

TSG AGENDA (tentative May 24)

TSG-35 Knowledge and practice of mathematics teacher educator Class A

Session 1 (July 13th) chair (M: Bartolini Bussi). 120 minutes (14.30-16.30)

1. Time: 14:30-15.00

Title of the paper: Introduction

Author Mariolina **Bartolini Bussi**

Institution Department of Education and Humanities – Reggio Emilia – Italy

Short abstract

Presentation of the tentative structure.

Introduction of the participants.

2. Time: 15.00 - 15.30 – invited plenary

Title of the paper: BOUNDARY CROSSING AND MATHEMATICS TEACHER EDUCATORS' HYBRID IDENTITIES (444)

Authors **Merrilyn Goos**, Margaret Marshman

Institutions: University of Limerick, University of the Sunshine Coast

Short abstract:

Within the field of mathematics teacher education there is emerging interest in how mathematics teacher educators (MTEs) themselves learn and develop. This paper takes a sociocultural perspective on MTE learning as identity formation. Its aim is to stimulate discussion on hybrid professional identities created when MTEs – who may be either university-based mathematicians or mathematics educators – cross the boundaries between these disciplinary communities. Brief case studies of MTEs who participated in two Australian research studies illustrate the complexities involved in addressing the question of “Who is a mathematics teacher educator?”

3. Time: 15.30 – 15.50

Discussion

4. Time 15.50 – 16.00

Short break

5. Time: 16.00 – 16.10 – long oral

Title of the paper: ANALYZING CHALLENGES IN THE PRACTICE OF A MATH TEACHER EDUCATOR FOR DEVELOPING COMMUNITY OF MATH EDUCATORS (1761)

Author Ruchi S. Kumar

Institution: Tata Institute of Social Sciences, Mumbai, India

Short abstract:

In this paper, analysis of math teacher educator's practice using vignettes illustrate the way different knowledge needs to be integrated in practice of teacher educator in designing and facilitating the tasks and discussion using them. When the goals of teacher professional development involve development of knowledge as well as developing community of math educators, there are several challenges experienced. The analysis reveals that though the dialogic approach in workshops allows teachers to articulate their

thoughts and ideas. Further research is needed to identify the knowledge and practice of math teacher educators for developing the sense of the community.

6. Time 16-10-16.15

Discussion

7. Time 16.15-16.25 – long oral

Title of the paper MATHEMATICS AND SCIENCE TEACHER EDUCATORS LEARNING INDUCED BY COMMON RESEARCH ON PROFESSIONAL VISION (885)

Author: Nada Vondrova

Institution : Charles University, Faculty of Education, Czech, CZ

Short abstract:

The article reports on the experience of a biology teacher educator (the first author) and a mathematics teacher educator (the second author) which started as collaborative research on professional vision but gradually became a learning experience for them. Thanks to their collaborative efforts, they not only developed their competence as researchers but also as teachers in subject education courses. The aim of the article is to bring insight into their learning process.

8. Time 16.25-16.30

Discussion

Session 2 (July 14th) - chair Nada Vondrova - LESSON STUDY. 90 minutes 19.30-21.00

0. Introduction (Lesson study)

1. Time 19.30 – 19.40 – Long oral

Title of the paper: USING A COMMUNITY OF PRACTICE PERSPECTIVE TO ANALYZE MATHEMATICS TEACHER EDUCATOR LEARNING DURING LESSON STUDY (1296)

Authors: **Melissa Soto**, Lara Dick , Mollie Appelgate, Dittika Gupta

Institutions: San Diego State University, Bucknell University, Iowa State University ,
Midwestern State University. US

Short abstract:

This presentation will share research on the use of lesson study for mathematics teacher educators' (MTEs) professional development. Using Wenger's (1998) Social Theory of Learning framework based in communities of practice, we demonstrate how mathematics teacher educators' learning changed across the process of the lesson study. We share examples of learning and discuss the benefits and implications of lesson study for mathematics teacher educators' professional development.

