Collaborative Approach for Teacher Professional Development

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International Policy Dialogue Forum on Teacher Challenges for Education for All, New Delhi
May 29-30, 2012
Collaborative approach for Teacher professional development

- Working together
- Learning together
- Improving together
- Supporting each other

http://matsyacrafts.com/tarpa-dance-warli-paintings/
Present Scenario

- Quality of in-service programs poor (NFGTE 2006)
- Programs not sensitive to teacher needs (NFGTE 2006)
Present Scenario

• Teacher education needs urgent and comprehensive reform (NCFTE 2009)

• Implementation of National Curriculum Framework 2005 fails to address adequate teacher preparation (Batra 2005)
Culture and practices common among teachers

- Textbook centered pedagogy without consideration for students' understanding (NCFTM 2006)
- Lesson Planning as ritualized formality
- Activities done without any discussion, at most followed by explanation by teachers
Culture and practices common among teachers

- Teaching' and student responses not an object of discussion for learning about teaching

- 'Teaching observation' feared as inspection, so teaching remains an isolated activity
Goals of TPD: Address teachers' beliefs

- Reflection and articulation of beliefs of teachers' about
  - nature of subject,
  - its teaching-learning,
  - self efficacy
  - about students

- Children from backward communities and poor sections will not be able to learn maths
- I get nervous when students ask me questions
- Listening attentively to the teacher is important to learn anything
- Mathematics is basically addition, Subtraction, Multiplication, division
Goals of TPD: developing teaching practices

- Sharing and reflection on practices that are taken for granted
  
e.g. Showing students solution of a problem and then asking them to practice similar problems
Goals of TPD: pedagogical content knowledge

- Making and developing the pedagogical content knowledge of teachers explicit
  - Knowledge about common errors
  - Methods and teaching aids found useful for developing students' understanding

Teacher discussing different ways of multiplication in In-service teachers workshop
Goals of TPD: Sensitivity towards student thinking

- Providing opportunities to integrate knowledge about how students' think with deep understanding of the concepts

Student errors for non-traditional questions on fractions used as tasks for teachers' reflection
Vision of teaching for Teacher Professional Development
Why Collaborative professional development?

- Shared responsibility for students' learning
- Possibilities for developing teacher community
- Sharing resources, ideas, and experience
- Planning, teaching, reflecting and learning together
- Ownership among teachers
- Discussion based on evidence of students' understanding
The Nature of Collaboration

- Modeling of teaching strategies vis-a-vis nature of the subject
- Discussing and analyzing student responses, teacher-student interaction through videos and other artifacts
- Analyzing textbooks, questions and research papers
- Planning teaching-learning sequences
- Sharing experiences in community
- Making teachers' beliefs and knowledge explicit
Teaching as centre of Teacher Professional Development activity through collaboration between Schools and Teacher Education & Research Institutes
Types of collaboration

- Teacher-researcher collaboration: to understand the challenges and support needed for teachers in classroom
- Teacher-Teacher collaboration: for developing communities of inquiry about teaching
Types of collaboration

- Teacher educators-teachers collaboration for continuous professional development
- Teacher educators-researchers collaboration to develop tasks and resources for teacher education
- Institutes of research-school collaboration to bring about change and sustaining support

Continuing professional development through lesson study
Vision of HBCSE for teacher education

- Development of community of teachers to foster collaboration
- 'Teaching' becoming an object of discussion
- Empowering the teacher to move beyond textbook by developing knowledge of mathematics and Science, activities and students thinking
Vision of HBCSE for teacher education

- Collaboration between research institutes, teacher education centres and schools to provide mutual support and sustaining change
Information and resources for Teacher professional development available at

- http://www.hbcse.tifr.res.in/

- For mathematics teachers:
  - http://web.gnowledge.org/cw/
  - http://mathedu.hbcse.tifr.res.in/

- For Science Teachers
  - http://coglab.hbcse.tifr.res.in/


Thank you

Acknowledgements

• HBCSE members of mathematics education group
• Teachers
• Teacher Educators