

How teachers join LS in Kazakhstan schools

Toshiya CHICHIBU

In 2013, from April to July, I visited 8 cities in Kazakhstan (Astana, Kokshetau, Semey, Oskemen, Almaty, Taraz, Qyzylorda)



My objective was coaching LS to NIS teachers.
Center of Excellence managed me.

An example of LS meeting focus on pedagogy

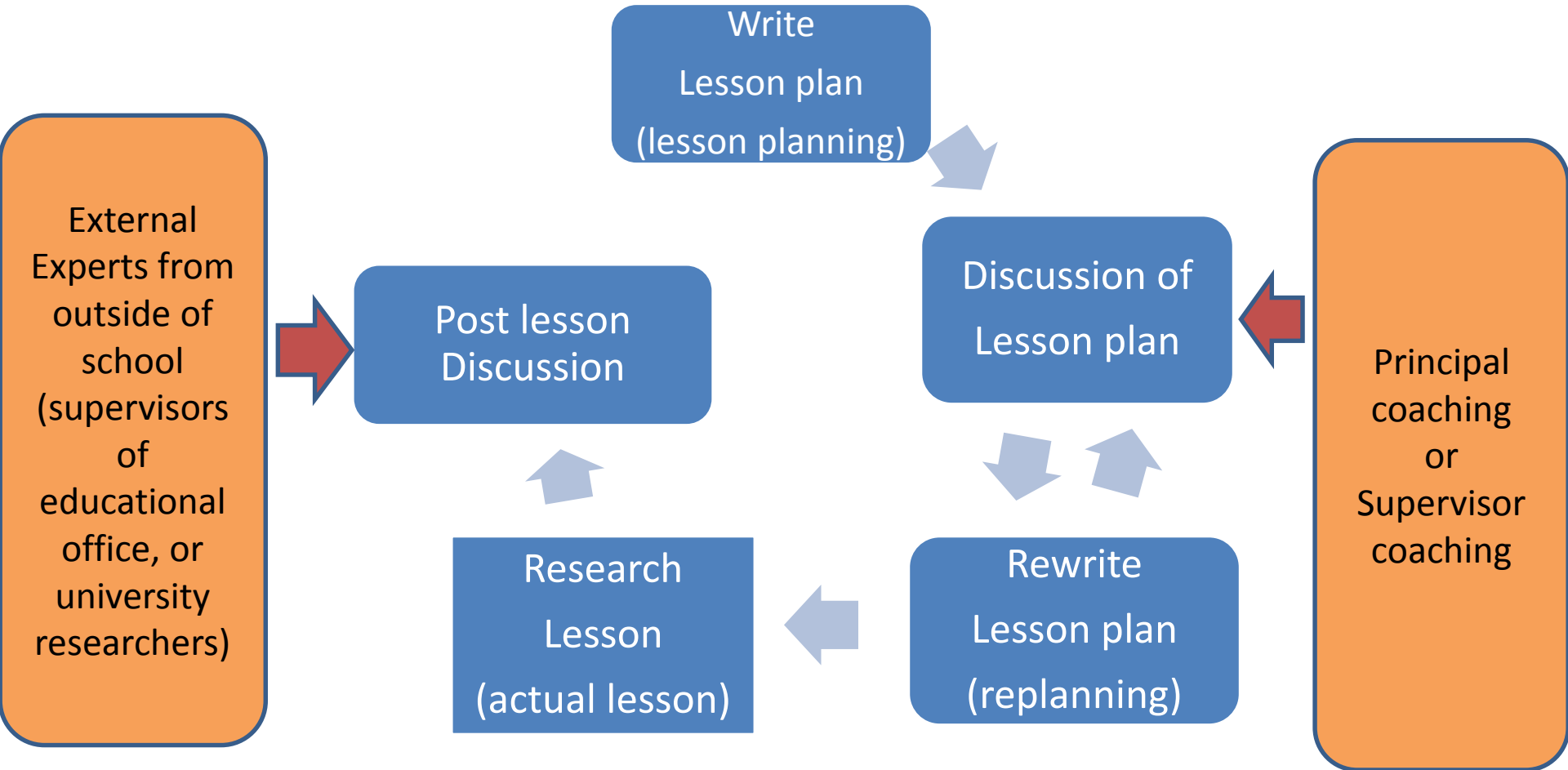
- The lesson was well prepared
- A guest teacher acted as he was assaulted
- The teacher showed students a SF movie in which people are locked in a dome
- After showing the movie, the teacher instructed students how to use “like”
 - It’s like he is assaulted
 - It’s like to be locked in a dome
 - It’s like yesterday

