LPS Research Series Publications

The third volume in the LPS Research Series has been published:

The following volumes are in preparation (all titles are provisional):

**Difference in Mathematics Classrooms Internationally**
Editors: Christine Keitel, Keiko Hino, Astrid Begehr & David Clarke

**International Perspectives on the Teaching and Learning of Algebra**
Editors: Frederick Leung, Kyungmee Park, Derek Holton & David Clarke

**Coherence in the Teaching of Mathematics Internationally**
Editors: David Clarke, Ida Ah Chee Mok & Gaye Williams

**Competent Teachers in Mathematics Classrooms around the World**
Editors: Yoshinori Shimizu, Jarmila Novotna & David Clarke

**Students’ Voice in Mathematics Classrooms around the World**
Editors: Berinderjeet Kaur, Glenda Anthony, Minoru Ohtani & David Clarke

Reports on the progress of each publication can be found in the LPS Team Meeting Report (below).
LPS Team Meeting – Belo Horizonte, Brazil, Friday, July 23, 2010

Meeting was attended by:
- AUSTRALIA: David Clarke (chair), Gaye Williams, Carmel Mesiti, Cameron Mitchell, Reggie Bowman
- CHINA: Cao Yiming (Beijing)
- CZECH REPUBLIC: Jarmila Novotna, Alena Hospesova
- JAPAN: Minoru Ohtani
- PORTUGAL: Joao Pedro da Ponte, Claudia Nunes
- SWEDEN: Jonas Emanuelsson

Review of membership and progress
Team Reports from Australia, China (Hong Kong, Macau, and Beijing), Czech Republic, Germany, Israel, Japan, Korea, New Zealand, Norway, Philippines, Portugal, Singapore, and Sweden were distributed prior to the meeting (attached).

Publications
The imminent publication of the *Tasks* book was a cause for major celebration.

Concern was expressed over delays in the publication of the *Difference* book. David reported that as of the December conference 2009 ten chapter manuscripts had been received and reviewed. As a consequence of the review process, one chapter had been rewritten as two separate chapters. It appeared that sufficient submitted chapters exist to constitute a publication, but the publication schedule has yet to be finalised. Chapter authors are encouraged to contact Christine Keitel (lead editor) for further information.

Frederick was not able to attend the meeting but indicated in a separate report that eight chapter manuscripts for the *Algebra* book existed in draft form and that with the addition of three further proposed chapters and one chapter relocated from the *Coherence* Book and the introductory chapter, there should be sufficient substance for a complete volume. It was anticipated that the manuscript should reach the publishers early in 2011.

Chapters for the *Coherence* book will provide one focus for the 2010 December conference. David reported that four chapter drafts have been received so far and that one draft had been redirected for inclusion in the *Algebra* Book. Six further chapters have been proposed and accepted. Manuscripts of these chapters should either be available for review at the 2010 December or presentations of preliminary drafts will be made and comment sought. Publication is intended towards the end of 2011.

Chapters for the *Competence* book would provide the other focus for the December Conference. Yoshi provided a report indicating that eleven chapters have been proposed. It is hoped that several of these chapters will provide the focus of presentations at the December Conference. Publication is anticipated in 2012.

Berinder successfully proposed a new volume to focus on *Student Voice*. The editorial team would consist of Berinder, Glenda Anthony, Minoru Ohtani and David Clarke. Chapter proposals should be submitted to Berinder and any LPS team members able to make a presentation at the December Conference related to a possible *Student Voice* chapter are very welcome to do so.

Team reports (attached) included records of other LPS-related publications.
Technical Update and Data Audit Update

Cameron, Reggie and Carmel reported on the management of the LPS data set.

1. **Consistency of formatting** – data continues to arrive at the ICCR in different formats. It is extremely important that we maintain consistency of standard by adhering to the LPS Technical Guidelines. Anyone uncertain as to the relevant standards should contact Cameron Mitchell at mitcc@unimelb.edu.au. Getting the format correct at the start can avoid additional work for everyone: ICCR staff and the generators of the data.

2. **Online portal system** – the LPS data audit circulated prior to the meeting provides the structure for the online portal system. Three teams currently subscribe to this service: Japan, Norway and Sweden. The annual cost of subscription was originally set at A$5000 based on indications that at least five teams would subscribe. With less than five teams using VideoPortal, the cost of the continual re-purposing and posting of data and the maintenance of the web-mediated facility is being significantly subsidised by the Australian team. David indicated that this subsidy would continue as long as the ICCR could manage the expense, but that other teams should consider the significant savings in cost of local storage made possible by subscribing to VideoPortal. David reported that the efficiency and ease of use of the VideoPortal system is remarkable – he has now used the system to access the LPS data base from hotels all around the world without difficulty. This ease of access at such low cost to such a substantial set of classroom data is unique in international educational research.

