

## **ICRSME Moments: International Science and Mathematics Collaborations Fostered by ICRSME Consultations**

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In this editorial, we share the voices of three long-time ICRSME friends. We interviewed each to get their personal experiences of collaborating with educators in ICRSME Consultation host countries. In what follows, Dr. Pamela Fraser-Abder recollects how ICRSME was conceived to foster international research collaborations. Then, Dr. Michael Kamen and Dr. Kathy Horak Smith share their personal collaborative experiences with host-country schools that emerged from ICRSME Consultations.

### **Pamela Fraser-Abder**

Dr. Pamela Fraser-Abder, Professor Emeritus of Science Education at New York University, has been involved with ICRSME from its inception. She shared with us how the first ICRSME consultation developed from an identified need to bring various educational researchers together to collaborate and support each other's work. In 1984, both Dr. Fraser-Abder and Dr. Arthur White, Emeritus Professor of Science, Mathematics, and Technology Education at The Ohio State University, were independently researching education throughout Latin America and the Caribbean. This similar research interest was what initiated the idea of ICRSME:

It started with [Dr. White], in the U.S., getting funding to come down to Trinidad to work with teachers ... he was also working in other Latin America and Caribbean countries. I was in Trinidad at that time and had gotten some funding from UNESCO to do a project on research going on in the Caribbean and Latin America. And what I was finding was that people were literally sitting in their offices, next to each other, and not knowing what research [each other] were doing. And many times their research could be supportive of one another. So, based on that, I got UNESCO to fund a [source book](#) on science education research and the Caribbean.

Soon after, Dr. Fraser-Abder presented her work at a meeting of the National Association for Research in Science Teaching (NARST), which is where she and Dr. White met. They also interacted with educators from Panamá and Costa Rica and talks began about how they could bring together these various silos of educational research to share and collaborate with one another.

[The group] went to Ohio and talked about our research and what we're doing and how we can work together and how we can form this group. [Someone asked] 'Why don't we have a meeting?' And I said, 'Okay, I'll do it in Trinidad.' So that's how the first ICRSME meeting was started.

As Dr. Fraser-Abder described it, the vision that developed was to:

Pull people at the university and school level together so that we could learn from each other and share the research we had been doing at universities with teachers in classrooms. And the idea was to develop a sort of conference, which was different from the run of the mill conference where you went, you sat down, you listened to people, and then you left. We thought we needed to be more immersed in the culture of the country, so that we got a better understanding of what was happening in each country.

After moving to the U.S., Dr. Fraser-Abder's vision of what ICRSME could be began to develop further:

I was teaching in New York City, and I would look around my class and I would have [education students] literally from around the world in the classroom ... people from Latin America, the Caribbean, India, Europe ... and it was their first interaction with somebody who didn't look like them. And they had no idea about the culture of the different peoples that they were going to be teaching. You know, where they came from, what did they eat? What was their religion? What were their views on certain things? So, that sort of made me focus even more on ICRSME as a place where we can learn about the cultures of people who we were meeting in our classrooms.

In what follows, two ICRSME friends describe their own collaborative experiences that developed after attending ICRSME Consultations.

### **Michael Kamen**

Dr. Michael Kamen, Professor of Education at Southwestern University, has been involved with ICRSME for almost as long as Dr. Fraser-Abder. He first attended an ICRSME Consultation in 1991 (the third ICRSME Consultation), while still a doctoral student at the University of Texas (UT) at Austin. In our interview, he shared with us how he and another graduate student had heard that some professors from UT were going to go to a meeting in Merida, Mexico and decided to join them. He described how this decision serendipitously led to collaboration between graduate student and established science educator:

I remember the first meeting, Pamela [Fraser-Abder] was presenting on something related to my dissertation. And so I ended up connecting with her and talking about it. I don't think I had done a proposal, but I ended up doing a piece of the presentation with her.

Dr. Kamen described how this represented the qualities of ICRSME that kept him involved ever since:

What I loved about [ICRSME] from the start is it was small, and inclusive. I felt like I got to know science and math educators ... at all levels, from some of the very well published names in the field, undergrad students, and everything in between.