2. Time 19.40-19.45

Discussion

3. Time 19.45 – 19.55 - long oral

Title of the paper: CHARACTERIZING MATHEMATICS TEACHING RESEARCH SPECIALISTS' MENTORING IN THE CONTEXT OF CHINESE LESSON STUDY (1828)

Author(s): **Zhenzhen He**, [feishi Gu](#), [lingyuan Gu](#)

Institution : Shanghai Normal University, Shanghai, CN

Short abstract

This study examines how mathematics teaching research specialists mentor practicing teachers during post-lesson debriefs of a lesson study in China. Based on a systematic, fine-grained analysis of 107 hours of videotaped mentoring meetings of 20 groups of teachers and teaching research specialists from different elementary schools, this study reveals that the Chinese teaching research specialists pay a great deal of attention to practical knowledge which consists of setting students' learning goals, designing instructional tasks, formative assessment of students' learning and improving instructional behaviors. Less attention is paid to mathematics content knowledge and general pedagogical knowledge. Meanwhile, the teaching research specialists tend to comment on lessons in general and address anticipated problems based on their previous experience, and pay less attention to address issues raised by the teachers or engage in dynamic dialogue with them. On the basis of the data analysis, a framework for analyzing mentoring activities emerges. The strengths and weaknesses of the teaching research specialists' mentoring strategies are identified through the framework, and suggestions to improve the teaching research specialists' mentoring strategies are discussed.

4. Time 19.55-20.00

Discussion

5. Time 20.00 – 20.05 – short oral

Title of the paper: DIDACTICAL SUITABILITY CRITERIA USED BY ITALIAN TEACHERS IN LESSON STUDIES (1447)

Authors: **Carola Manolino**, Viviane Hummes * (**physical present**), Adriana Breda, Alicia Sánchez, Vicenç Font

Institutions: University of Torino, University of Barcelona

Short abstract

This paper aims to identify the Didactical Suitability Criteria used by a group of Italian teachers participating in Lesson Studies. The written reflections and report documents - such as the Lesson Plans - are qualitatively analysed. The results suggest that all the Didactical Suitability Criteria are considered: the Epistemic, Cognitive, Interactional and Ecological criteria are particularly prominent; the Emotional and Mediational criteria sporadically appear. These criteria are shared in the practices of these teachers, but implicitly considered. As the Didactic Suitability framework makes them explicit, we suggest that it can be implemented in Lesson Study procedures as a guide for the a-priori analysis of contents, objects and practices.

6. Time: 20.05-20.10 – short oral

Title of the paper: THE LESSON STUDY'S CULTURAL TRANSPOSITION: FROM CHINESE LESSON STUDY TO ITALIAN LESSON STUDY (245)

Authors: **Alessandro Ramploud**, Maria Mellone, Silvia Funghi, Simone Esposito.

Institutions. University of Pisa, University of Naples, Italy

Short Abstract

This work aims to show the process of deconstruction, functional to start a Cultural Transposition (CT). Starting from the awareness of the "disorientation" generated by different cultural approaches to mathematics teaching, this process aims to produce versions of a didactic practice that are compatible with other cultural context and are suitable to support changes in teachers' beliefs.

7. Time: 20.10-20.15 - short oral

Title of the paper: USING A NESTED STRUCTURE OF LESSON STUDY APPROACH: A SELF-STUDY AS A MATHEMATICS TEACHER EDUCATOR (985)

Author: Yinkang Wu * (physicall present)

Institution: East China Normal University, CN

Short abstract

In this paper, I report a nested structure of lesson study approach adopted in working with my preservice mathematics teachers during the course entitled Design of Mathematics Teaching. The underlying consideration and activities of each phase of lesson study at levels of mathematics teacher educator and preservice secondary teachers are both presented. I provide some preliminary findings regarding the effect of this approach on both the enrolled preservice secondary teachers and myself. This paper concludes with a discussion of the lessons learned and suggestions for further study.

8. Time: 20.15- 20.20– short oral

Title of the paper: A COLLABORATIVE WORK OF FOUR MATHEMATICS TEACHER EDUCATORS. A STUDY IN URUGUAY (716)

Author: Daniela Pages

Institution : Consejo de Formacion en Educacion, Montevideo, UY

Short abstract

We report a research about collaborative work of mathematics teacher educators (MTEs) in Uruguay. A four MTEs group was created, and we proposed them to plan a lesson in the first Calculus course of the mathematics teacher education program, to implement that lesson, and analyze it in a collective way. Classic Grounded Theory was used as the methodological approach, to analyze the process and obtain an explanation. We found a theoretical model, a process we have called looking for agreements. This process is resolved by the activation and eventual mobilization of the personal theories built in practice (PTBP) of each MTE, which constitutes the core category that emerged during the study. We present the model, which comprises the main category and those which relate to it. The function of one of the MTEs as a broker, within the team, was crucial for the negotiation and collective reflection on practice.

