IMPULS-QU lesson study project
Presented by:
Anbarah AlAbdallh
National Center for Educational Development (NCED)
College of Education-QU

Population 2018
2,694,849

2017 report
87 different Nationalities living in Qatar.

About the Project

- The project IMPULS, International Math-teacher Professionalization Using Lesson Study.
- Collaborative work between Tokyo Gakugei University and Qatar University, College of Education (NCED).
- An innovative project aimed to establish a robust organizational improvement model of professional development in Qatar schools.

About the Project

- 3-7 years project for fostering Problem solving and reasoning by using teaching through problem solving
- This is a teacher research project under the following research theme

“Fostering students’ ability for problem solving and reasoning by using Teaching through Problem Solving (TtPS)”
Project Goals

- Increase the number of students who are motivated to learn at a higher level of mathematics
- Develop strong skills of reasoning and problem solving for the students.

Project Significance

- Qatar was ranked as 62 out of 65 country shared in the latest results of the Program for International Assessment (PISA)
- 70% of students in Qatar were considered to be low achievers in Math according to PISA assessment.
Phase 1 (year 1)

- Nurturing Qatar University’s content specialists (PDS’s) in becoming leaders in Lesson Study
  - Observe the student learning process effectively
  - Design lessons to address student needs based on these observations.

Phase 2 (year 2-3)

- Train teachers in selected schools to:
  - Design research lesson plans.
  - Conduct lesson plans based on projects’ requirements.
  - Evaluate students’ performance.
  - Reflect on their performance.
- Supervise work on project in the selected schools

Phase 3 (year 4-7)

Increase the number of participated schools

**Year 2017-2018**
4 new schools joined the project (total = 8 schools)

**Year 2018-2019**
2 schools planned to join (Total = 10 schools)

The Program Through The Years

<table>
<thead>
<tr>
<th></th>
<th>Year 1 2014-2015</th>
<th>Year 2 2015-2016</th>
<th>Year 3 2016-2017</th>
<th>Year 4 2017-2018</th>
</tr>
</thead>
<tbody>
<tr>
<td># of lessons presented</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td># of teachers presented</td>
<td>4</td>
<td>16</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td># of students</td>
<td>80</td>
<td>240</td>
<td>300</td>
<td>330</td>
</tr>
<tr>
<td># of participants observed lessons</td>
<td>9</td>
<td>50</td>
<td>150</td>
<td>200</td>
</tr>
</tbody>
</table>

Two open days were conducted
Data Collection

- **Pre-test**: students from grade 4 to grade 8 in four schools.
- **Teachers Belief Questionnaire**: teachers and PDSs.
- **Lesson Plans**: PDSs and teachers.
- **Lesson notes**: using LessonNote Application.
- **Students’ works**.
- **Post-discussion notes**: Participants.
- **Daily reflections**: Participants.

Progress Achieved

General endorsement of CLR proved its success.

- Majority of QU specialists changed their beliefs regarding teaching approaches.
- Improvements were made by QU specialists to help teachers step out of their comfort zone.
- Observation process become more focused on students’ performance

Progress Achieved

- Engaging more students in the class.
- Quality of classroom questions and discussions.
- Giving clear instructions.
- Thoughtful planning to accommodate students’ needs.
- Teachers’ self reflection.
- Students’ achievement in problem solving.

Challenges

- Resisting change
- Turn over in schools
- Provided support in schools
- Shortage in resources in Arabic Language
- Available Time on teachers’ schedules
Thank you