3. **Data collection systems** – Cameron and Reggie reported on recent developments that streamlined classroom data collection and made multi-camera designs incorporating post-lesson interviews much more efficient to implement. Such developments include the use of screen-capture technology to better document the focus of post-lesson interview discussion. The general comment was made (again) that good quality data is needed from the point of capture. In particular, as has been repeatedly stressed, good quality audio, saves time and money at the transcription stage. With improvements in data storage, it becomes even more important to future-proof data. A workshop on these developments will be conducted at the December Conference.

4. **Transcription tools** – Inqscribe is still recommended as the best (and simplest) available.

5. **The LPS Technical Guidelines need updating** – it is possible that a working group might be set up at the December Conference to address this need.

6. **StudioCode version 4.0** has been released. Teams wanting to purchase copies of the latest version of StudioCode should do so through the ICCR since a significant discount has been arranged.

**LPS website**

LPS members must accept responsibility to keep the information on the LPS website up to date. PLEASE VISIT THE WEBSITE at http://www.lps.iccr.edu.au/ and send any updated information, including additional publication details, to David and Cameron at d.clarke@unimelb.edu.au and mitcc@unimelb.edu.au.

**December Team Conference in Melbourne**

After the success of last year’s LPS December Conference, it was decided to continue the December Team Conference at Wilson’s Promontory National Park from December 6 to 11. LPS team members attending the team conference are encouraged to arrive on Saturday, December 4. On Sunday, December 5, the traditional shopping expedition to Victoria Market will provide team members with the chance to purchase ingredients for the dinner that each
team must contribute to the Retreat. A Welcoming Dinner will be held on the Sunday evening and everyone will re-locate to Wilson’s Promontory National Park on the morning of Monday, December 7. Costs of the Sunday dinner and accommodation in Melbourne will be met by the Melbourne team. The primary purpose of the conference will be the presentation of draft chapters for the Coherence and Competence books, although papers related to the Students’ Voice book are welcome.

**Collaborative possibilities (eg Lexicon, LPS Primary, etc)**

**LPS-Primary:** see Japanese team report.

**The Lexicon Project:** David reported the successful completion of a pilot study for the Lexicon Project, which seeks to identify pedagogical terms in non-English languages used to describe the activities of the mathematics classroom. Of particular interest are non-English terms that do not have a simple English equivalent. Terms have now been collected in French, Czech, Portuguese, Finnish, Swedish, Japanese, Chinese and Korean. The pilot study was funded in 2009 by the Spencer Foundation (USA). Additional funding is currently being sought for an expansion of the study. Many LPS team members have already expressed interest in taking part in the study.

**The Spoken Mathematics Project:** David reported briefly on the recent work of the Melbourne team on a comparative analysis of the use of spoken mathematics in classrooms from six of the LPS countries (Australia, China, Germany, Japan, Korea, and the USA). The analysis has led to two journal articles, two book chapters (to be published in the LPS Differences book) and a large number of conference presentations. Drafts of all publications have been circulated to the leaders of the teams whose data has been analysed and the response has been enthusiastic. If further funding can be obtained then the project will be expanded to include other countries’ data.

**Accomplished Practice Study:** David proposed a possible new study for which OECD support might be sought in which locally-generated classroom video material would be made available to teams of “expert teachers” in each participating country for the purpose of identifying those practices identified as competent or accomplished in each country. Interested LPS team members should contact David.

**Collaboration:** David suggested that the mathematics education community was expecting more from the LPS project than separate analyses of each country’s data and that more comparative analyses must be undertaken. These comparative analyses could be the focus of collaborative work and joint funding applications from different combinations of LPS teams. The availability of the VideoPortal system should make comparative analyses easier than has previously been possible. Consistent with established LPS protocol, any proposed analysis must be submitted via David for approval by the research team leaders whose data is to be analysed.

**Funding**

**International Collaboration Prioritised** - There is a current interest in funding agencies internationally to support international collaborative research and LPS team members should make use of the project to develop new partnerships and initiate new analyses of the large body of LPS data available. The Australian Linkage-International funding scheme that has supported the LPS meetings, both overseas and in December no longer exists. It is possible that this December Meeting will be the last unless an alternative funding source can be found. Research groups in other countries are strongly encouraged to seek funding to host LPS Team Meetings in their home country or elsewhere.
The University of Melbourne Visiting Scholars Program provides funding for international researchers to conduct collaborative research at the University of Melbourne for up to one year. LPS team members interested in applying should contact David. Copy Editing Costs for LPS books may be available from universities. LPS lead editors should explore this possibility at their own university.