An example of LS meeting focus on pedagogy

In the post lesson discussion, many participants criticized the lesson

- “I don’t like the teacher with over acting which made students to be scared”
- “I don’t like the movie which shows stimulating scene, such as, a cow was cut by a dome, a plane was fallen when it crashed into the dome”
- “I didn’t observe the lesson, because I can’t understand English”

Process of Lesson Study



A typical Japanese school conducts lesson studies several times a year.

In Lesson Study, one teacher volunteers to be in charge of research lesson, write a lesson plan about one month before the research lesson.

Then, he/she introduces his/her lesson plan in a meeting in which the teachers of the same grade or same subject area get together.

The teacher then rewrites the lesson plan based on the discussions with other teachers.

In some cases, the cycle of meeting and rewriting is repeated several times.

In some other cases, the teacher asks for feedback from a supervisor of the school board for improving the lesson plan.

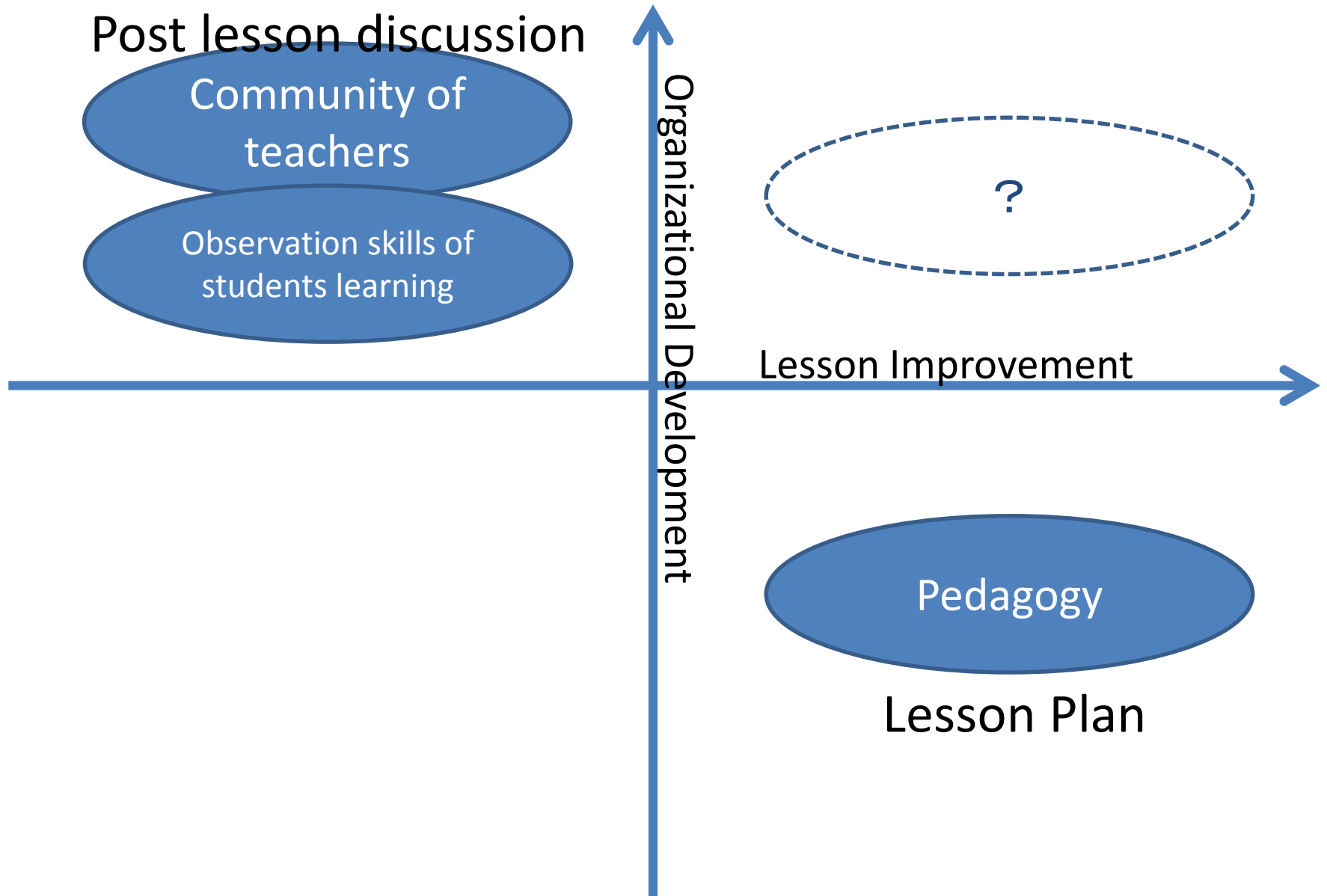
At the research lesson, the teacher conducts a lesson in his/her class following the lesson plan.

