



Christina Scott

Lateral Learning for Science Reporters

An IDRC-supported peer-to-peer mentoring program helps bring science journalists in the Middle East and Africa closer to the professional mainstream.

"The way we see the world shapes the way we treat it."
Geneticist and science broadcaster David Suzuki

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The Development Challenge: Isolated journalists

“We’ve arranged a civilization in which most crucial elements profoundly depend on science and technology,” wrote the American astronomer and science popularizer Carl Sagan. “We have also arranged things so that almost no one understands science and technology. This is a prescription for disaster.”

Sagan’s warning resonates today, as we witness growing doubt, anxiety, and discord in the general public surrounding scientific matters. Perhaps even more than scientists do, laypeople argue about issues like the cause of global warming, or worry about the safety of genetically modified organisms (GMOs) in food, or question the seriousness of the avian flu threat.

Ever since the Catholic Church persecuted Galileo for his heretical theories about the solar system, “objective” science has been fraught with social, religious, philosophical, ethical, and political implications, and has frequently been the focus of passionate public debate. Too often, however, these arguments are impaired by people’s misunderstanding of the science that is at issue.

Now more than ever, when some warn that the very existence of life on our planet may be at risk — and others dismiss that view as being overly alarmist — the general public ought to be well informed about the science that underpins state policies.

Among the important sources of such information are the journalists whose beat is the world of science and technology. In most developed countries, science reporters are abundant and well respected. In most parts of the developing world, however, science reporters are rare and have little prestige. This is unfortunate because some of today’s pressing scientific issues have profound implications for poorer and more vulnerable societies. Witness again climate change, GMOs, and avian flu, as well as malaria, HIV/AIDS, the loss of biodiversity, and other serious concerns.

In poor countries, science journalists frequently lack training, resources, and support. Often, they are deeply mistrusted by scientists and government officials — normally their key contacts. Their services are hardly needed in some countries, where science policy is decreed

by the state, or else is ignored altogether. And they may even feel disconnected from the science carried out in their own backyard, because research results are usually published first in overseas journals.

The fundamental problem suffered by these journalists, in other words, is their isolation.

The Idea: Peer-to-peer training

With support from Canada’s International Development Research Centre (IDRC), Britain’s Department for International Development, and the Swedish International Development Agency, the World Federation of Science Journalists (WFSJ) is making a good start on breaking down this isolation. The WFSJ aims to address at least one of the practical hurdles faced by these professionals in the Middle East and Africa: their low levels of training.

Seminars, workshops, courses, and field trips can all be effective ways to teach, but these measures are often one-time, usually expensive to conduct, and may offer little chance for instructors to give close attention to individual students. Instead — recognizing that “networking” is an effective tool in fostering communication for development — the WFSJ has engaged seasoned science journalists to share their knowledge and expertise with their less-experienced colleagues on a continuing, long-term basis.

Thanks to email and other modern links, science journalists anywhere can readily exchange regular messages for the purpose of “peer-to-peer mentoring.” Now, novice professionals can easily learn from veterans in the trade the skills they will need to do their job well.

Capacity Building: From sources to styles, verbs to videos

And what are those skills? The mentoring program aims to build competence in just about every aspect of a science journalist’s practice.

It teaches apprentice reporters how to approach the basic task of gathering facts. They learn about assembling an informal network of sources by building confidence with these contacts. They are taught to be “science-minded” and to use initiative in chasing down compelling stories. As Kenyan mentor Otulah Owuor says, “Journalists need skills to



Cover photo:
Armand Faye (hat) and
clockwise from his right:
Makeba Tchibozo (Benin),
Jérôme Bigirimana (Burundi)
and Aimable Twahirwa (Rwanda)

expand their sources of information and thus have sustainable story ideas.”

The program stresses the value of maintaining good relations with editors. Novice journalists are taught that they must first convince these gatekeepers that their science stories are in the public interest — especially when these stories are new and may require an investigatory approach — then satisfy the same editors by meeting deadlines with substantiated facts, clean copy, and punchy headlines.

The program reviews fundamental writing skills, such as how to simplify style and avoid jargon, “localize” a story, and educate and entertain the reader at the same time. The trainees learn how to translate scientific vocabulary into local languages, and even pick up tips on operating the specialized equipment needed for recording and transmitting audio and video files.

On the Ground: Learning by doing

The program runs until 2009. Its opening class comprises 60 budding science journalists from 35 countries in the Middle East and Africa, working in English, French, or Arabic. Each person has been matched with one of 16 more experienced professionals. The four-to-one ratio allows each mentor to devote plenty of attention to each learner.

Such close bonds are possible, despite the distances separating the individuals, thanks to modern communication technology. The program kicked off with telephone conversations in which people introduced themselves and agreed on the details of their affiliation. Subsequent links — to exchange drafts and feedback — are being conducted by way of the WFSJ’s private website.

