UN play for their specific organizations: these roles encompass providing to the UN a scientifically accurate and relevant perspective on the organization's issues of interest, as well as bringing back to the organization a global perspective on issues relating to research and human rights. As one example, the speakers pointed to recent action by the APA urging US. ratification of the UN Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) as a result of the involvement of APA members in discussions on women's rights at the United Nations.

In fulfilling these goals, the panel saw four primary responsibilities of their associations' NGO representatives: 1) to directly advocate for their societies to UN representatives; 2) to provide educational programming both to UN representatives and to their societies; 3) to assist in policy development and the writing of meeting statements for both the UN and their organizations; and 4) to provide necessary research support to UN representatives.

The panel then discussed the importance of an organization being awarded [Special Consultative Status](#) through the [UN Economic and Social Council](#). Special Consultative Status accreditation can be awarded through [CSONet.org](#), under the UN-DESA NGO Branch. This enables scientific societies to fully participate in UN meetings, according to the rules of procedures for NGOs. They said that while societies may be able to influence the discussions in other ways when they do not have consultative status, being at the UN during meetings opens up many more opportunities, including informal or on-the-spot discussions with delegates during deliberations.

The issues addressed above prompted many questions and comments from participants. Primary topics of interest included the practicalities associated with achieving Special Consultative Status, the extent of influence NGO representatives were able to achieve at the UN, and specific procedures through which scientists and engineers could influence the UN perspective on issues under debate. The panel referred to the [Civil Society Network](#) as a useful resource for NGOs to interface with the UN. With regard to the extent of influence that NGO representatives were able to achieve at the UN, there was a uniform consensus that having a representative presence at the UN has made a positive influence on issues of importance to psychologists.

The panel then provided several examples of procedures and mediums through which scientists and engineers could influence the development of different issues. Examples included presenting scientific information to be included in the [Universal Periodic Review](#). This prompted a discussion that was echoed in the closing remarks of the Coalition meeting on whether or not the United States has a funding responsibility to UNESCO and the future interactions of the US with that organization.

Plenary: “Conserving, Developing and Diffusing Science:” Article 15 and Open Access

The closing plenary addressed the implications of Article 15 for open access. Open access, the provision to the public of unrestricted, free access to scholarly works, is a growing and contentious issue within the scientific community. In this session, Kevin Finneran ([National Academy of Sciences](#)) moderated a discussion and debate among Molly Land ([University of Connecticut](#)), Alan Leshner ([American Association for the Advancement of Science](#)), and Felice Levine ([American Educational Research Association](#)) concerning how Article 15 is related to questions surrounding open access.

Benefits of open access include facilitating future research developments by increasing data accessibility to a spectrum of researchers and clinicians, facilitating the transparency and replication of research, informing the general public of scientific progress, and inspiring new economic ventures based on the most current research. Challenges relating to open access include the current business model for academic journals which does not support broadly (and freely) available research articles, the risks associated with making dual-use research available, and privacy concerns. Leshner and Levine explained how scientific publishers are balancing these benefits and challenges; for example, Leshner noted that *Science* provides access to developing countries and provides immediate access to everyone when articles are determined to be of general public interest.

The panel acknowledged all of the above issues and then further delved into the question of how open access, in the context of Article 15, can be perceived as a human rights question. Land emphasized that the availability of scientific knowledge is a crucial human rights issue explicitly protected by Article 15. The right to access information, the right to exchange information, and the right to education were all cited as basic human rights that are supported by the right to benefit from scientific progress. Article 15 was further cited in support of the right to basic healthcare. In this context, Article 15 can be interpreted both from the research and development point of view in which access to current research findings spurs future medical findings that lead to improved responses to disability and disease, for example, as well as from the consumer point of view, whereby access to information informs a basic understanding of individual healthcare options, allowing individuals to make informed decisions about their own health.

Access, however, is not an end in itself. The panel considered the question of consumers' varying capacity to understand and integrate technical scientific information in their everyday lives. The debate here centers around whether it is simply enough to make information available, or whether Article 15 requires that it must be made available in a manner that is translated for a variety of audiences. For example, is it simply enough to make a paper detailing the macrophage reaction to a specific drug in a specific treatment regime available to the public? Or does the scientist, publisher or government have a further obligation to translate these findings into layperson's terms and to explain the practical implications and limitations of these findings?

The discussion spurred many lively questions from the audience, with the majority of questions focusing on the practicality of requiring open access. The audience questioned the panel regarding how open access would impact peer review and professional societies, and whether open access might decrease publication quality as a result of budgetary constraints limiting editorial input. The ensuing discussion touched on the possibility of changing the processes for reviewing articles for publication as well as the benefits to scientific progress and the scientific societies that would result from creating a more scientifically literate public. Land said that concerns such as how to regulate access to dual-use research, privacy concerns, and information security, could be guided by norms in human rights law that allow the State to limit access, but only where there is a demonstrable security risk and then only to the information directly related to that risk. The issue of patent and copyright in the era of open access was also raised; the audience wondered how the right of authors to benefit from the moral and material interests in their work would be realized in an environment in which it is compulsory for information to be freely available. While this is an issue that is still being investigated, Land stressed that the right to attributions resulting from your work is not necessarily an intellectual property issue alone.