Teachers in the entire school, or teachers in same grade level or subject area, observe the research lesson.

After the research lesson, the instructor and observers discuss the research lesson.

Sometimes external advisors such as supervisors of the school board or university professors, are asked to join the discussion, and asked to give some advice to the teachers who participated in the meeting.

What teachers emphasize on the lesson study



LS focus on lesson plan

- Improve pedagogy of the research lesson teacher, and teachers who join the LS discussion
- **The relationship between teachers tends to become stern**
- There are times when the teachers observed the lesson all point out its shortcomings. Criticizing a lesson is much easier than implementing one
- In such a LS discussion, the research lesson teacher has nothing but a negative experience, and nobody benefits.

LS focus on post lesson discussion

- The ideas of individual teachers are respected.
- Different teachers have different views of the students' engagement, and the post-lesson discussion allows teachers to foster skills to heighten their perception of student learning.
- Some teachers are dissatisfied because the pedagogy is not clear.

1st type LS focus on pedagogy

- The participants will focus on the lesson plan, instructional tools, and instructional skills.
- The LS team is organized by teachers who have same subject specialty.
- It is preferred that **an outside coach** who has high competence in the subject be invited to instruct the LS team with a high level of pedagogy.
- Otherwise, an expert teacher in the LS team will be the leader.
- The coach have to facilitate LS members to improve their pedagogy and try to make them respect each other.

1st type LS focus on pedagogy

In the lesson plan meeting

- A lesson plan meeting prior to the open research lesson is important to improve participants' understanding of the pedagogy.
- Basically, participants try to accept what the instructor want to do in the research lesson.
- The participants try to improve the lesson plan.
- In the meeting, it is important to improve participants' understanding of the pedagogy.