The mentors are motivated by more than simple goodwill or the spirit of volunteerism. They are paid for their effort. They undergo rigorous training. And program coordinators closely monitor their performance.

Similarly, the mentored journalists are expected to strive for a high standard. They must produce for their employers articles and other professional materials on a regular basis, and share the drafts with their mentors.

The whole group first met face-to-face in November 2006, at a WFSJ workshop organized

alongside the Nairobi meeting of the United Nations (UN) Framework Convention on Climate Change. This short course allowed all participants to become better acquainted, but also gave them a splendid opportunity to polish their mentoring relationship while doing some actual reporting of a high-profile event.

During the workshop, each mentor sat down for a one-on-one chat with each assigned learner. Guest lectures offered advice on how to navigate the complexity of the UN conference and to identify the best stories. As well there were group discussions, field trips to research facilities and social events.

The workshop also test-launched the first two lessons of the WFSJ’s pioneering online course in science journalism. Its curriculum is specially adapted to the needs of reporters working in developing countries.

Since the Nairobi meeting, the participants have been writing, reading, advising, and learning. The mentored journalists have been uploading their drafts to the website, and the mentors have been responding. As well, the mentors have been passing along other useful information, such as suggestions about networking with other reporters, setting up journalists’ associations, or finding scholarships.

The Impact: By-lines, resources, connections

Although the project has been up and running just a short time, much has been achieved or is already in the works.

- Following the UN conference, journalists published articles about that event for news media in their home countries or abroad (including in *Nature*, one of the world’s most prestigious science journals). Stories are also being posted on IDRC’s website. The journalists have learned how to market their products to a variety of media, and are now getting published in more than one place.
- To complement its website, the WFSJ is gradually assembling a complete package of working materials. In the pipeline are booklets advising “how to mentor science journalists” and “how to set up and manage an association of science journalists.” Further lessons in the online course are being



“I hope the peer program will give me a chance to highlight important science issues in my own country, and at the same time help me develop an international outlook in the stories I write.”

Esther Nakkazi, reporter for The EastAfrican newspaper

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"I think Arab science journalists have been isolated from their colleagues elsewhere for too long. This program will give them the opportunity to see what's out there in the world in terms of various forms of writing, topics to cover, and opportunities in the form of scholarships and training."

WFSJ coordinator

Nadia El-Awadi

prepared: the curriculum will ultimately expand to 12 lessons.

- Not only are individual science journalists becoming better connected, but so are their professional associations. In the Middle East and Africa, new national and regional groups are being formed and existing ones strengthened, while some have been twinned with more experienced bodies abroad (notably, in light of the current geopolitical climate, the Arab Association of Science Journalists has linked up with the US National Association of Science Writers). Thus the isolation is being broken at every level. As WFSJ Executive Director Jean-Marc Fleury puts it, "We're essentially creating a network. We're putting people in touch."
- Although the scheme delivers top-down instruction, at the same time it fosters the sharing of knowledge in the opposite direction. In particular, mentors from the developed world can learn from the experiences of their colleagues living in less-developed places. And mentors based in the region — who are the majority in this group — benefit from the two-year training-of-trainers course. Says Nadia El-Awadi, coordinator for the Middle East and North Africa, "Everybody stands to gain."

Future Challenges: Wider horizons

While the overall program is off to a brisk start, a few of its members remain frustrated by the hurdles associated with living in a developing region. Some journalists, for example, have no choice but to work from commercial Internet cafés that may lack the capacity to handle their large digital files. In some districts, basic research resources like cheap and reliable telephone service, libraries, and even dictionaries can be scarce.

Where possible, the WFSJ will work around these obstacles. It plans, for instance, to explore the use of the Skype "voice over Internet protocol" system to reduce the cost of telephone calls.

Participants continue to have opportunities to travel and meet colleagues. During spring 2007, for instance, a group of Arab journalists journeyed to Morocco to report on IDRC projects there, and the WFSJ holds its fifth world conference in Melbourne, co-hosted by the Australian Science Communicators.

A long-term goal for the program will be getting African and Middle Eastern science reporters to cover more local stories, and so better balance the flow of information between developed and developing regions.

Meanwhile the WFSJ looks forward to a second round of the mentoring program and aims to introduce the method in Latin America and Asia. Already other organizations are looking at replicating the WFSJ's approach.

Canada's International Development Research Centre (IDRC) is one of the world's leading institutions in the generation and application of new knowledge to meet the challenges of international development. For more than 35 years, IDRC has worked in close collaboration with researchers from the developing world in their search for the means to build healthier, more equitable, and more prosperous societies.

International Development Research Centre
PO Box 8500
Ottawa, Ontario, Canada, K1G 3H9
Tel: 613-236-6163
Fax: 613-238-7230
Email: info@idrc.ca

www.idrc.ca