

Are we doing Lesson Study right? Major roles of knowledgeable others

Ninth Annual Lesson Study Conference

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Lesson Study Participants (Japan)

- ✿ Classroom Teachers
- ✿ School Administrators
- ✿ Outside Advisor
- ✿ Lesson Study Promotion Committee
(School-Based Lesson Study)
- ✿ Organizer/Sponsor (Volunteer
Groups)



Lesson Study Participants (US)

- Classroom Teachers
 - School Administrators
- Facilitators
 - Content Coaches
 - PD providers
 - College/University Faculty
- Outside Advisors



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Lesson Study Participants (US)

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- ◆ School Administrators
- ◆ Facilitators/Moderators
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 - ◆ PD providers
 - ◆ College/University Faculty
- ◆ Outside Advisors

Knowledgeable Others

All non-classroom teacher
participants of lesson study.



Role of Outside Advisors

Outside Advisors

(Lesson Study Research Group)

- ❖ Also known as the “outside examiner,” “invited advisor,” or “reactor”
- ❖ This person is usually an outside expert or researcher, who has been invited to occasionally advise the group.



Role of Outside Advisors

- ❁ The outside advisor serves three purposes: (LS Research Group)
 - 1) to provide a different perspective when reacting to the lesson study work of the group
 - 2) to provide information about content, new ideas, or reforms
 - 3) to share the work of other lesson study groups.



Role of Outside Advisors

Other roles:

- ❖ Cheerleader
- ❖ Guinea pig
- ❖ Guest lecturer
- ❖ etc.



Knowledgeable Others: What do they contribute to LS?

- ❖ Broader perspective
- ❖ Specific knowledge
- ❖ Discussion facilitator



Knowledgeable Others: Teachers' Perspectives

- Knowledge of the content
- Experience with lesson study
- Ability to convey a sense of collegiality in working toward a common goal
- Generosity in sharing expertise, experiences, larger perspective
- Respect for teachers and students as learners, for what each person brings to the process
- Sense of humor, warmth



Knowledgeable Others: Requirements for effective KO

“Knowledgeable Other” must be like a master teacher – s/he must pay attention to the learners (teachers participating in the lesson study), understand where they are in terms of their understanding of mathematics teaching and learning, and provide appropriate guidance to the learners.



Knowledgeable Others: Requirements for effective KO

- ❖ “Learning” mind set: as a member of a professional learning community
- ❖ Respect
 - ❖ Teachers
 - ❖ Students
 - ❖ Subject Matters
- ❖ Ability to “read” the audience
- ❖ Communication
 - ❖ LS group members
 - ❖ Administrators & other key supporters
 - ❖ Facilitator/Advisor



Knowledgeable Others in Japan

- ❖ College/University professor
 - ❖ mathematician
 - ❖ mathematics educator
 - ❖ others
- ❖ District/Prefecture supervisor
- ❖ Principal from other school
- ❖ Teacher from a university affiliated school
- ❖ Others



Knowledgeable Others in the U. S.

- ❖ University/College professors
- ❖ District/state supervisors (perhaps from neighboring district/state)
- ❖ Teachers - experienced lesson study practitioners



Knowledgeable Others in US

- ◆ University/College Professors
- ◆ District/State supervisors
- ◆ Content Coaches
- ◆ PD providers

Knowledgeable Others: Some Issues

- ❖ Knowledgeable others must be useful for your lesson study
 - ❖ Communicate your needs and expectations
- ❖ Can a person play both roles: facilitator & advisor?
- ❖ Professional development of knowledgeable others



Usefulness of Knowledgeable Others

- ◆ How do lesson study groups identify their needs?
- ◆ How do lesson study groups locate useful knowledgeable others?

- ◆ We need a strong network of LS practitioners

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Facilitator & Advisor

- ❖ Potential Advantages
 - ❖ Familiarity
 - ❖ Availability
- ❖ Potential Disadvantages
 - ❖ May not be able to provide a broader perspective
 - ❖ May not possess a particular expertise



Is Knowledgeable Others Essential to Lesson Study?

- ◆ Which knowledgeable others?
- ◆ Are facilitators sufficient?
- ◆ What do outside advisors add to lesson study?

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Personal Reflections

- ◆ What do I say before the lesson?
- ◆ What do I observe during the lesson?
- ◆ What do I focus during the post-lesson discussion?
- ◆ What do I say?

Hatsumon: The Art of Crafting Good Questions

- ◆ Questions we want students to ask themselves.
- ◆ Questions that approach the essence of the subject matter and process of learning.
- ◆ Questions that students are not yet ready to ask on their own.

Outside Advisors as Teachers

- ◆ Questions we want **teachers** to ask themselves.
- ◆ Questions that approach the essence of the subject matter and process of learning **and teaching**.
- ◆ Questions that **teachers** are not yet ready to ask on their own.

Making Final Comments Two Pronged Approach

- ◆ What can we do to improve this lesson?
- ◆ What “big idea” about mathematics teaching and learning can we gain from this lesson and discussion?

Outside Advisors as Teachers

- ◆ What do teachers know? What do they not know yet?
- ◆ Anticipate
 - ◆ How the lesson may develop
 - ◆ What teachers might observe/say
- ◆ “Learn 10, then discard 9 to teach 1.”

Professional Development of KO

- ✿ Study school mathematics and how students learn mathematics
[*kyozaikenkyu*]
- ✿ Develop a disposition to think about broader/general issues
- ✿ Teach lessons
- ✿ Observe lessons - develop eyes to see lessons



Professional Development of KO

- ✿ Participate in lesson study open houses and listen to other outside advisors' comments
- ✿ Communicate with others who serve as knowledgeable others



Professional Development of KO Challenges

- ◆ Limited opportunities to attend Lesson Study open houses
- ◆ No “community” of knowledgeable others

Professional Development of KO Proposals

- ◆ A national organization of lesson study practitioners
 - ◆ Open House announcement
 - ◆ Making LS more public
- ◆ Publishing final reports
 - ◆ Opportunities to “practice” commenting
 - ◆ Reading the summary comments by respective outside advisors