9. Time: 20.20– 21.00

GENERAL DISCUSSION: LESSON STUDY

Session 3 (July 16th) - chair Paola Sztajin 21.30-23.00 90 minutes total

0. Time 21.30 – 21.35 Introduction

1. Time 21.35-21.45. long oral

Title of the paper: TEACHER EDUCATORS' PREPARATION MODEL: EXAMPLE FROM A SUCCESSFUL PROFESSIONAL DEVELOPMENT (1990)

Authors: Paola Sztajin, Kristen Malzahn, Reema Alnizami

Institutions: North Carolina State University, Horizon Research Inc., North Carolina State University

Short abstract

We describe a model used to prepare mathematics teacher educators to facilitate a professional development (PD) program that has demonstrated it can be implemented with integrity and has also shown positive impact on elementary teachers' knowledge and practice. The work presented here contributes to the limited available research on how to support the professional preparedness of mathematics teacher educators for their work with teachers.

2. Time 21.45- 21.50

Discussion

3. Time 21.50-21.55 short oral

Title of the paper: A COLLABORATIVE SELF STUDY OF TWO MATHEMATICS TEACHER EDUCATORS LEARNING AND GROWING AS CULTURALLY RESPONSIVE PEDAGOGUES

Authors: **Lindsay Keazer**, Kathleen Nolan (84)

Institutions: Sacred Heart University, CT, USA University of Regina, SK, Canada

Short abstract

This paper presents a collaborative self-study of two MTEs developing our own culturally responsive pedagogies. As we teach mathematics education courses, we reflect on our efforts to enact a pedagogy that is responsive to the culture(s) and knowledge(s) of our students (i.e., prospective and practicing teachers). We address the question, "What do MTEs learn from attempts to grow and reflect on their own CRP?" We developed an MTE framework for growing CRP, which we apply to our practice for data collection and for further iterations of examining our CRP. In this paper, we present the framework and sample data, to illustrate how we are applying the framework in our self-studies on learning and growing as culturally responsive pedagogues.

4. Time 21.55– 22.00 – short oral

Title of the paper: EXPLORING POWER AND OPPRESSION: A STUDY OF MATHEMATICS TEACHER EDUCATORS' PROFESSIONAL GROWTH (1659)

Authors: **Craig Joseph Willey**, Michael Richard Lolkus, Jill Newton, Troy Bell

Institution : Indiana University-Purdue University Indianapolis, Indianapolis, US

Short abstract

The training of mathematics teacher educators (MaTEDs) varies widely, with little guidance regarding the essential skills and knowledge necessary to tackle the fields looming challenges. Equitable access to, and engagement with, mathematics has surfaced as an elusive goal of math education organizations. MaTEDs, therefore, ought to identify and engage with resources that help them comprehend and confront systemic oppression and inequities. This article showcases the process and findings from an examination of MaTEDs professional growth as a result of engaging in a collaborative interrogation of critical texts outside of mathematics education. Findings suggest that this series of structured reading and dialogue led MaTEDs to develop a deeper understanding of the historical movements and events that created today's local and global status quos. Furthermore, MaTEDs could more readily make connections between macro-contexts of colonialism, violence and oppression, and the micro-manifestations of power and marginalization within mathematics education. Implications for future development of MaTEDs are discussed.

5. Time 22.00 – 22.05 short oral

Title of the paper: DIFFERING CONTEXTS AND TENSIONS MATHEMATICS TEACHER EDUCATORS EXPERIENCE IN CONTENT COURSES FOR ELEMENTARY PRESERVICE TEACHERS (1216)

Authors: Author(s): **Hwa Young Lee**, Emily Miller, Travis Weiland, Tuyin An, Daniel Clark
Institution : Texas State University, KR

Short abstract

Five mathematics teacher educators (MTEs) who teach mathematics content courses for elementary preservice teachers (ePTs) at institutions across the USA present the differing contexts in which they teach such courses. The goal of this paper is two-fold: (a) to foster discussion in the MTE community about the different conditions in which MTEs operate and the different tensions they experience due to these conditions, and (b) to highlight the need for more research considering how to support MTEs in preparing ePTs to teach mathematics. Specifically, the sequencing and integration of content and pedagogy, content coverage and mathematical rigor, and interactions with ePTs views and prior experiences in learning mathematics are explored from the perspective of MTEs. Related literature and future directions for research that could support MTEs are suggested.

