

# **DRAFT AGENDA US South Korea Math Education Workshop**

**July 15-17, 2012**

**Sunday, July 15 Overview (4:30 – 6:30)**

15 minutes Welcome & Introductions

*Korea – Oh Nam Kwon*

*US – Rick Scott, Chair, US National Commission on Math Instruction*

*Myonghi Kim, US National Commission on Math Instruction*

## **Session 1 - The Math Curriculum in Korea and the US: Key Issues**

- An overview of the background and framework for the development of each country's math curriculum
- Issues and concerns in designing math curriculum

*Korea – Hee Chan Lew, Man Goo Park, and Jeong Suk Pang*

*US – Janine Remillard, University of Pennsylvania*

*Brenda Gardunia, Frank Church High School, Boise, Idaho*

Background presentation from each country. (30 minutes per country)

Round Robin with all participants - What strikes you as similar and what is different from what happens in your country?

- Reflection from Mathematicians (15 minutes)

*US - Roger Howe, Yale University, ICMI Executive Committee*

*Korea - Sung Je Cho, Seoul National University (Retired)*

**Dinner** 6:30 – 7:30

## Monday, July 16 – Curriculum

### Session 2 – New Curriculum and Textbooks (8:30 - 10)

- What are the main concerns (or main focus) in the development of the curriculum?
- What issues have been discussed or debated among curriculum developers, teachers, teacher educators, and scholars regarding the curriculum?
- How have textbooks been developed for the curriculum?
  - In particular, what are the main ideas used to support the learning of fractions?

South Korea (20 minutes): *Oh Nam Kwon, Mi-Kyung Ju, Jung Suk Park, and Ji Hyun Park*

Round Robin from the US responding to “What do you see as challenging in what South Korea does for the US and/or what is promising?” (20 minutes)

Open Discussion (50 minutes)

**Break** 10-10:30

### Session 3 – New Curriculum and Textbooks (10:30-12)

- What is different about the CCSS from the standards or curriculum frameworks that have been in place?
- What issues have surfaced as the community begins to implement the CCSS?
- How have textbooks been developed for the curriculum?
  - In particular, what are the main ideas used to support the learning of fractions?

US Presentation ((20 minutes)

*Mary Kay Stein, University of Pittsburg*

*Stacie Kaichi-Imamura, Hawaii State Department of Education*

Round Robin reaction from South Korea responding to “What do you see as challenging in what the US does for South Korea and/or what is promising?” (20 minutes)

Open Discussion (50 minutes)

Reflections on sessions 2 and 3

US - *Hy Bass, University of Michigan, Past President of ICMI*

Korea - *Kyoo Hong Park, Seowon, President of Korean Society of Math Ed*

**Lunch** 12:15 – 1:00

## **Session 4 – Curricular Tasks (1 – 2:30)**

- How are curricular tasks designed and what criteria are used?
- What is the role of learning trajectories in the development of curriculum?
- How do you assure procedural competency as well as conceptual understanding in the design of the curriculum?

*Kyungmee Park, Hongik University; Kyeong Hwa Lee, Seoul National University  
Ji Won Son, University of Tennessee at Knoxville; Dongjoong Kim, Korea U  
Kyong Mi Choi, University of Iowa (20 minutes)*

Round Robin reaction from US responding to “What do you see as challenging in what South Korea does for the US and/or what is promising?” (20 minutes)

Open Discussion (50 minutes)

**Break** 2:30 – 3:00

## **Session 5 – Classroom Practice (3:00 – 5:00)**

### **Elementary:**

Presiders: *David Barnes, National Council of Teachers of Mathematics  
Mi-Kyung Ju*

- 5 minute US elementary video clip with subtitles.
- 2 minute writing what most surprised or interested you in the video.
- 5 minute Korea elementary video clip with subtitles
- 2 minute writing what most surprised or interested you in the video.
- 30 minute Round Robin reaction from all participants

### **Secondary:**

Presiders: *Jung Hyunvi, Purdue University  
Rae Young Kim*

- 5 minute US secondary video clip with subtitles
- 2 minute writing what most surprised or interested you in the video.
- 5 minute SK secondary video clip with subtitles
- 2 minute writing what most surprised or interested you in the video.

Round Robin reaction from all participants (30 minutes)

Open Discussion (45 minutes)

**Dinner** 6:00 – 7:00

## **Tuesday, July 17 – Teachers & Curriculum**

### **Session 6 – Teaching Practices in the US (8:30 – 10)**

- How do teachers work together, if at all, in thinking about how to enact the intended curriculum? (i.e., cooperatively planned lessons, professional learning communities)
- What issues does this raise with respect to status, school support, equity across grade levels, schools, and districts?

US Presentation ((20 minutes)

*TBA*

*Laura Ann Hulsebus, Alpenglow Elementary Anchorage, Alaska School District*

Round Robin reaction from US responding to “What do you see as challenging in what the US does for South Korea and/or what is promising?” (20 minutes)

Open Discussion (50 minutes)

**Break** 10-10:30

### **Session 7 – Teaching Practices in South Korea (10:30 – 12)**

- How do teachers work together, if at all, in thinking about how to enact the intended curriculum? (i.e., cooperatively planned lessons, professional learning communities)
- What issues does this raise with respect to status, school support, equity across grade levels, schools, and districts?

South Korea Presentation (20 minutes):

*Gooyeon Kim,*

*Nayoung Kwon,*

*Jae Hong Shin*

Round Robin reaction from US responding to “What do you see as challenging in what South Korea does for the US and/or what is promising?” (20 minutes)

Open Discussion (50 minutes)

**Lunch** 12-1

## **Session 8 – Technology to Support Teachers and Students (1 – 2:30)**

- How is technology being used to support the teaching and learning of mathematics?
- What is the role of research in how technology is being implemented?

US Presentation (20 minutes)

*Johnny Lott, University of Montana (Retired)*

*John Staley, Baltimore County Schools*

Round Robin reaction from South Korea responding to “What do you see as challenging in what the US does for South Korea and/or what is promising?” (20 minutes)

Open Discussion (50 minutes)

**Break** 2:30 – 3:00

## **Session 9 – Reflection and Sharing (3:00 – 4:30)**

Each country will meet to discuss what they have learned and what questions remain to be clarified (30 minutes)

US Presentation on what has been learned and what questions remain to be answered (15 minutes)

South Korea Presentation on what has been learned and what questions remain to be answered (15 minutes)

Round Robin with each participant giving a closing comment (30 minutes)

**Dinner** 6:00-7:00