Closing Remarks

Stephen P. Marks ([Harvard School of Public Health](#)) concluded the day's discussion with a wrap-up of some of the key points raised during the meeting with a view to identifying important contributions that could feed into the ongoing work to define Article 15. In describing the discussions throughout the day as "exceptional," Marks noted that the Coalition is one of the few places in the world where this type of reflection on the right to enjoy the benefits of scientific progress and its applications is taking place. The discussions have not only contributed the perspectives of US-based scientists and engineers on this right, they have also provided preliminary answers to important questions that set the stage for bringing the right "out of obscurity and into the normative framework."

Marks highlighted five points from the meeting's discussions:

1. *We now have an empirical basis for specifying the benefits of the right.* Referencing the presentations in the opening plenary, Marks said that the continuum of access "provides a rich framework for understanding that the distinction between science as pure and public, on the one hand, and technology as applied and primitive market driven, loses its significance in light of this continuum, showing the shifting relevance of applications, information, literature, data, samples to the general public at one end to scientists at the other." Connecting this concept with the discussion on open access in the final plenary helps provide a much clearer picture of what scientists consider the object of this right.
2. *International cooperation with scientists in repressive regimes:* Marks noted how human rights became significant when participating scientists are victims. The speakers earlier in the day emphasized the long-term advantages to maintaining and supporting cooperation with scientists living in repressive regimes. Marks connected this to a discussion in one of the workshops regarding US funding for UNESCO and the potential for international cooperation that could be lost as a result. Marks urged the US to restore funding in the U.S. interest and in the interest of promoting Article 15.
3. *Instrumental value of rights related to Article 15:* Frank La Rue's position that the Internet is more than simply an instrument of freedom of expression because it supports a broad range of human rights is consistent with the concept that Article 15 is instrumental to numerous rights "and therefore can be invoked creatively." This also suggests another advantage: engaging in a cooperative, rather than accusatory, mode of human rights realization. While some of the work to realize Article 15 may involve "naming and shaming," it also holds the potential to work with governments to design policies and seek resources to enhance access to the benefits of science and technology. This type of cooperation can open doors across the range of rights for which this right is instrumental.
4. *UN procedures are more diverse than the General Comments of the UN Committee on Economic, Social and Cultural Rights.* Marks said that the upcoming meetings of the UN Office of the High Commissioner for Human Rights and UN Committee on Economic, Social and Cultural Rights are critical moments for impact. However, he urged the audience not to forget that the right to benefit from scientific progress can be advanced through a wide range of UN procedures: a) other committees that oversee human rights treaties; b) through the UNESCO NGO Committee; and c) [special procedures](#). For example, special rapporteurs whose mandates could address the right to benefit from scientific progress and its applications include those who have been appointed as independent experts on adequate housing, food, freedom of opinion and expression, health, indigenous peoples, solidarity, safe water and sanitation, transnational corporations and other business enterprises. There is also a special rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes.

Other opportunities to advocate for the right include side events at the UN Human Rights Council and the General Assembly meetings, as well as the complaints procedures under the human rights treaties and the UNESCO complaints procedure. Science and engineering societies could influence the UN by preparing shadow reports to official government reports on their efforts to implement the right.

5. *The deeper policy significance of the right to benefit from scientific progress.* Finally, Marks noted the discussion during another workshop earlier in the day raised the question of whether under the theme of measuring and monitoring compliance with state obligations, a human rights framework means that the ultimate measure of R&D and other science funding is not the benefit to scientific institutions and science but rather the benefit to people and their rights. Such an understanding underscores the policy implications of taking seriously the right of everyone to benefit from scientific progress. This was echoed in the discussion of open access, especially by Alan Leshner, who mentioned access to publications in poor countries. The goal, as Leshner concluded, is to do the right thing. Molly Land told us to think holistically. If we want to do the right thing – and isn't that what human rights are all about? – it becomes a problem of policy for all countries, not a one-way channel of the global north providing knowledge and technology to the global south, but rather structural changes in all countries, with enormous resource implications. Marks concluded, "That is an enterprise meriting active engagement of the AAAS Science of Human Rights Coalition, cloned in every region of the world."

Working Group Report: Welfare of Scientists

The Welfare of Scientists working group is devoted to the protection and defense of scientists, engineers and health professionals under threat, and will work to increase the effectiveness of professional societies in defending the human rights of our colleagues.

Co-Chairs: Juan Gallardo, American Physical Society
 Alec Greer, Committee of Concerned Scientists

Progress Since Last Meeting

Michelle Irwin (American Physical Society) and Liezl Perez (American Chemical Society), with the support of Theresa Harris (AAAS) have put together an online form (<http://www.surveymonkey.com/RZS72GR/>) to facilitate the compilation and sharing of information on individual cases of scientists and engineers around the world whose human rights have been violated or are at risk. Our main objective is to provide members of the Coalition with accurate and objective information, alert them to urgent cases, and invite them to respond to calls for action.

Alec Greer (Committee of Concerned Scientists) raised the issue of scientific boycotts. AAAS and American Physical Society have standing positions on the subject. It was agreed that during the Council meeting, Juan Gallardo (American Physical Society) will ask if other associations or societies have taken positions on the issue, and if so, to send them to Michelle Irwin for compilation.