Summer School on Classroom Research and Video Analysis – possibilities are being explored regarding the offering of such a Summer School or Summer Institute by ICCR staff, possibly interested in hosting such an event at their university should contact David.

Visibility
The LPS project and community are continually gaining status and being more frequently mentioned in publications and keynote addresses by other (non-LPS) researchers. We must maintain the international interest in our work by ensuring the timely publication of our series of research books. The LPS website is one major source of information for the international community about the LPS project. Each time an LPS-related publication appears, please send the full APA reference to David and Carmel for inclusion on the LPS website.

Conferences in 2011
CERME - Rzeszow, Poland - Feb. 9 to 13
AERA - New Orleans, USA - April 8 to 12
NCTM Research Presession and Main Conference - Indianapolis, USA - April 11 to 16
MERGA/AAMT - Alice Springs, Australia - July 3 to 7
PME - Ankara, Turkey - July 10 to 15
CIEAEM - Barcelona, Spain - July 24 to 29
EARLI - Exeter, UK - August 30 to September 3
ECER - Berlin, Germany - September 13 to 16
ICMI 21 - Sao Paulo, Brazil - September 16 to 20

Future LPS meetings
David expressed disappointment at the low attendance at the Team Meeting, despite the initial indications from many LPS team members of their intention to attend. A majority of those present indicated their preference that the 2011 LPS Team Meeting should be held during or following the PME conference. The other possibilities are the EARLI and CIEAEM conferences. The LPS team membership will be contacted and given an opportunity to indicate their preference.
LPS TEAM REPORTS - 2010

Prepared for the LPS Team meeting held in Belo Horizonte, Brazil, on Friday, July 23.
LPS Australian Team Report – 2009/10

Team members: David Clarke, Gaye Williams, Carmel Mesiti, Cameron Mitchell, Reggie Bowman, Li Hua Xu, and Vivien May Ee Wan

1. Recent changes affecting the activities of the Australian team
   • Dr Gaye Williams (Deakin University) continues at the ICCR as post-doctoral research fellow three days per week from until the end of 2012.
   • Dr Li Hua Xu has commenced work at the ICCR as a postdoctoral researcher, after completing her PhD early in 2010. Li Hua’s position is funded from an Australian Research Council grant for a project on curricular alignment in mathematics and science in Melbourne, Helsinki and Beijing.

2. Visiting Researchers – last 12 months
   The December meeting of the Learner’s Perspective Study (LPS) international research team was held from December 5 to 12, 2009. Support for this conference, which attracted representatives from ten countries, was provided partly by an ARC Linkage-International Grant and partly by a Melbourne University International Research Planning Workshop grant. LPS visitors during 2009/10 include:

   2009
   Tomas Hojgaard (Aarhus University, Denmark), Minoru Ohtani (Kanazawa University, Japan), Jonas Emanuelsson (Gothenburg University), Zuo Hualing (Beijing Normal University, China), Glenda Anthony (Massey Uni., NZ), Christine Keitel (Free University Berlin), Birgit Pepin (University of Oslo), Berinderjeet Kaur (National Institute of Education, Singapore), Ida Ah Chee Mok (Hong Kong), Fritjof Sahlstrom (Helsinki, Finland), Hauke Straehler-Pohl (Free University Berlin), Huan Zhongdan (Beijing Normal University), Minoru Ohtani (Kanazawa University)

   2010 (to June 30)
   Cecilia Kilhamn (doctoral student, Gothenburg University), Celia Hoyles and Richard Noss (Institute of Education, London), Arne Mogensen (Aalborg Uni., Denmark), Zheng Guomin (Dean of Education, Beijing Normal University) and a delegation of 20 Deans of Education from a variety of Chinese Universities, Kang Changyun (UBC, Canada) and four Chinese teachers

3. Research Projects

   LPS-related Projects being conducted at the ICCR
   Learner’s Perspective Study (David Clarke and various LPS collaborators)
   (ARC-DP grant (now finished) and several ARC Linkage-International grants – currently 2008/9/10).

   The International Classroom Lexicon Project (David Clarke and collaborators in ten countries). Funding of $50,000 obtained from the Spencer Foundation (USA) for 2009. Major grant application to Spencer Foundation to continue the study in 2010 was not successful – alternative funding is being sought.