2008/10/28

1st type LS focus on pedagogy

In the observation of the lesson

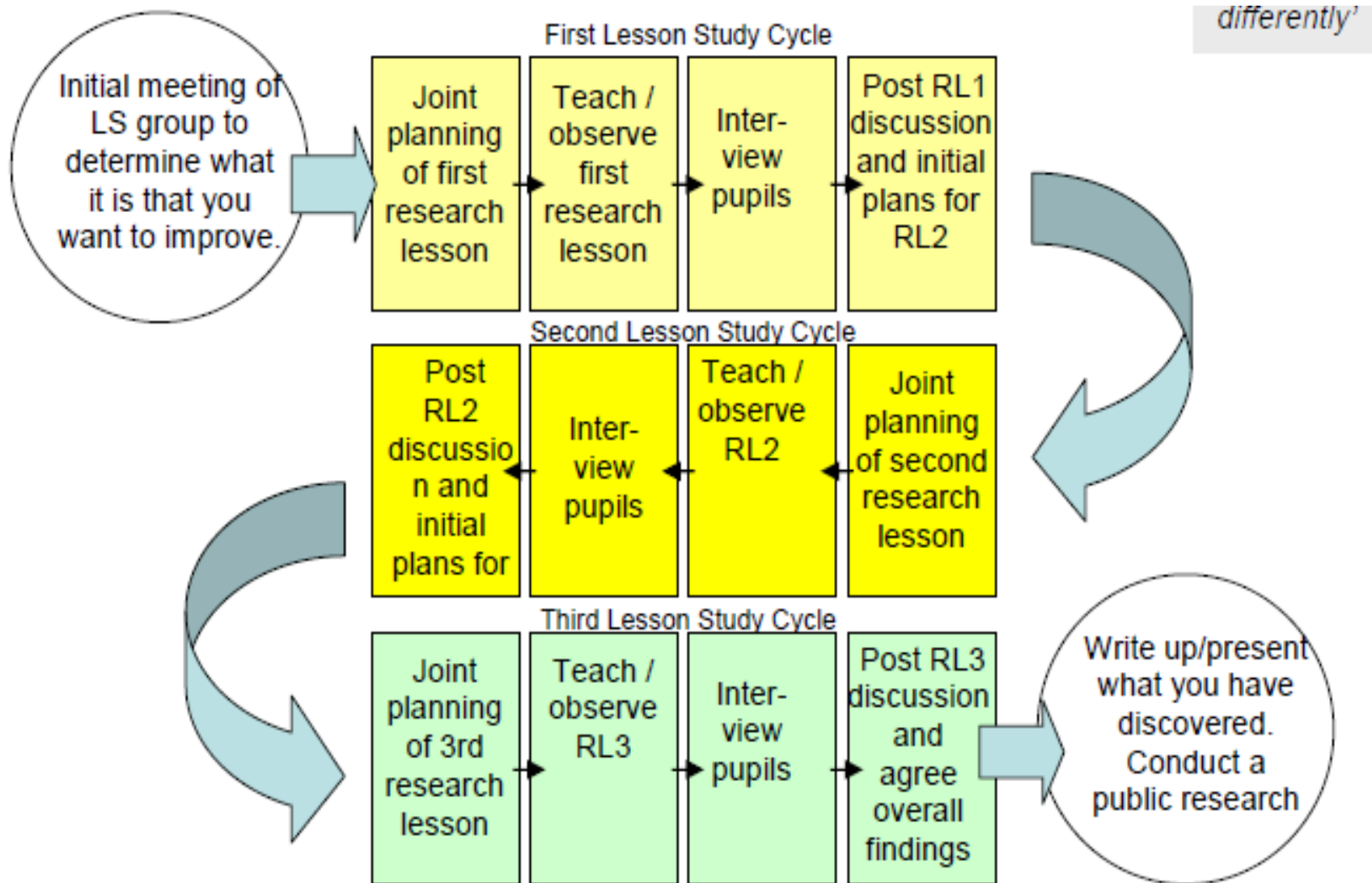
- When the research lesson is opened, observers should focus on how the instructor teaches the students.
- The participants try to observe how the lesson plan works or not.
- If there exist some difficulties, take notes how students learned in the lesson.

1st type LS focus on pedagogy

In the post lesson discussion

- The teachers who observed the research lesson will share their findings, which will improve the lesson plan, instructional skills, or pedagogy of the research lesson. That meeting can improve participants' pedagogy simultaneously.
- If there exist some difficulties in the lesson, discuss how to improve the lesson.
- The teachers who join the post-lesson discussion should **try not to evaluate or criticize the lesson but to improve the lesson.**
- In the 2 cycle LS, the instructor will rewrite the lesson plan for the 2nd lesson.