6. Time 22.05 – 22.15

Discussion of the first short orals of the day

7. Time 22.15 – 22.20 short oral

Title of the paper: DEVELOPING MATHEMATICS EDUCATION LEADERS IN SCHOOLS IN GUATEMALA AND IMPLICATIONS FOR WORK IN OTHER COUNTRIES (1613)

Author: Author(s): Chadd McGlone

Institution : Teachers2Teachers Global, Chapel Hill, US

Short abstract

Rural mathematics teachers in developing countries frequently begin their careers with limited training, both pedagogically and mathematically. Taught through teacher-centered, chalk and talk strategies, these teachers utilize similar strategies with their students. Consequently, students in these classrooms perform below standards. Starting in Guatemala, Teachers2Teachers Global has developed and implemented teacher training strategies that are rooted in the best practices in mathematics education.

8. Time 22.20-22.25 short oral

Title of the paper. TRANSITIONING BETWEEN DIFFERENT IDENTITIES: HOW THE DIFFERENT POSITIONS ASSUMED BY THE MATHEMATICS TEACHER EDUCATOR IMPACT THEIR PRACTICE (1726)

Authors: **Natalia Ruiz**, Nicole Fuenzalida & Luz Valoyes-Chávez

Institutions: Center for Mathematical Modeling & Center for Advanced Research in Education- University of Chile

Short abstract

A critical challenge to scale up professional development programs is the education of facilitators able to replicate its core aspects and to adapt them to new school contexts. Little is known about the knowledge and abilities required for facilitators to recreate the fundamental principles of PDs in new and unfamiliar school contexts and to fully respond to mathematics teachers' needs. An issue widely identified in the current literature. In this paper we explore the processes through which a novice facilitator navigates between teachers' and facilitators' identities. We pay particular attention to contextual aspects that

trigger changes between such identities. To do so, we adopt Darragh's (2016) notion of identity as a performance and Halls' (1996) notion of processes of identification. Our results indicate that to faithfully and flexibly replicate PDs it is critical to understand the processes of identification experienced by novice facilitators as part of their process of learning. Becoming a facilitator not only imply to know mathematics and pedagogy better but to reconcile different performances and stories.

9. Time 22.25- 22.30 . Short oral

Title of the paper: MATHEMATICS TEACHER EDUCATORS AS ROLE MODEL: INTENTIONS AND STRATEGIES (952)

Authors: **Helena Montenegro**, Salomé Martínez, Francisco Rojas

Pontificia Universidad Católica de Chile, Center for Mathematical Modeling, Universidad de Chile and UMI CNRS

Short abstract

This study reports phenomenographic research which aimed to explore the approaches to modeling held by mathematics teacher educators. Data were collected through semi-structured interviews conducted face-to-face with fifteen mathematics teacher educators working in three Chilean primary initial teacher education programs. The analysis identified four approaches to modeling, ranging from performing pedagogical activities and interactions to developing teaching practices linked to the school classroom. These findings have implications for both practice and research. We recommend continuing the study on this topic for improving the teaching practices enacted by mathematics teacher educators.

10. Time 22.30-22.35 short oral

Title of the paper: EXPERIENCE OF LEARNING TO TEACH MATHEMATICS: WHAT DO PROSPECTIVE TEACHERS LEARN FROM THEIR MATHEMATICS TEACHER EDUCATORS?(897)

Authors : **Francisco Rojas**, Helena Montenegro, Flavio Guiñez, Marco Catalán & Valentina Giaconi

Institutions: Pontificia Universidad Católica de Chile, Universidad de Chile, Universidad de O'Higgins

Short abstract

This study reports on part a Self-Study aimed to investigate the challenges of two Chilean mathematics teacher educators when teaching how to teach mathematics. In particular, we explored the prospective teachers' perceptions of the teaching practices enacted by their mathematics teacher educators. Data were collected through focus groups and analyzed using thematic analysis. The results showed that prospective teachers identified collaborative work as a meaningful way of teaching mathematics. Furthermore, they recognized that the teaching strategies orchestrated through the lessons contributed to a deeper understanding of the mathematical concepts discussed. We conclude that prospective teachers look at the mathematics teacher educators as a role model and would replicate some of their teaching practices when they become schoolteachers.

11. Time 22.35 – 22.40

Title of the paper: NARRATIVES OF MATHS TEACHERS: STUDENTS & TEACHER RATIO IN MATHEMATICS CLASSES IN PRIVATE SCHOOLS (1187)

Author: Sagar Dahal

Institution : The Celebration Co - Ed College/ Kathmandu University School of Education

Short abstract.