   The spoken mathematics project – funding obtained as The Distribution of Responsibility for Knowledge Generation in Mathematics Classrooms in Australia and Korea (David Clarke, University of Melbourne, Frederick Leung, University
of Hong Kong, and Kyungmee Park, Hongik University, Korea) (ARC Discovery-Project grant – finished 2007 – analysis continues)

The Alignment Project – major funding obtained for research into curricular alignment in Melbourne, Beijing and Helsinki from an ARC Discovery-Project grant for 2010-2013.

Projects employing variations on the LPS methodology

Causal relations between complex classroom practices and science learning (David Clarke, Russell Tytler, Christina Hart, Jenny Arnold, Seah Lay Hoon, and Xu Li Hua) (ARC Discovery-Project grant for 2008/9/10/11)

Designs for Learning: Teachers and Students as Co-Participants in the Development of Professional Standards for Teachers of Geography (Jeana Kreiwalldt, Dianne Mulcahy, David Clarke, University of Melbourne) (ARC Linkage-Project grant awarded for 2007/8/9/10)

The role of optimism in collaborative problem-solving in mathematics: Building problem solving capacity (Gaye Williams) (ARC-DP grant (2009/10/11/12) including a postdoctoral fellowship for Dr Williams)

Technical Projects related to the LPS

VisualGrid: Grid-Enabled International Collaborative Entry, Retrieval and Analysis of Video Data in Education and the Social Sciences (David Clarke and Cameron Mitchell, University of Melbourne; Sally Barnes, University of Bristol; Frederick Leung, University of Hong Kong; Fritjof Sahlström, Uppsala University) (ARC SRI e-Research grant for 2006/7 – work continues)


Developing Collaborations – loosely connected to LPS

Learning outcomes in mathematics and science classrooms in Australia, Finland and China: Interrogating the alignment of curriculum, instruction and assessment (David Clarke, Fritjof Sahlstrom, Yi Ming Cao) (ARC-DP application submitted)

Systemic provision of resources to support mathematics teacher professional learning (Paul Cobb, David Clarke, Yi Ming Cao) (Implementation of new Chinese curriculum – possible application to the NSF).

4. Recent and Pending Publications of LPS-related Research by the Australian team


Four further volumes in the LPS research series are in preparation. The next volume to be titled, *Difference in Mathematics Classrooms Around the World*, should be published in December, 2010. It is hoped that the following three volumes (*Algebra, Coherence and Competence*) will be published at six-monthly intervals.

5. **LPS-related Conference Presentations in 2009 and 2010**

*6th Conference of European Research in Mathematics Education, Lyon, France*
Fri., Jan. 30  Research report (Clarke): Spoken Mathematics as a Distinguishing Characteristic of Mathematics Classrooms in Different Countries

**European Association for Research in Learning and Instruction, Amsterdam, The Netherlands**
Fri., Aug. 28  Symposium. Social Interactions and Language Use in Asian and Western Mathematics Classrooms
Sat., Aug. 29  Symposium. The Challenges of International Classroom Research

*Korean Mathematics Education Conference, Chungbuk Uni, Korea*
Sat., Oct. 24  Keynote address: Spoken Mathematics as a Distinguishing Characteristic of Mathematics Classrooms around the World

**National Curriculum Conference, Providence University, Taipei**
Fri., Oct. 30  Keynote address: Speaking in and about the mathematics classroom

**Australian Association for Research in Education, Canberra**
Mon., Nov. 30  Presentation 1. The cultural specificity of theory
             Presentation 2. Spoken Mathematics (Clarke)

**Mathematical Association of Victoria, La Trobe University**
Fri., Dec. 4  Keynote: Speaking in and about the mathematics classroom

**2010**

*International Group for Psychology in Mathematics Education, Belo Horizonte, Brazil*
Mon., July 19  Research Forum 1: Speaking in the mathematics classroom
Fri., July 23  Research Forum 2: Speaking about the mathematics classroom

**Australian Council for Educational Research, Melbourne**
Mon., Aug. 16  Opening Keynote: Speaking in and about mathematics classrooms internationally: The technical vocabulary of students and teachers

*East-Asian Research Conference On Mathematics Education (EARCOME 5), Tokyo, Japan*
Thurs., Aug. 19  Plenary Address: The Cultural Specificity of Accomplished Practice: Contingent Conceptions of Excellence
Fri., Aug. 20  Research Paper: Meta-discursive rules and the introduction of new content in mathematics classrooms in Seoul, Shanghai and Tokyo (Xu, Clarke, Wan)