He also emphasized how much he enjoyed visiting local schools in host countries, a common activity at ICRSME Consultations that sometimes lead to international collaborative opportunities. He describes one such experience that happened while attending the tenth ICRSME Consultation in Concepción, Chile in 2004:

The Thomas Jefferson School was a place we visited ... I had met Greg [Trezbiatowski], who was the headmaster of the school ... And I ended up teaching a summer course for Southwestern [University] students in Concepción. I took [five or six] students down ... it's an English immersion school for Chilean kids and they're eager to have native speakers of English at the school ... and so my students were placed in classrooms ... Greg had arranged for families for them to stay with, they were there for three weeks. ... It's one thing neat about South America – our students are off for summer and you can do a summer course and their schools are in session.

The students were able to experience teaching in a foreign country and were able to contrast the learning environment with those with which they were familiar at home. Such rich experiences can only help developing teachers recognize the variation among learners in diverse environments.

### **Kathy Horak Smith**

Dr. Kathy Horak Smith, Professor at Tarleton State University, shared one of her interests with us: “Wherever I travel, I like to be able to see the schools.” Attending an ICRSME Consultation provided her this possibility. When we asked how ICRSME is different from other organizations, Dr. Smith shared:

I see [ICRSME] as different in the fact that it is international, and it is not International and in the United States, it is [hosted in a country outside of the United States]. And when we go there, whatever country it is, teachers from the public schools and [faculty from] the universities [attend]. We get to meet people that are teaching in the public schools in those countries. ... That for me is the biggest excitement about ICRSME.

Dr. Smith’s experience attending her first ICRSME Consultation in Nassau, Bahamas in 2006 exemplifies the opportunities she described. She came to the ICRSME Consultation not knowing anyone and left with the foundation for a long-term collaboration.

While in the Bahamas, Dr. Smith and several other ICRSME attendees, including Dr. Michael Kamen, asked Bahamian teacher attendees if they could visit their local schools. The school visits initiated a partnership between Dr. Smith and one of the teachers. After the Consultation, Dr. Smith reached out to her Bahamian colleague and asked if she could return for a visit. For the next five years, Dr. Smith visited this teacher’s school annually for a week at a time. On her visits, she taught model lessons (Figure 1) and conducted professional development, addressing needs identified by her colleague (e.g., problem solving). Dr. Smith also talked about what she learned from these experiences:

I learned from the Consultations whether I go into the schools or just listen to the teachers, during sessions or [outside of the] sessions. We visit to learn about their schools and how they [teach] and then I can talk about that in my own classroom [as a teacher educator].

She further explains that mathematics and mathematics instruction are not universal. ICRSME provides attendees the opportunity to learn about different cultures beyond a typical tourist experience through its site-based nature with chances to engage with local teachers and schools.

**Figure 1**

*Dr. Smith Teaching a Mathematics Lesson in the Bahamas*



### Conclusion

As we wrote about in the previous [editorial](#), collaboration is an integral part of ICRSME, both in how ICRSME was formed and in the experiences of Consultation attendees. The stories shared in the present editorial describe such collaborations from an organizational and individual level. Dr. Fraser-Abder described how the origin of ICRSME stemmed from similar research being conducted internationally. Both Drs. Kamen and Smith talked about partnerships resulting from school visits while attending ICRSME Consultations. These collaborations flourished beyond the Consultations themselves.

In our conversation with Dr. Kamen he talked about *ICRSME moments*, a term he coined to mean “moments of interaction, culturally and unexpected.” For Dr. Kamen, examples of such moments included meeting Dr. Fraser-Abder as a graduate student or spontaneously asking local teachers if he and some ICRSME colleagues could visit classrooms. We hope that you have the opportunity to attend an ICRSME Consultation, whether ICRSME XVI in Panamá City, Panamá or a future Consultation, to interact with ICRSME friends, potentially establish collaborative experiences, and make your own ICSRME moments.