The group discussed the *Primer on Scientific Freedom and Human Rights*, a completed project of the working group, carried out to conclusion in great part by the American Chemical Society (ACS). The discussion centered on potential steps to make the document more widely read and used. Currently, the document is available by a link in the working group's website and the ACS website. Copies of the primer were available on the document-table during the Coalition meeting. Working group members were asked to help make their colleagues aware of the document.

To increase collaboration, the working group agreed to have monthly phone conferences.

Goals for Next Six Months: Key Next Steps and Decisions Made

The working group has three draft documents under consideration, related to the rights of scientists and engineers online and the potential use of Article 15 to help defend the welfare of scientists. The possible work on these documents will be a measured and deliberative process to be carried out over phone and email. Taking on any one of these projects will require a sustained effort of committed individuals.

Ideas Generated

The working group co-chairs will consolidate the different working group email lists into one that hopefully will smooth the interaction between those who have expressed interest in participating in the working group's activities. In addition we might be able to set up committees focused on the specifics of the three documents mentioned above and their interconnection with the rights established in Article 15.

Next Meeting Date

Conference call on August 9, 11:00 a.m. (Eastern time)

Working Group Report: Ethics and Human Rights

The Ethics and Human Rights working group is devoted to promoting the incorporation of human rights into scientific and engineering codes of ethics by fostering an appreciation among scientists, engineers and professional associations of the relevance of human rights to ethical standards, the conduct of science, the application of technology and human subject protections.

Co-chairs: Robert Albro, American Anthropological Association
 Douglas Richardson, Association of American Geographers

Progress Since Last Meeting

We have identified our next report project, which is focused on providing a sharper appreciation of the extent, meaning, and implications of the responsibilities of scientists, as these are part of the interpretation of Article 15 of the ICESCR. This project is intended as direct support for the ongoing Joint Initiative project on Article 15, and to support the work of the UN Special Rapporteur for culture, who has currently identified this as a priority.

In addition to identifying the report topic, together with the staff of the AAAS's Scientific Responsibility, Human Rights, and Law Program, we developed a pilot survey, and administered this survey to over 1500 scientists to date, both in the U.S. and internationally. This survey provides one of three potential sources of data, which will form the basis for the analysis offered in the report on scientific responsibility.

We have also opened conversation with the Service to the STEM Community working group to collaborate in sharing data of relevance to this report topic. Finally, we have identified over half a dozen illustrative or epitomizing cases from across the sciences, which bring key and emerging questions of scientific responsibility to the fore, and which are particularly helpful in considerations of the changing contexts and expectations for scientific responsibility. We have also assigned these cases for write-up to individuals, all of whom have agreed to do so.

Goals for Next Six Months: Key Next Steps and Decisions Made

Working group co-chair, Robert Albro, will continue to work closely with working group member, Maya Sabatello, who has volunteered to co-lead the effort to write the report.

An immediate next step will be to liaise with additional working group members (e.g. George Middendorf, Aurora Plomer, Stephen Marks, Joe Carson, and others), who have agreed to assist in developing the report by writing-up particular cases, to be incorporated in the final product. Both Albro and Sabatello are also responsible for case write-ups.

An additional next step, to be pursued at the same time, is to work closely with the AAAS's Scientific Responsibility, Human Rights, and Law program (in particular, Mark Frankel and Jessica Wyndham) to determine appropriate next steps in the analysis of the pilot survey data now collected.

Specific questions for us now to address regarding the pilot survey include:

1. What analytic approach/software package will we be using?
2. How best to make use of support from available AAAS interns?
3. How to best use the pilot survey data to inform the report on scientific responsibility but also to inform future and related projects?

In addition, as suggested by working group member Toni Carbo, we will be investigating whether/how to incorporate into the report comparable data on scientific responsibility, collected and now available through the Consortium of Social Science Associations.

During the Fall of 2013, our working group hopes to complete these two tasks and to begin to draft the report itself.

During the Winter of 2013-14, the working group hopes to conclude the draft report and to initiate with the AAAS a subsequent process of review and revision of the report, aiming for its completion and presentation in the spring of 2014.

Ideas Generated

The following additional potential ideas were generated as a result of our working group meeting as part of the July 2013 meeting of the Coalition:

1. With Stephen Marks taking the lead, we will explore whether we might make the report part of a public comment to UNESCO on a proposed revision of the 1974 Recommendation, to be submitted this October, 2013.
2. With Toni Carbo and other working group members, we will explore how, and to what extent, the pilot survey data itself can be made publicly available via potential open-access platforms.
3. With Stephen Marks, we will explore to what extent and how the working group might take up the question of therapeutic technologies and human enhancement, along with the associated question of dual-use, as a potential project.

Request(s) for Intern Assistance

We would certainly have use for the assistance of a AAAS intern (see above). In particular, given the volume of responses to the working group's pilot survey, we would welcome intern support to: liaise with the Scientific Responsibility, Human Rights, and Law program; begin to organize these data for analysis; assist in the work of analysis, and subsequent organization of preliminary survey results, for incorporation into the report.

Next Meeting Date

Tentatively, scheduled for the last week in September.

Working Group Report: Service to the Human Rights Community

The Service to the Human Rights Community working group is devoted to bridging the scientific, engineering and human rights communities with the aim of encouraging and facilitating the greater engagement of scientists and engineers in efforts to advance human rights.