**European Conference on Educational Research, Helsinki, Finland**
Fri., Aug., 27  Symposium. Multiple Approaches to the Analysis of Social Interactions and Language Use in Asian and Western Mathematics Classrooms

Moving Through Cultures of Learning (Conference of EARLI SIGs 10 and 21), University of Utrecht, The Netherlands
Fri., Sept. 3  Research paper 1. Moving between theories: The need for multi-theoretic designs for classroom research
Research paper 2. Differences in Student Participation in Mathematical Discourse: Comparisons across classrooms in Berlin, Hong Kong, Melbourne, San Diego, Seoul, Shanghai, Singapore, and Tokyo

School of Education, University of Waikato, 50th anniversary
Fri., Nov. 5  Invited keynote: Pushing the Boundaries of Classroom Research

6.  ICCR Centre Review
   •  The ICCR is going a major Review of its activities. Attempts will be made to get some university support for Centre infrastructure.

7.  VideoPortal
   •  The videoPortal facility has now been running successfully for 12 months. At this time it has only three subscribing teams. At least five subscribers are needed for it to be self-maintaining – so, for the moment, it is being subsidized by the Melbourne team from other research funds. Lesson tables have now been included as part of the front-page to assist LPS researchers to select suitable lessons for analysis.
LPS China - Hong Kong Report for 2009/10
(June 30, 2010)

Project leader: Frederick Leung, The University of Hong Kong
Project members:
Ida Mok, The University of Hong Kong

Prepared by Ida Mok
The data set collected by Hong Kong team consists of the Hong Kong and Shanghai data in 2000-2003. They are uploaded in the LPS online system. We submitted a grant last year but was not successful. Therefore, at the present moment, we have no grant support. Nonetheless, analysis and writing continues.

To support the Beijing team, a visit by Ida was made for Beijing to share the LPS experience with the Beijing Team in January 2010. To support the Beijing LPS work, seminars and workshops were presented about findings by the Hong Kong Team and issues about translation and documentation of data.

Another visit by Ida is planned to Taiwan in October 2010 to give a talk on LPS Hong Kong experience.

List of Publications


Conferences


List of writing in preparation

Mok, I.A.C. (draft). Seeking the evidences of instructional scaffolding in the reform-based teaching of a Shanghai teacher. In LPS Book7 (Working title): Competent Teachers in Mathematics Classrooms around the World (Working)

Mok, I.A.C. (draft). Seeking coherence: A case study in the Hong Kong Classroom. In Coherence in the mathematics classroom: The teaching of a topic in mathematics classrooms around the world. (LPS Book 6), (Working)

Mok, I.A.C. (draft). The coherence of student beliefs about good classrooms in Shanghai and Hong Kong. LPS book 4 chapter. (revised and resubmitted)

Mok, I.A.C. (draft) Teaching the graphical method of solving equations: An example in the Shanghai lessons. LPS algebra book chapter. (submitted)

Huang, Mok & Leung (draft) Teaching algebraic concepts in Chinese classrooms: a case study of systems of linear equations. LPS algebra book chapter (submitted, revised)

Zhu & Mok (draft) What matters in a mathematics lesson in the students' and the teacher's view: A case study in Hong Kong (working)
LPS China-Beijing Team Report in 2009/10
Zhongdan Huan

From 2009 LPS annual meeting, the LPS China-Beijing Team has finished the following work:

(1) Clarification of LPS design
The LPS design was reviewed and understood in Chinese by the team. The team wants to thank Ida for her support.

(2) Chinese Transcripts
The team redid the old transcripts on 2005 tapes and finished the transcripts on 2009.

(3) Researches
The team starts several researches based on the transcripts, both related to LPS book 7 and other issues. There is a monthly meeting on LPS since last January.
Journal paper

Book and Book Chapter:

Conference Presentation
TEAM PROGRESS 2009/10
CZECH REPUBLIC

Team Members: Alena Hošpesová, Jarmila Novotná

1. New set of data registered in January 2010 are being processed.

2. Outputs
   - PME 34
     Research report Hošpesová-Novotná: *Promoting components of algebraic competence in school practice*
     Chapter in Clarke, Mok & Williams: *Coherence in the mathematics classroom: The teaching of a topic in mathematics classrooms around the world*: Hošpesová-Novotná: *Solving word problems and school dialogue - Cognitive demands*
     Chapter in Leung, Park, Holton & Clarke: *The Teaching and Learning of Algebra Around the World*: Novotná-Hošpesová: *Traditional versus Investigative Approaches to Teaching Algebra at the Lower Secondary Level: The Case of Equations*
German LPS Team Report – 2009/10