2 or 3 cycle LS by Pete Dudley



1st type LS focus on pedagogy

In the post lesson discussion

- The outside coach will give comments to promote improvement of the pedagogy of all participants, including the research lesson teacher.
- In order to improve the pedagogy of the research lesson, teachers must have **connoisseurship of the curriculum, that is, understanding of disciplinary concepts and epistemological foundations.**
- Connoisseurship of the curriculum can be obtained by meeting with colleagues, but it is necessary for someone to have deep understanding of it.
- If connoisseurship of the curriculum can be shared by teachers, the level of discussion and lesson may improve.

LS focus on post lesson discussion

- Two types exist.
- One is to improve a community of teachers.
- The other is to improve the observation skills of student learning.
- Both type of LS focus on reflection skills of teachers more than pedagogy.

2nd type LS focus on community

- In order to improve a community, participants have to **respect each other**; they have to accept all the ideas of others, whether or not the ideas are agreeable.
- The atmosphere should be kept warm, and participants should try to be familiar with each other. In order to do that, the role of a facilitator is important.
- The facilitator might be an expert teacher from the school who is familiar to the participants.

2nd type LS focus on community

- In this type of LS, teachers don't value the lesson plan. Therefore, many schools will skip the lesson plan meeting prior to the open research lesson.
- In the post-lesson discussion, participants should try not to evaluate the lesson but to improve the pedagogy of the lesson. It is difficult not to criticize the instructor when the participants focus on pedagogy. Therefore, it may be better for the meeting to **focus on student learning** or the findings of the participants by observation.

2nd type LS focus on community

- In this type of LS, workshop is recommended.
- In the workshop, participants write their findings of the lesson on stickers and put them on to the poster paper.
- Stickers which show similar ideas can be grouped in a circle with a title. This shows the features of the lesson.
- This process is the analysis of the lesson. Participants can share their findings without a nervous atmosphere.





3rd type LS focus on observation

- Teachers should know two types of student assessment: convergent and **divergent** assessment. The former focuses on how students gain knowledge or skills through the lens of the curriculum, whereas the latter focuses what students learn, what students are interested in, and what students do through the lesson (Torrance and Pryor, 1998).
- When a teacher assesses students using the convergent method, tests or marking of homework may be the best strategy. When a teacher assesses students using the divergent method, observation may be the best way.

3rd type LS focus on observation

- When teachers observe student learning, they have to understand the motivations of students, relationships between students, and how they rely on each other.
- It is difficult to observe how students learn, are concerned with the lesson, and maintain motivation. Observation skills are tacit, not explicit.
- Although observation of student learning is difficult, teachers can share what they observe in a relaxed atmosphere. When teachers share their findings of student learning, they can develop their observation skills.

3rd type LS focus on observation

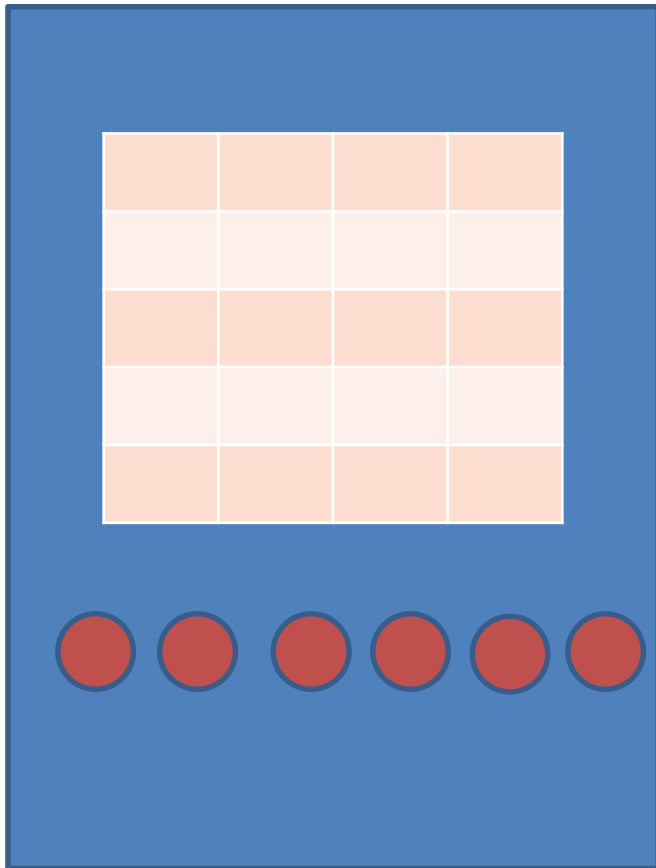
- Teachers can be allocated to observe specific students. When a teacher is able to concentrate on observation of one student, the observation may be easier, and he or she can share his or her findings with other teachers who observe other students.
- In this type of LS, teachers don't value the lesson plan. Therefore, many schools will skip the lesson plan meeting prior to the open research lesson.
- In this type of LS, teachers not only share their findings of the research lesson but also their reflections according to their findings.