Co-chairs: Brian Gran, American Sociological Association
 Susan Hinkins, American Statistical Association
 Patricia van Arnum, Affiliated Individual

Progress Since Last Meeting

Since January 2013, the Working Group on Service to the Human Rights Community has made progress in three project areas:

1. *Guidelines*

Human Rights Projects: Guidelines for Scientists and Human Rights Organizations is available on the AAAS website at http://srhrl.aaas.org/coalition/WG/4/Projects/guidelines/Scientists_Human_Rights_Orgs.pdf. The Guidelines were presented at a workshop in spring 2013 by Working Group member Amanda Sozer, who also was one of the leads on developing the Guidelines.

2. *Outreach to Human Rights Organizations*

With support from AAAS staff, the Outreach subgroup organized two workshops on Program Evaluation for Human Rights Organizations, one in New York and another in Washington, DC. Each of the following workshops was set up to cover a range of evaluation topics such as logic models, types of designs, indicators and measurement, sampling, inferring causation, challenges to validity, and management considerations.

The January 11, 2013 workshop was held at the School of Law, New York University. It was co-hosted with ActKnowledge and the Center for Human Rights and Justice, NYU School of Law. The theme was Program Evaluation for Human Rights Organizations. Helene Clark of ActKnowledge spoke on the fundamentals of program evaluation. Jerome Helfft of the International Center for Transitional Justice and Babatunde Oluogboji of Human Rights Watch discussed implementing program evaluation: overcoming the measurement challenge. Theresa Harris of AAAS opened and closed the workshop.

The June 21, 2013 workshop was held at AAAS in Washington D.C. The theme was Implementing Stronger Program Evaluations for Human Rights Organizations. Safaa R. Amer, Senior Research Statistician, RTI International and Romesh Silva, Demographer and Statistical Consultant at Human Rights Data Analysis Group, took turns presenting topics in this workshop. Theresa Harris of AAAS opened and closed the workshop.

3. *Development of indicators of the right to enjoy benefits of scientific progress and its applications (REBSPA)*

The Working Group outlined ways for additional outreach to human rights organizations. These future efforts include: (1) developing a database of human rights organizations for use in outreach efforts by AAAS; (2) performing a needs-assessment survey to populate the database to help AAAS better serve human rights organizations (3) Introductory/networking meetings at organizations' offices, where these organizations can describe their work and project needs and for AAAS to inform human rights organizations about the On-Call Scientists Program and AAAS activities that can assist those organizations in their work. The Working Group will discuss these plans and the time frame for implementing these activities in the near future.

A sub-group of Working Group members are developing a database of indicators of the right to enjoy benefits of scientific progress and its application. The group has set two short-term goals: collection of a set of indicators and determination of whether our collaborative approach is efficacious. The first set includes structural, process, and outcome indicators of REBSPA, with a focus on education. The structural indicators are the date of International Covenant on Economic, Cultural, and Social Rights (ICESCR) ratification and whether a national

constitution or laws delineate REBSPA. The process indicators are time devoted to scientific education and journal publications. The outcome indicator is proficiency at science. In addition, this group is collecting data by which we can monitor progressive realization and minimum core obligations of governments attempting to implement REBSPA. This group tries to hold tele-conferences each 3-to-4 weeks to discuss ongoing work. During these telephone meetings, the group discusses its methods of work and collaboration, and monitors efficiencies and effectiveness of its efforts.

The Working Group established a regular pre-scheduled monthly conference call for all Working Group members to provide a forum to keep members informed and engaged on current projects and as a way to offer input on these project and suggestions for new projects. Written summaries of the calls were distributed to all Working Group members, including those who could not attend the call. The plan is to continue the regular monthly conference call with adjustment made in scheduling based on feedback from the Working Group.

Through its monthly conference call, the Working Group preliminarily discussed ways to facilitate information-sharing/knowledge-sharing among human rights organizations and the role of the Working Group in assisting the AAAS in that effort. The Working Group further discussed this topic at the July Coalition Meeting with additional follow-up targeted for post the meeting

Goals for Next Six Months: Key Next Steps and Decisions Made

1. *Outreach*

(a) Workshops for human rights organizations: With approval and support from AAAS, the Working Group would like to hold additional educational workshops for human rights organizations. Planning and topic selection will be discussed with the Working Group and Outreach subgroup.

(b) In addition to educational workshops, the Outreach Subgroup will continue efforts to outreach to individual human rights organizations as well as through collective bodies representing and serving human rights organizations.

(c) Plan the approach and implementation for furthering a database of human rights organizations, including a needs assessment, and networking opportunities with human rights groups.

2. *Indicators*

At the July meeting at AAAS headquarters, the sub-Working Group members who are focused on the REBSPA indicators discussed future avenues for their work, including selection of the next set of indicators, as well as alternate means of collaboration and distribution of information.

3. *Guidelines*

Develop ways to make scientific organizations and the human rights community aware of the *Guidelines for Scientists and Human Rights Organizations*.

4. *Information Sharing/Portal*

The Working Group will strive to provide AAAS with suggestions for an information-sharing portal for human rights practitioners. The Working Group plans to discuss this approach at the upcoming monthly conference call.

Ideas Generated

1. *Outreach*

Increase awareness of AAAS Science and Human Rights Coalition and On-Call Scientists Program through participation in annual meetings and information-sharing vehicles (i.e., newsletters) of individual human rights organizations as well as collective bodies representing human rights organizations. Several specific suggestions for such groups were offered at the meeting.