Team Members: Christine Keitel, Astrid Begehr, Hauke Straehler-Pohl

1. The German LPS-group had still to cope with capacity problems for the LPS-study in Germany:
   a) Prof. Dr. Christine Keitel could not contribute more deeply to LPS because of the various duties of her function as Vice-president, where she was and is in particular responsible for the first evaluation and substantial changes to be completed until 2011 of the majority of study orders, after having identified major problems and disfunctions of the newly developed and firstly evaluated study orders of the recently introduced BA and MA system. At the end of her period as VP and after a detailed evaluation of all orders university-wide CK had started a university-wide reform of study orders accompanied by accreditation process.
   b) Further additional tasks have to be tackled by CK for the new round of the “Excellence”-competition with newly developed “clusters” and graduate programs/schools. In addition, alongside with excellency programs, new demands for internationalisation and a lot of travelling as Vice-president have taken time and power.
   c) Dr. Astrid Begehr took up another two year break for her new parentship as she got a second daughter and has resigned from any work, i.e. she did not contribute to LPS.

2. We also attracted some new research capacity, however only for a short period:
   a) Our MA-student Hauke Straehler-Pohl as our new collaborator and scientific co-worker joined us for working on the improvement of our data base and on the analysis tools, but only for while as he became scientific assistant for Prof. Dr. Uwe Gellert who took over my duties of teaching:
   Hauke could contribute and still works on these themes:
      - Continuation of an very intensive reworking of our lesson scripts and a unification and harmonisation of all translations and specific classifications, which allows now direct comparisons of video and available texts to create further descriptors and deeper analyses.
      - The improved unification of the transcripts together with additional translations of contextual characteristics and variables offer a more perfect translation.
      - A listing of those terms or specific expressions that occur typically during German lessons but do not exist in English are listed as well with a unified English term that comes close to the meaning and should be used throughout the texts. These lists were especially important when we compared US-lessons with German lessons and compared the very different meanings in the wordings.
   Hauke is working on this list of terms that do not exist in English in the particular meaning, choosing a term with special connotations:
   Now we have finally unified all interviews by several checks of language/translation as we had employed different translators during the first working on translations. We think that now we have more “perfect” transcripts with additional explanations/directing remarks. We believe that this will be of great help when turning into our videos of primary schools.
   We have partially used and worked on our first set of 24 videos of lessons from very different primary schools which were taken to identify appropriate
schools, and we experienced that the new status of videos from our secondary schools and their transcripts allow us an easier and quicker working on the primary school data, because there is now a kind of a “Handbook for unified transcripts and translations”.

Most interesting aspects, which are now more visible, relate to the different images and conceptualisations of what is considered as mathematics by teachers and students in different settings/school types and what are the differences in the main values attributed to mathematics teaching and learning, which might substantially influence the transition process from one school type to the next higher one – an unknown and not yet well researched perspective.

During the past year we were mostly occupied and strongly devoted to finalising the collection of papers for the book on “Difference(s)” which has now a fine range of papers to cover a good stories to tell with respect to what makes differences and how they come alive or disturbing. Just now, we design the preface with an overview and marking of the status where we are and where we want to go, most contributions are ready and “improved” from point of view of content analysis, maybe not all from point of view of “language refinement”. For this we might need a look from Carmel over - at least – some papers; we still wait for some papers to be finalised and not yet arrived in their final style and version with us, including David’s now two different papers.
LPS Progress Report Israel, 2009/10

LPS Israel Team:
- The principal investigators continue to be Miriam Amit and Michael N. Fried.
- Lower-level graduate students provide some assistance to the team.

As before, our LPS data continue to serve as an invaluable source of material and inspiration for investigations in several different directions. This year, however, has been a low point as for actually using the data. Financial support for research in areas, like education, that do not have an immediate economic impact, has not increased over the last year; indeed, if anything, funding has become less available. So, again this has prevented us, among other things, from completing the enormous amount of translation work needed to make our data available to other LPS members via the videoPortal facility.

The report for 2009-2010 is, therefore, as it was in the previous period and can be summarized as follows:

Data
- Fieldwork finished. Two full LPS data sets have been collected (including interviews, integrated video record, etc.)
- Both data sets have been transcribed entirely.
- Translation from Hebrew into English of data sets still remains to be done.