Example of a form of observation note

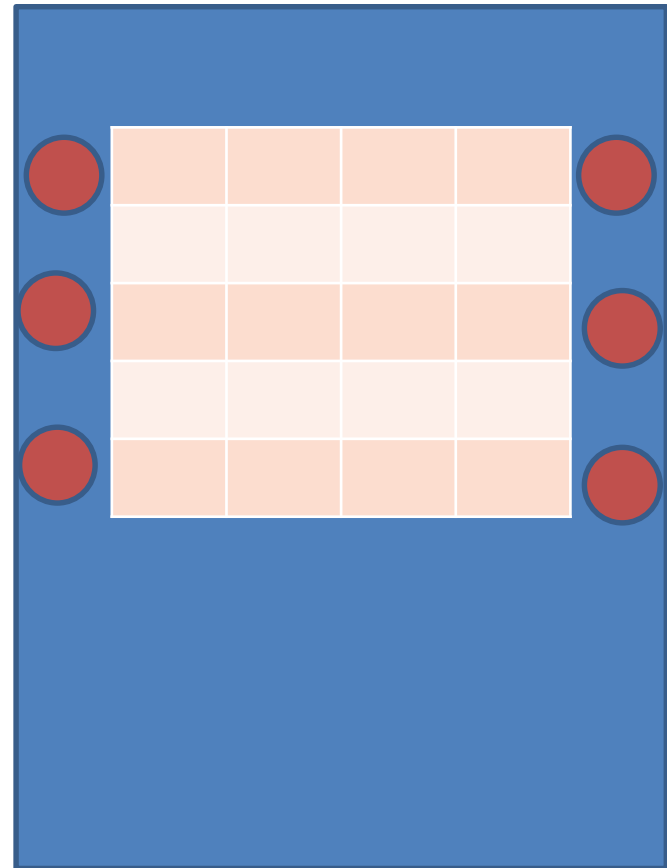
	What I found in the lesson	My interpretation or reflection of it
00:00 -		
10:00 -		
20:00 -		
30:00 -		
40:00 -		