Student-teacher ratio is the number of students who attend a school or university divided by the number of teachers in the institution. The paper aims at exploring the experiences of private school head teachers regarding the student and teacher ratio in the classroom of mathematics. The research problem of this paper was to know the practices of class size with student teacher ratio in private school in the context of Kathmandu district with academic performances in mathematics. The school maths teachers' were the research participants. Two maths teachers' stories were collected which were in narrative form, thus qualitative approach with narrative inquiry as research paradigm was used in this paper. Their stories were collected for knowing the gain and pain of the classroom with larger number of student and smaller number of students'. The base line for the student and teacher ratio was from 24 to 30 students. By reading this paper, the researcher identifies the gain and pain story of different size classes.

12. Time 22.40-23.00

General discussion of the short orals

Session 4 (July 17th) - chair Bartolini Bussi. 90 minutes total (21.30-23.00)

0. Introduction

1. Time. 21.35-21.40 short oral

Title of the paper: INTEGRATED MATHEMATICS TEACHER EDUCATORS' PROFESSIONAL DEVELOPMENT PROGRAM (1830)

Authors: **Haw-Yaw Shy**, Ting-Ying Wang, Yen-Ting Chen, Chi-Tai Chu, Chen-Ju Pai, Mei-Hsien Chen

Institutions: National Changhua Normal University, National Taiwan Normal University(**), National Taichung University of Education(***), Liuqiu Junior High School(****)

Short abstract

This paper is to report a four-year nation-wide professional development(PD) program called "New Horizon of Mathematics (NHM)" in Taiwan. The goal of the project is to provide a system of resources for PD including a list of mathematics teacher educators. The team members of the study are mathematics teacher educators (MTEs) including professors in teacher preparation institutions, mathematicians in mathematics departments of universities, experienced in-practice teachers and facilitators from local administration. The study, in the action research design paradigm, is carried out in two stages: in the first stage, for one year, all the MTEs met twice a month to clarify both CK and PCK of grade from 1st to 9th, and to produce teaching materials to testify the findings in the meeting. In the second stage, for three years, according to the data collected in the first stage, a series of professional developing booklets is developed as the course package for in-service teachers' professional development workshop. Data are primarily collected from the questionnaire administered in the workshop. The findings indicate that all MTEs and in-service teachers participating in the study have a great transformation on the understanding of CK and PCK and some satisfactory results on mathematics teacher education are obtained. The details will be elaborated.

2. Time 21.40-21.45 short oral

Title of the paper: TALKING ACROSS PROFESSIONAL COMMUNITIES: TEACHER EDUCATOR COMPETENCIES IN MATHEMATICS AND IN TECHNOLOGY (1725)

Authors: **Cengiz Alacaci**, Bulent Cetinkaya, Ayhan Kursat Erbas

Institutions University of Agder Middle East Technical University

Short abstract.

This paper has two purposes. First, we report the findings from a project aimed to develop a framework of competencies for mathematics teacher educators by using a Delphi approach. Second, we compare those with Teacher Educator Technology Competencies (Foulger, Graziano, Schmidt-Crawford, and Slykhuus, 2017), a framework developed for teacher educators of all subject specialties, in terms of contents and emphasis. The comparison is done from the perspective of technology competencies. The paper aims to contribute to the discourse on the nature of teacher educator competency frameworks, identify areas of variances, and suggest possible reasons as well as inherent tensions underlying efforts in trying to understand complex professional fields such as teacher education.

3. Time. 21.45 – 21.50 short oral

Title of the paper: MATHEMATICS TEACHER EDUCATORS' KNOWLEDGE FOR DESIGNING ONLINE PROFESSIONAL DEVELOPMENT (999)

Author: Dinglei Huang

Institution: Independent Researcher

Short abstract.

Reliance on online media in providing educational opportunities has gained tremendous momentum in mathematics education. The genre of studies that explore pedagogical practices of mathematics teacher educators in the online environment is still in infancy. In this work, I examined pedagogical practices of mathematics teacher educators who provide online professional education programs for prospective and practicing mathematics teachers to unpack mathematics teacher educators' knowledge. Three MTEs' knowledge structure was analyzed using teacher educator knowledge tetrahedron. Cross case analysis revealed knowledge that was specific for MTEs' decisions about online mathematics teacher educating.