Staff
- The principal investigators continue to be Miriam Amit and Michael N. Fried.
- Lower-level graduate students provide some assistance to the team.
LPS Japanese Team Report – 2009/10

Team Members
Yoshinori Shimizu (University of Tsukuba) yshimizu@human.tsukuba.ac.jp
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A Summary of Activities

- Data collection of LPS-Primary, 2010
  The first data collection of LPS-Primary, founded by Japan Society of Promotion of Science, has been completed in 2008. The second data collection has been planned to be conducted in Tokyo in year 2010.


- Books Research Papers-LPS related
Korean team has not been active in further analysis of data, but hopefully we can do what we are supposed to do.

1. Analyze the data from an angle of transition from informal/intuitive level to formal/abstract level. The idea is not mature enough to report, but the main idea is like the following. Most lessons start with some contexts or situations where mathematics which will be dealt in the lesson are embedded. Capable teachers can make students move from this stage to more advance stage (formal/abstract stage) smoothly. The analysis will focus on how this transition occur in the class, and what ensures such transition.

2. Korean team was inspired by the special issue of ESM (Vol. 69), and plan to analyze the lessons from an angle of ‘examples’ which play a central role in the teaching of mathematics. The function of examples will be identified whether they are raw materials for generalization, illustrations of concepts, giving students a motivation, or summary etc.

3. Work on the LPS Algebra book with David and Frederick. So far, we have full submissions as well as abstract or rough draft. We will go on the review process while we solicit more contributions.
LPS New Zealand Team Report – 2009/10

(Project titled: Mathematics Classrooms: Explorations into the teaching/learning nexus)

Team Members: Glenda Anthony and Margaret Walshaw

Our work on the LPS project data is now focused on analysis and writing—work that is just one of our research priorities. The main funding for the data collection and initial formatting/analysis has now come to an end. That said, we are aware that there is a huge potential for lots of data analysis within the rich data set and for more focus on collaboration with other country members. Our outputs in the last year include:


Currently we are have submitted Anthony/Burgess paper to the LPS Algebra text and are working on a chapter for the Effective Teaching text. Dr Liping Ding has returned to China and is working on a publication involving comparative study of classroom in NZ and China.

Although our funding for the main project is completed we do have funding available that can contribute to living expenses if an overseas team member was interested in visiting NZ to collaborate on writing a journal article. We have interests in comparing lesson starters, use of worked examples, participation practices, language, task complexity, formative assessment, and language.

Glenda Anthony (NZ co-director)
Norwegian LPS team members: Professor Kirsti Klette, Birgit Pepin and Ole Kr. Bergem

1. **Current members of the LPS-team**: Kirsti Klette, Birgit Pepin and Ole Kr. Bergem

Birgit Pepin, who is a professor at HiST, Sør-Trøndelag University College in Trondheim, has now joined the Norwegian LPS-group. Through her initiative, all the data material from one of the Norwegian LPS-schools is now translated to English, and are available for all LPS-researchers.

2. **Recent publications**


3. **Activities**

Our group has, in cooperation with the Finnish and Swedish LPS-group, applied to The Nordic Social Sciences Research (NOS-HS) for funding of a study with a focus on student-teacher negotiation in mathematics classrooms during individual seat work (“Interrogating the alignment of curriculum, instruction and assessments in mathematics classrooms in Finland, Norway, Sweden, Australia and China”). The project involves LPS scholars from Finland (project leader), Sweden and Norway, together with colleagues from Australia and China. The project serves as a further development of the LPS-design.

We are now working on a book from the Norwegian PISA+ video study: “Exploring Life in Classrooms within the Era of PISA and TIMSS: Lessons learned from the PISA+ Video Study”), which will be published in March 2011. The Norwegian LPS-study was a part of the PISA+ video study. However, the PISA+ video study also included science- and reading lessons.

We have also presented papers from the LPS-study at various international and national conferences, and will continue to do this in accordance with our extended analysis of the LPS-material.
The Philippine team now consists of Lydia and myself. Lydia was a colleague who served also as an observer and mixer just like Flor and myself when we were still gathering data in 2001.

For 2009, the main thing that I had done was to start writing the chapter that I am contributing to the Algebra book. I am still working on it and so haven't submitted it to Frederick. Moreover, I am still waiting for the comments on the chapter that I submitted for the Difference book. This is why I did not write a report anymore for 2009.

Lydia and I submitted to Yoshi an abstract for the Competence book. Hopefully, in the second half of this year, we can start doing our analysis.