Observation style

1st type

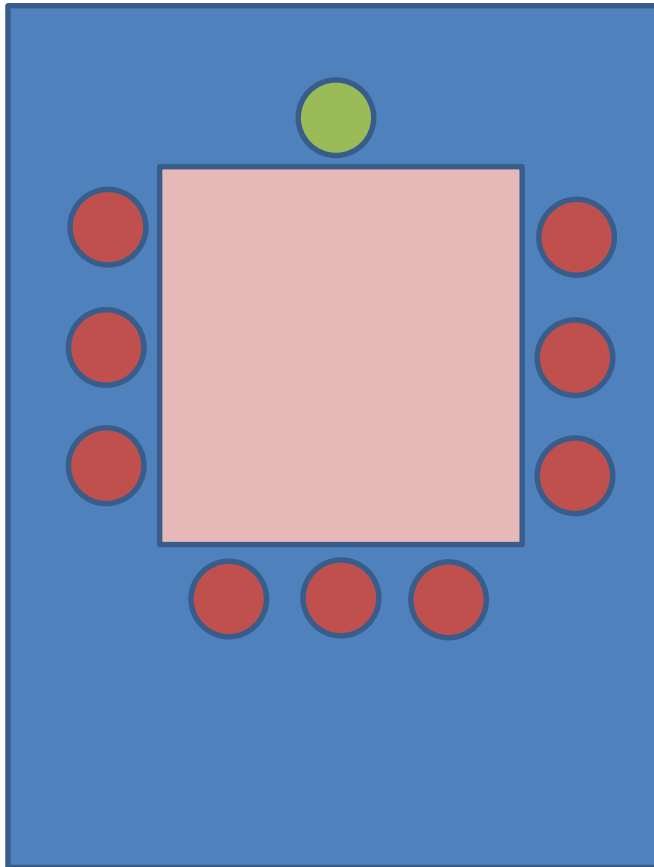


2nd & 3rd type

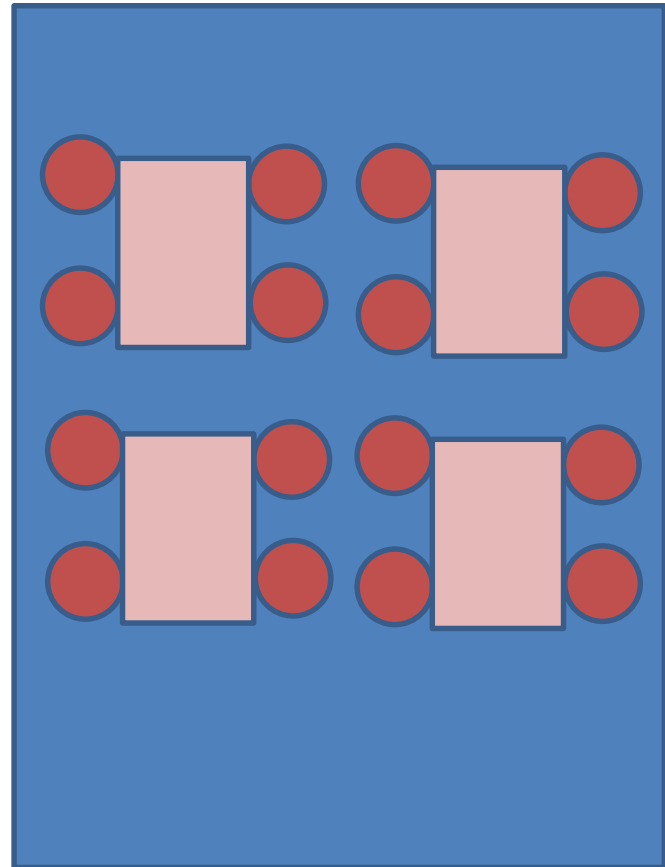


Discussion style

1st & 3rd type



2nd type



ТАҚТА

1) Оқушылардың зейіні сабақта



2) Тақтадағы жазуи анық

Мағуыр, қатенді түсіндір бе?



3) Мұғалімнің сөзі анық.

Қарқынсыз



4) Сабақ тәсілі жасағары



Белсенді

Белсенді

Нұрай

МАҚДИ

Өзіне сенімсіз

Белсенді

Белсенді, ЭГОИСТ

Ақыл

Мағуыр

з-талқырама з қате

жетістік аташтыра өзін-өзі жолдары

Батаалау

мәтіндер туралы тек, тұлғаны талпын

Аулап

Белсенді

Басқа топтарға көмектесті

Ернар

Қиыншылы топ.

Ай

Ал

Баяу қатысты, селқос

Оқушылар өздері еркін сезінеді

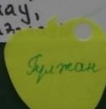
БАЛАЛАР ТЕОРИЯЛЫҚ БІЛІМДЕРІК ТӨЛІК МЕН ҚИЫН ДІК ТЕРІ ЕСЕЛТЕРІН ТАРТУ АРҚЫЛЫ ҚОРСАТҚИЛДЫ.