4. Time. 21.50-21.55 – short oral

Title of the paper. MATHEMATICS TEACHERS' PROFESSIONAL NOTICING IN TEACHING OF INVERSE FUNCTIONS AND GRAPHS IN GRADE 12 (1445)

Author: Annie Mamoretsi Kgosi,

Institution: University of the Witwatersrand, South Africa

Short abstract

This paper discusses Mathematics Teachers' professional noticing in the teaching of inverse functions and graphs in Grade 12 in South Africa. The notion of 'professional teacher noticing' becomes key in teaching due to teacher's interpretation of events becoming a challenge in a mathematics classroom (Davis, 1996). As a result, the paper looks deeper in how professional noticing can be used to provide assistance for teachers' to notice learner(s) mathematical thinking and how to interpret their mathematical understanding while learning inverse functions and graphs. Qualitative research approach was used to conduct this study, data collection method used was the self - study using video recording of the lessons. In addition, Grade 12 pre and post – tests were used to determine their mathematical thinking and interpretation of their understanding of inverse functions. For

the study, I have adopted Davis (1996, 1997) framework of evaluative and interpretive listening as an important conceptual tool that can be embedded into the study of 'professional noticing'. The study established that implementation of professional noticing in teaching practices was key to minimizing Grade 12 challenges of learning inverses functions. As a result, Grade 12 performance in inverse functions and graphs will be improved.

5. Time 21.55 – 22.05

Discussion of the first papers

6. Time. 22.25-22.30 short oral

Title of the paper: EXAMINING TEACHER EDUCATOR NOTICING DURING REHEARSALS OF TEACHING: A FOCUS ON ATTENDING (1180)

Author: Marta Kobilec

Institution: McGill University

Short abstract

Rehearsals of teaching have been advocated as a means for supporting pre-service teachers to develop practices connected to general principles of teaching. The teacher educator facilitating the rehearsal plays a key role in supporting such learning opportunities. When facilitating rehearsals, the teacher educator must determine when and how to interject to support the pre-service teacher. This requires teacher educators to notice moments in the pre-service teachers' teaching for interjection. In this paper, I present an analysis of four teacher educators' noticing when facilitating rehearsals of one instructional activity – quick images. Using video-based interviews with each of the teacher educators, I identified eight aspects within rehearsals that they attended to. These results provide an initial framework for future research in this area.

7. Time. 22.30-22.35 short oral

Title of the paper: MATHEMATICS TEACHER EDUCATOR CARE AND QUESTIONING IN MATHEMATICS METHODS EARLY FIELD DEBRIEFING DISCUSSIONS (892)

Authors: Signe Kastberg Lizhen Chen **Sue Ellen Richardson** Mahtob Aqazade

Institution: Purdue University

Short abstract

Characterizing mathematics teacher educators' (MTEs') questioning helps gain insight into MTE practices. In this study, we examined how caring-relations influenced MTE questioning practice in the context of debriefing discussions with prospective teachers (PTs) during early-field experience linked to a mathematics methods course. Using self-study methodology, we constructed narratives of MTE-PT caring-relations from three PTs' course artefacts, an MTE's written feedback, and interviews with PTs. We analyzed debriefing discussions between the MTE and PTs for shifts in objects of interest. Findings revealed that the MTE's ability to maintain focus on the PTs' objects of interest was informed by the MTE's feelings of reciprocal care. This finding underscores the importance of investigating the origins of MTE's questioning in relation to PTs' actions.

8. Time 22.35-22.40

Title of the paper: UN/INTELLIGENT WAY TO PROFESSIONAL DEVELOPMENT OF MATHEMATICS TEACHERS: A CASE FROM NEPAL (1243)

Author: Amrit Bahadur Thapa,

Institution: Ohio University, Athens, Ohio, USA

Short abstract

This paper is a part of dissemination (Thapa, 2016) of the research I conducted for M.Phil of mathematics education at the Kathmandu University, Nepal. In view of the different images and beliefs parents, teachers and teacher educators have of math and math teaching/learning, I have focused my attention to the strong beliefs teachers possess of mathematical intelligence in the form of innate intelligence, giftedness, aptitude etc. Through Auto/ethnographic methodology supported by qualitative method I have used multi-paradigmatic research space to inquire about the dis/empowering environment teachers create in math class. Further I have developed an educational approach that appreciates diverse learning styles and unique profile of multiple intelligences children possess. Here I discuss and share my exploration and practices towards 'un/intelligent educational approach' for a reform in content, pedagogy and assessment of mathematics teaching through teacher development.

9. Time. 22.40-23.00

General discussion - Conclusions