Lessons Learned From Lesson Study: Focusing on Differentiation for ELLs and Students with Special Needs

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**Lessons Learned From Lesson Study: Focusing on Differentiation for ELLs and Students with Special Needs**

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**Summary of Project:**
In peer groups, MATH UP students enrolled in EDE740 designed a mathematics lesson to be taught by one member of the group. Groups followed the lesson study process which included researching a topic, planning for instruction, revising the lesson, teaching the lesson, reflecting upon the lesson, and revising the lesson again.

**What is Lesson Study?**
- Lesson Study is a collaborative, peer-led, professional learning approach. It requires on-going meaningful input from teachers, school administrators, and other education professionals.
- Lesson Study is the fundamental process that many Japanese teachers use annually to improve instruction across all content areas. It is a form of professional development.
- Lesson Study is conducted as a part of konakenshu or “whole-school research model” that begins with a research theme. Teachers conduct research around the theme, plan a research lesson, conduct the research lesson, and reflect upon the lesson. The process is then repeated.

**Goal of Lesson Study:**
To cultivate a strong school culture and practice of lesson and unit development through collaborative planning, continuous reflection and lesson revision to reveal significant data focused on lesson effectiveness and subsequent student learning.

**Focus on ELLs and Students with Special Needs:**
Lesson Study allows groups of teachers to focus specifically on the instructional needs of diverse populations of students including ELLs, Students with Special Needs, and Gifted Students. Across several Lesson Study groups in Math UP, students focused their thinking on lessons to include the following:
- Modifications to vocabulary
- Encouraging of ‘math talk’ and students’ explanation of thinking
- Introducing multiple strategies

**Learning about...**

**Collaboration**
- I learned various teaching styles from watching my fellow peer teaching the lesson.
- In this group project, I have learned that responsibilities must be decided early on and participation in regularly scheduled collaborative meetings is paramount.
- It’s a lot easier to teach math when working in a lesson study group, and having others to talk to.

**Planning**
- You can never be prepared enough.
- The most rewarding part of the process was writing a lesson, which was executed well. It’s one thing for the writer to teach what they’ve planned, it’s another to see someone else do and have it be equally as successful.
- I would say the most rewarding part of the LS process was learning what and what not to do when teaching (using manipulatives & visuals which are important to have in every math lesson).

**Student Thinking**
- I noticed that students needed visuals like the place value chart in order to read the number and state any individual digits value.
- Although some students can grab the concept right away, others will need the instruction clarified and simplified.
- Making assumptions about previous student performance does not predict future outcomes.
- Students are great observers and they know more than we think they do!

**Teaching**
- I believe that practice will help us improve our weakness and perfect our strengths. “I realized that these conferences with the math coach, the cooperating teacher, and colleagues help us for a better perspective of things and helps address students needs more proficiently and effectively.
- …conceptual understanding may not happen at the rug, it can happen during the guided practice, or the independent practice.
- I learned that teaching mathematics is not as simple as putting together a lesson, presenting it to the students and moving forward to the next topic.

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**References**

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**MATH UP Cohort 2 Interns:**
- Haseen Ahmad, MATH UP Cohort 4 Interns:
  - Mayookh Firooz, Bronx
  - Jackie Fernando, Queens
  - Anisha LaFountain, Alaka Williams

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**Figure 1**
Lesson Study Cycle

1. **STUDY CURRICULUM & FORMULATE GOALS**
   - Consider long-term goals for students when selecting a particular theme.
   - View research and determine what to focus on.
   - Focus on research data and what is needed.

2. **PLAN**
   - Plan a research lesson.
   - Write differentiated learning objectives.
   - Plan for student thinking.

3. **CONDUCT RESEARCH LESSON**
   - Teachers conduct the research lesson.
   - Students participate in the group process.

4. **REFLECT**
   - Feedback from peers.
   - Meet to discuss feedback.
   - Reflect on the lesson.

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"Lesson study helps teachers make the transition from being objects of research to actual researchers in the classroom." – Patsy Wang-Iverson, Research for Better Schools