2. *Outreach and Information Sharing*

Discuss feasibility and plan for multimedia projects (podcasts, webcasts) of interest and assistance to human rights organizations.

Next Meeting Date

The next WG monthly conference call will be scheduled for the end of August, pending arranging a mutually agreeable call.

Working Group Report: Education and Information Resources

The Education and Information Resources working group is devoted to producing a variety of accessible information materials for the promotion and support of collaboration between scientists, engineers and human rights practitioners.

Co-chairs: Sheryl Luzzadder-Beach, Association of American Geographers
 Sam McFarland, Affiliated Individual

Progress Since Last Meeting

Our best progress since the January meeting has been in area of Activity (2), "Preparation of Other Educational Resources." Since that meeting, the working group has worked extensively to update the annotated bibliography of science and human rights resources (<http://bit.ly/15EQNK1>), posted in 2009 and not updated since that time. Every Coalition organization was asked to provide updates to the bibliography for its discipline, and these were received from 12 organizations. These were reviewed during the July 12 meeting. Suggestions were made for amending these (see Ideas Generated) and for acquiring updates from other sciences and general issues (e.g., the rights of scientists).

Some progress was also made on Activity (1), "Professional Development of Science Teachers/Preparation of Teaching Modules."

- The working group has been slowed by difficulty in clarifying a common template for the form and content of the science and human rights modules. However, such a template was adopted at the July 2013 meeting, which should enable faster progress on the modules.
- A module for high school teachers on science and human rights, prepared by EIR member Jennifer Bronson was reviewed positively, although suggestions were made for revision before final approval.
- A 30-page "backgrounder" paper on "A Very Brief Introduction to Modern Human Rights," prepared by Sam McFarland, was approved and will be recommended shortly to the Steering Committee for posting under Educational Resources on the Coalition Website.
- A second backgrounder paper, "Making Sense of Science as a Human Right," is undergoing further review.

Nevertheless, the EIR working group is considerably behind where we had hoped to be by this date regarding Activity (1).

Goals for next six months: Key Next Steps and Decisions Made

1. Submit six or more discipline-based updates to the current annotated bibliography to the Steering Committee for amending the Educational and Information Resources on the Coalition website.
2. Solicit, receive and review at least five additional discipline-based updates for the annotated bibliography.
3. Submit the backgrounder, "A Very Brief Introduction to Modern Human Rights," to the Steering Committee for posting under Educational and Informational Resources on the Coalition Website.
4. Finish revisions on the high school science and human rights module and submit it to the Steering Committee for posting on the website.
5. Revise, in accordance with the common template, at least four science and human rights modules to recommend to the Steering Committee for website posting.

Ideas Generated

Regarding the updating annotated bibliography, it was proposed that

1. Each society name a "curator" for its bibliographic resources so that these can be updated with vital new references on an on-going basis;
2. Each society prepare a brief (100-word or less) introduction to its bibliographical listings;
3. Each society provide a link within its annotated bibliography to its human rights webpage (if one exists).

Next Meeting Date

At this point, no conference call or meeting is scheduled prior to the January 2014 meeting in Washington.

Additional Comments

The individuals who joined this working group following the January 2013 meeting are contributing significantly to our progress, offering the promise of greater progress in the future.

At this meeting four other persons agreed to join the EIR working group.

- Jessi Grieser, Georgetown University, Graduate Student in Linguistics.
- Brad Hornback, American Orthopsychiatric Association
- Sari Paikoff, American Chemical Society
- Katie Picchione, Student Delegate, National Center for Science and Civic Engagement

Committee Report: Outreach and Communication

The Outreach and Communication committee is devoted to expanding the impact of the Coalition's work by increasing the Coalition membership and building bridges with scientific, engineering, and health professionals as well as the human rights community.

Co-chairs: Ali Arab, Affiliated Individual
 Jeffrey H. Toney, Sigma Xi

Progress Since Last Meeting

- We have now nine student delegates.
- Several members have published articles and blogs on topics related to the Coalition's work (e.g., "Has a new era of academic warfare arrived?" by Arab and Toney, Huffington Post, June 12, 2013). Members have also been fairly active in social media (Twitter, Facebook, and LinkedIn). These activities are particularly notable in Twitter, where several members are listed under a group Twitter account (@HuRiSc).
- Student engagement has increased in the Coalition meetings in part due to the work of the Outreach and Communication Committee.
- A survey was sent out to the committee members in early July. In summary, most of the respondents are members of organizations that are currently members or affiliated with the Coalition; many respondents are interested in writing articles, organizing webinars and brownbag seminars for their organizations; majority of respondents are interested in reaching out to non-member organizations.

Goals for Next Six Months: Key Next Steps and Decisions Made

The following goals were discussed and set for the next six months:

1. Provide information and general guidelines (including the web address for the Starter kit) for committee members who are interested in reaching out to non-member organizations.
2. Student poster session for the January 2014 meeting with potential competition (based on ratings by committee members)
3. Set up monthly conference calls to discuss and follow up topics among the committee members
4. Reach out to non-member organizations, particularly, those related to engineering, medical sciences, economics, and physical sciences.
5. Increase student engagement in the activities of the Coalition (including July and January meetings).
6. Increase outreach activities to propagate information regarding Coalition's work within the public and scientific communities (e.g., more effective usage of social media such as the existing Twitter, Facebook, and LinkedIn accounts, blogs and articles, etc.)