Батаалау түрлері: өзін-өзі батаалау, бірін-бірі батаалау, мұғалімнің батаалауы



Бір-бірлеріне көмек көрсетті



Задание
Работа по карточкам

G R O U P S

Тапсырмаларды орындауда белсенділігі тымен

МАРИМ
МАРИМ
МАРИМ

1		2		3	
ЭЛИНА	БУТАГӨЗ	АФЫН	БУЛАТ	ЭЛВИРА	ЭЛИЗ
МАРИ	НУРИ	МАРИЯ	РХСЛАН	ЕРИП	АБЗАЛ

МУТАЛИМ

Бүгүнкү сабагыңдагы каталыктарыңды талдоо жана жөндөмө

Бүгүнкү сабагыңдагы каталыктарыңды талдоо жана жөндөмө

Бүгүнкү сабагыңдагы каталыктарыңды талдоо жана жөндөмө

1, 3 топ 2 тапсырма бериле турган, 4 тапсырма берилген

2 топта 4 тапсырма берилген, 2 тапсырма берилген

W O R K

1 топ
2 топ
3 топ

2 тапсырма берилген, 3 тапсырма берилген

4 тапсырма берилген, 2 тапсырма берилген



МАРИЯ
ЭЛИНА
БУТАГӨЗ

Transcript based LS

Math lesson in grade 6

- “Car A can travel 150km in 2hours, and Car B can travel 240km in 3 hours. Which is faster Car A or Car B?”
- C1: The point is how many kilometers the cars travel per hour. Firstly, we find the cars’ distance per hour. Then, we use it to find how many kilometers, the cars have travelled.
- C2(Takuma): Yes. This textbook says, [distance divided by time]. After learning about speed. I want to know why this formula is applied.

- C3: In previous lesson, we learned speed per same quantity, such as running distance per one minute or times to get one meter. And in this lesson, we will use “speed =[distance divided by time]”. So, I want to find the difference between these using this formula.
- C4: We know the distance and time of cars A and B. That’s why I want to find out how the distance and time relate to speed.
- C5: Although we calculate how many kilometers each car can travel per hour, the formula is [distance divided by time]. I want to make clear the meaning of the formula

- C6: Car A can travel 150 kilometers in two hours, so 150 kilometers divided by 2 hours. So, it can travel 75 kilometers per hour. Next, car B can travel 240 kilometers in 3 hours. 240 divided by 3 equals 80, so 80 kilometers per hour. Car A travels 75 kilometers per hour, and B travels 80 kilometers per hour. That's why car B is faster than car A.
- C7: I am concerning Takuma said "the meaning of the formula": speed is [distance divided by time], was his aim, but why does it apply?

Three types of LS

1. LS focus on pedagogy
 - Needs an outside coach or an expert teacher who can facilitate connoisseurship of the curriculum of participants
 - Has to try not to evaluate or criticize the instructor
2. LS focus on community of teachers
 - Requires that participants respect each other, atmosphere are kept warm
 - Doesn't value the lesson plan, but post lesson discussion is important
3. LS focus on observation skills of student learning
 - Requires teachers to observe student divergently
 - Doesn't value the lesson plan, but post lesson discussion is important
 - Transcript based LS is in this type
4. Select LS style depend on the school

references

- Catherine Lewis Akihiko Takahashi (2013), "Facilitating curriculum reforms through lesson study", International Journal for Lesson and Learning Studies
- Toshiya Chichibu (2016), "Impact on lesson study for initial teacher training in Japan", International Journal for Lesson and Learning Studies, Vol. 5 Iss 2
- Eisuke Saito (2015), "Lesson Study For Learning Community", Routledge
- Mohammad Reza Sarkar Arani, Yoshiaki Shibata, Masanobu Sakamoto, Zanaton Iksan, Aini Haziah Amirullah, Bruce Lander, (2017) "How teachers respond to students' mistakes in lessons: A crosscultural analysis of a mathematics lesson", International Journal for Lesson and Learning Studies, Vol. 6 Issue: 3
- Torrance, H., & Pryor, J. (1998). *Investigating formative assessment: Teaching, learning and assessment in the classroom*. Buckingham: Open University Press