Ideas Generated

The following tasks are to be followed up during the next monthly conference calls:

- Developing a unified approach for recruiting new member organizations
- More details regarding the poster session to be implemented at the January meeting should be discussed. Details such as providing a unified template and potential assistance with printing should be discussed.
- Encourage universities and professional organizations to support student travel to attend future meetings.

Next Meeting Date

We have identified a tentative date for monthly conference calls.

Appendix: Session Evaluations

Opening Plenary: Contributions of Scientists and Engineers to Defining Article 15

	Poor (1)	Fair (2)	Good (3)	Very Good (4)	Excellent (5)	N/A	Rating Average
Session Topic	0	0	4	11	23	7	4.50
Usefulness of Presentations	0	2	2	14	23	5	4.41

Comments:

- More specifics about our behaviors as scientists would be good - a more critical look at what we do and how it is good, bad, or neutral vis-a-vis human rights would be useful. Many things can begin at the person level and I feel this was not discussed.
- I wasn't overly enthusiastic about the topic beforehand, but the presenters did a great job giving engaging talks, explaining the importance of the research.
- The presentation blew me away!
- The response to the question about the US position on ratifying ICESCR was disappointing. Most attendees I think we can assume are reasonably educated, so please take the discussion to the next level.
- It's great to hear about on-going work!

Plenary: International Scientific Cooperation and Article 15

	Poor (1)	Fair (2)	Good (3)	Very Good (4)	Excellent (5)	N/A	Average
Session Topic	0	0	6	15	18	7	4.31
Usefulness of Presentations	0	3	7	15	16	6	4.07

Comments:

- It would have been good if the moderator had recognized all of the submitted questions (or the general topic of the question).
- I was particularly inspired by the contribution by the Special Rapporteur.
- Choice of speakers was good. Nice variety.
- Speakers were very good and had a nice variety of discussion/viewpoints. Moderator was very effective and handled questions very well.
- Would have much preferred power points or other visuals as opposed to a comfy chair session.
- Please note if speakers have any papers on the topic and if they are available by email request. Frank La Rue's talk was fascinating; I would like to learn more.

Business Meetings: Overview

	Response Count	Response Percent
Introduction to the AAAS Science and Human Rights Coalition	19	40.4%
Planning the January 2014 Coalition Meeting	14	29.8%
I did not attend a business meeting	14	29.8%

Business Meeting: Introduction to the AAAS Science and Human Rights Coalition

	Poor (1)	Fair (2)	Good (3)	Very Good (4)	Excellent (5)	N/A	Average
Session Format	0	0	5	3	9	0	4.24
Explanation of How You Can Contribute	1	0	6	5	6	0	3.83

Comments:

- It was a good overview of AAAS and the Coalition. I would be happy to receive the power point presentation.
- Useful and informative.

Business Meeting: Planning the January 2014 Coalition Meeting

	Poor (1)	Fair (2)	Good (3)	Very Good (4)	Excellent (5)	N/A	Average
Session Format	1	0	2	7	4	0	3.93
Explanation of How You Can Contribute	1	0	2	4	4	1	3.91

Comments:

- As Chair of the NOBCChE's Board, I would like to get NOBCChE involved in this effort.
- Spirited discussion and much collegial agreement.

Workshops: Overview

	Response Count	Response Percent
R&D Budget Analysis for Article 15	12	25.0%
Science and Engineering Societies Influencing the United Nations	25	52.1%
I did not attend a workshop	11	22.9%

Workshop: R&D Budget Analysis for Article 15

	Poor (1)	Fair (2)	Good (3)	Very Good (4)	Excellent (5)	N/A	Average
Session Topic	0	1	1	7	3	0	4.00
Session Format	1	1	4	5	0	0	3.18
Usefulness of Presentations	0	1	3	4	2	0	3.70

Comments:

- I suggest a case study of an R&D budget that was enhanced through a human rights framework in a future session.
- Not a lot of detail.
- Everyone seemed a little confused by the group exercise, and so it took some time for us all to warm up to it. Had more time been allowed for it, we probably could have gone further in depth with the exercise.

Science and Engineering Societies Influencing the United Nations

	Poor (1)	Fair (2)	Good (3)	Very Good (4)	Excellent (5)	N/A	Average
Session Topic	0	2	5	8	9	1	4.00
Session Format	0	5	7	5	6	1	3.52
Usefulness of Presentations	1	4	7	5	4	0	3.33

Comments:

- It could have been better structured; though I enjoyed the informality of it.
- All psychology which leads to the question of whether any other sciences are similarly engaged. If not, why not, one wonders.
- I would have preferred a presentation with time for Q&A rather than a "talk show format" which I think kept things at too superficial a level. I did not learn anything new. Perhaps taking a survey of the audience in advance on what they hoped to learn would enhance the 'talk show' format b/c audience members could get their questions answered. There were some very experienced, smart people presenting and attending so the discussion could have been ratcheted up quite a bit.
- Need more "nuts and bolts" information.

Closing Plenary: "Conserving, Developing and Diffusing Science:" Article 15 and Open Access

	Poor (1)	Fair (2)	Good (3)	Very Good (4)	Excellent (5)	N/A	Average
Session Topic	0	2	5	11	18	9	4.25
Usefulness of Presentations	2	2	6	10	13	9	3.91

Comments:

- Very uneven. Alan was excellent and informative. More information on costs and previous studies should have been included. Limiting participation of participants to written questions and having no open discussion is a very large problem that should be corrected.
- This was confusing and felt like a plug for certain orgs/pubs at times.
- This was my favorite part of the day.
- It was a bit dull; not very engaging, until the end.
- We only needed more time since there were so many questions; although, I would not suggest making the plenary longer. Otherwise, this was a good topic to discuss.
- The topic was not quite large enough for the time - it was very good initially but ran out of steam. The discussion became somewhat repetitive. A better way to handle questions was needed.
- I was disappointed at the apparent lack of progress in reconciling the Article 15 rights of "everyone" and the partially countervailing rights of "creators."
- Interesting format. It is possible that an entire day could be devoted to different aspects of this topic, as it seemed there were many questions unanswered in the end.

Working Group and Committee Meetings: Overview

	Response Count	Response Percent
Welfare of Scientists	6	12.8%
Ethics and Human Rights	2	4.3%
Service to the STEM Community	6	12.8%
Service to the Human Rights Community	4	8.5%
Education and Information Resources	5	10.6%
Outreach and Communications Committee	3	6.4%
I did not attend a working group or committee meeting	21	44.7%

Working Group and Committee Meetings

	Poor (1)	Fair (2)	Good (3)	Very Good (4)	Excellent (5)	N/A	Average
Welfare of Scientists							
Explanation of Current Projects	0	0	1	1	4	0	4.50
Explanation of How You Can Contribute	0	0	2	0	4	0	4.33
Ethics and Human Rights							
Explanation of Current Projects	0	0	0	0	2	0	5.00
Explanation of How You Can Contribute	0	0	0	1	1	0	4.50
Service to the STEM Community							
Explanation of Current Projects	0	0	0	1	4	1	4.80
Explanation of How You Can Contribute	0	0	0	1	4	1	4.80
Service to the Human Rights Community							
Explanation of Current Projects	0	0	1	0	2	1	4.33
Explanation of How You Can Contribute	0	1	0	0	2	1	4.00
Education and Information Resources							
Explanation of Current Projects	0	0	0	2	2	1	4.50
Explanation of How You Can Contribute	0	0	0	1	3	1	4.75
Outreach and Communications Committee							
Explanation of Current Projects	0	0	0	1	2	0	4.67
Explanation of How You Can Contribute	0	0	0	2	1	0	4.33

Comments:

- Welfare of Scientists:
 - Attendees are mostly from the same field. Would be nice to see people from social sciences involved.
- Service to the STEM Community:
 - I will work out some issues and send them to Jessica and Margaret
- Education and Information Resources:
 - I cannot wait to become more involved
 - Excellent meeting.

What would be the most productive way to use working group and committee meetings?

- Have more time for working groups; and don't schedule them all at the same time. There should be more open discussion without raising hands.
- Have more speakers who have useful real-world experience.
- Internal and external awareness and connection development.
- I believe that how they are working now is the best format.
- Strict agenda with time frame.
- Must have a brief meeting after the committee meetings to report back to the whole coalition on the progress of each group.
- Providing specific opportunities for attendees to contribute to the work, which was the case at the session I attended. It was excellent.
- It would have been more productive to have had a more detailed analysis and discussion of the Document to be presented to UNESCO on Art 15.
- This format worked very well in our group - a chance for the working members to get together and discuss next steps.
- Ask Coalition members their interests; how rigorous or academic they think a presentation can be; aim to advance knowledge to people already in the field.
- I think it would be great to have two shorter meeting periods instead of one.
- Two hours was very helpful.

Appendix: General Meeting Evaluations

How did you hear about the Coalition meeting?

	Response Count	Response Percent
Email from AAAS/Program	35	79.5%
Program Facebook Page	6	13.6%
AAAS/Program Website	0	0.0%
Word of Mouth	6	13.6%
Other	11	

Other Responses:

- DC Linktank
- Invited Speaker
- Through being a Coalition member
- Through a member organization of which I am a member
- Student delegate
- Colleague

Affiliation

	Response Count	Response Percent
Professional Society/Association	23	50.0%
University/College	13	28.3%
Government	4	8.7%
Human Rights Organization	0	0.0%
Business/Industry	2	4.3%
Nonprofit	2	4.3%
Press/Media	0	0.0%
Self-employed	2	4.3%

Other Responses:

- Independent
- Student delegate
- Emeritus
- Retired

What was your main reason(s) for attending? (Check all that apply)

	Response Count	Response Percent (of total number of respondents)
To learn how my professional society can become involved in the Coalition	10	20.8%
To learn how I can personally become involved in the Coalition	19	39.6%
To learn more about science, technology and human rights	36	75.0%
To learn how my organization can respond more effectively	16	33.3%
To obtain help in engaging members of my discipline in human rights	11	22.9%
Other (see below)	6	

Other Responses:

- To help develop educational materials on science and human rights.
- To serve as student representative.
- Continued involvement in the working groups and Coalition.
- Presenter.

Overall, how satisfied were you with the meeting?

	Response Count	Response Percent
Very satisfied	29	61.7%
Moderately satisfied	18	38.3%
Neither satisfied nor dissatisfied	0	0.0%
Moderately dissatisfied	0	0.0%
Very dissatisfied	0	0.0%

What aspect of the meeting did you find the most valuable?

- Several of the presentations and the networking opportunities.
- Plenary sessions.
- Meeting people and idea sharing for personal and professional activities to promote human rights using science.
- Openness.
- It was interesting as from the topic, to attempt to make correlation between scientific tools and human rights.
- I used the meeting as an opportunity to gain information that can be used to encourage my organization to get involved.
- I found all aspects helpful. Sorry I couldn't attend both days.
- The interview/interactive format of the workshop on NGOs working with the UN on human rights.

- The management of the questions by some of the moderators.
- Introduction to the subject.
- Working group and the Open Access session.
- Our working group. I also liked the fact that the formal presentations were on one day, the committee meeting on another.
- Plenary presentations - very informative. Networking and informal discussions with other participants.
- The information on Article 15 was most informative.
- As a student, I found everything to be eye opening, particularly the first plenary and the introduction to science and human rights.
- Focused and project goals oriented.
- The first day was very informative. I would have liked to have a more extensive presentation by Frank La Rue.
- Personal narratives of work in this field. Discussions of the philosophical and practical challenges facing scientists regarding human rights. Liked the use of cards for questions.
- Good speakers in the plenary sessions.
- Made me aware of efforts and issues on a different level than I, as a professor and academic scientist, typically engage.
- Learning about how other organizations conduct HR work.
- All of it. Topics were great. Working Group was great.

What aspect of the meeting did you find the least valuable?

- The lack of opportunity for discussion in the program sessions; using written questions, only a few of which can be answered, hinders true interaction.
- The lack of critical thinking about science and its role in human rights and the emphasis on "human rights" that are more beneficial to us as US scientists was frustrating. I don't disagree with the importance of travel particularly for scientists from other countries, but the focus on this made me feel as if we were interested most in the human rights that are best for us, not the hard questions about what we should and should not be doing to promote human rights as scientists.
- Parking
- Involvement of societies with UN.
- I am not sure that submitting questions on cards is an improvement over people moving to the microphone to ask questions.
- The workshop on budgets. But only because this is not relevant to my work. But I found it really interesting.
- Workshops should be workshops with working on the goals provided at the beginning, not that someone gives an answer to a question, which takes alone 10 or even 15min.
- The plenary on open access was limited to literature and the topic became somewhat laborious.
- Still not convinced this is a good frame for looking at the problem of R&D portfolio evaluation.
- Lack of progress reports = lack of progress?
- I am grateful that careful attention is being paid to careful wording, what it means to different communities and why it is relevant. My personal bent though, is to set and learn about ideas, and then pay attention to where the rubber hits the road - how do the rights, policies, laws etc. become implemented and enforced in practice. There was less talk of the latter at the conference.

How can future meetings be improved?

- Allow for real discussion in program sessions; provide more time for working groups with fewer meeting concurrently; and don't waste our time with reports on poor quality studies such as the one on the focus groups.
- Sessions from those who work on human rights and their perspectives more central.
- Be more careful in choosing topic and speakers for plenaries.
- I hope that more scientists or engineers can come to the meeting, even though this is not directly related to their work.
- Consistency is not at all bad.
- Larger meeting spaces for workshops (?)
- It always seems like we just need more time for everything.
- Strict agenda in workshops - new members of the coalition, who want to contribute can listen to the committee meeting (without discussing), getting an impression, what is going on.
- More discussion based sessions.
- Draft report(s) should be sent prior to the meeting so that more productive discussion can be made.
- Finding ways to expand the participation of other academies and societies. This work is not well known.
- Have more time for networking.
- Would like to be able to view video recordings of presentations online after the meeting.

What topics would you like to see covered at future meetings?

- Open Access with speakers who have done research in this area and including different cultural perspectives; meeting the needs of people with disabilities of all kinds.
- Benefits of science.
- Examples of implementation of Article 15.
- I would like to see more discussion on educating youth to benefit from science.
- Educating groups active in human rights issues to the contributions science can make and how to let science know of the needs of those groups.
- An entire session on science, healthcare and human rights.
- Access to information/care for health and mental health.
- I think the topic of the use of science to advance social justice to address mass incarceration, broadband access, and access to new medical technologies would be interesting.
- More on the importance of human rights education and its far reaching implications on both the scientific and humanitarian levels.
- Privacy and its relation to human rights, scientific freedom and Art 15.
- Measures of global and national progress in respecting human rights.
- Climate Change Communication, and directly related to that, invite the AGU (American Geophysical Union) to join the Coalition.
- More on translation.
- Domestic political objections to human rights efforts and means to better public education on these issues.
- Women's rights.
- Status of UN efforts on REBSPA.

Finally, we welcome your testimony on the impact your involvement in the Coalition and/or this meeting has had on you and your work.

- I was impressed.
- Further affirmation of the importance of academic, scientific and professional societies working with the UN on the broad range of human rights issues.
- I initiated contact with the A21 Campaign to discover if it is interested in benefitting its targeted victims of human trafficking from science and technology on a very specific basis. This type of approach is now policy here.
- I always come home inspired!
- Excellent!
- A much needed work is being carried out by the Coalition. It is enormously satisfying to me personally to share this time with like-minded people engaged in the defense of human rights of all of us.
- This was a very interesting experience for me. I am grateful for the efforts of persons at the AAAS and others working on these issues from many angles, in many agencies.