Best regards,
Sol
The current members of the Portuguese team are
a) João Pedro da Ponte, Department of Education of the Faculty of Sciences of the University of Lisbon;
b) Cláudia Canha Nunes, PhD student at the same Department and mathematics teacher at EB 2,3 Marvila, Lisbon;

Recent publications in research journals:

Chapters in international books

Curriculum development products

In addition, João Pedro da Ponte has been involved in the Project of implementation of a new mathematics curriculum, for grades 1-9. This curriculum was approved by the Ministry of Education in December 2007.
Team Leader: Berinderjeet Kaur

(i) at the present team comprises of only one member, i.e. BK
(ii) nothing exciting has happened in the last year
(iii) proposal for the Book on "Students Voice".

Berinder
Introduction:
In the report from 2008 I reported on changes in the LPS team and work in Sweden. In this report I will take such issues of given and will focus on events during the last year.

The Swedish LPS team
The 2009 LPS team in Sweden is as follows:
Team leaders:
Sverker Lindblad, University of Gothenburg
Ference Marton, University of Gothenburg (now emeritus)

Researchers:
Jonas Emanuelsson, University of Gothenburg.
Johan Häggeström, University of Gothenburg
Michael Hansen, University of Gothenburg
Martin Harling, University of Gothenburg
Eva Jablonka, Luleå University of Technology
Johan Liljestrand, Gävle University College
Olof Reichenberg Carlström, University of Gothenburg
Ulla Runesson, University of Gothenburg
Fritjof Sahlström, Helsinki University

The degree of activity varies between the members, but at present I think it is fair to present this list.

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Research resources:
In the 2008 report I wrote about the Swedish CULT project (Swedish school culture in comparative perspective) which is the Swedish counterpart in LPS. The CULT project was part of an application for a centre of excellence that was approved, but almost all of the researchers in CULT as an LPS project were excluded from work in this Linnaeus centre LinCS. Since this centre changed direction and since the LinCS to my understanding was not organised in a way that could preserve agreements concerning intellectual property rights and research ethics made in the LPS consortium I decided to resign from LinCS together with the research projects I direct. Thus, the LPS is outside the LinCS centre of excellence in Gothenburg. However, we got additional research funds for a study on Lived Curricula and School Results in Late Modernity, where we are continuing working with research and comparisons of classroom interaction from a curriculum theory point of view. This also opens up opportunities for LPS work.

On the deliverance of the Swedish data sets:
There is one data set delivered – a full set including very detailed transcriptions of lessons and interviews. The detailed level implied that we used all resources on that set. This was a fair thing to do, given the complex interaction patterns we identified in the school and class studied.
We have now, with a reallocation of resources, started anew with transcriptions of lessons and interviews. Jonas Emanuelsson and I have made a few strategic decisions and Olof Reichenberg Carlström is outlining the work to be done now. We have not yet decided on the time schedule, but the important point here is that work is in progress and that more of our research can be shared with other teams.

**Current activities:**
We have four different but related foci for our work:

*Firstly*, member in the LPS team are continuing their work on the mathematics education task. Here, Jonas Emanuelsson and Johan Häggström are writing on a chapter in the next LPS book. It will hopefully be published in the autumn of 2009. The doctoral thesis of Häggström presented last year (2008) is a major input under this focus. I elaborated that more in detail last year and will go over to the other three foci.

*Secondly*, as part of the Swedish team ambitions there was an interest in developing conversation analysis, most persistently driven by Fritjof Sahlström. He has actively worked with the data, and has presented results in publications and at conferences. Sahlström has now edited a special issue of Scandinavian Journal of Educational Research with that focus: Scandinavian Journal of Educational Research, Volume 53 Issue 2 2009: *Conversation Analysis as a Way of Studying Learning*  
As such this special issue is outside the LPS work, but it is of considerable interest for LPS research in its way to deal with a specific approach to capture interaction and learning. Ference Marton contributed with a commentary “Beyond learning as changing participation” where he states about the contributions to the special issue. I quote him here to show the qualities of the contributions in the special issue edited by Sahlström:

> This is a very impressive collection of papers, right at the cutting edge of research on learning—or at one of the cutting edges of research on learning, I would rather say. The five papers relate nicely to each other: A shared methodological and theoretical (or a-theoretical) stance is applied to five widely varying content domains. The research specialization is exemplary insofar as it builds on clearly identifiable earlier research, in a highly convincing way, but goes beyond it, carving out its own space in the landscape of scholarly inquiry into human affairs in general, and human learning in particular. The approach is distinct, rigorous, precise, and relentlessly empirical. Some of its specific features are: relating the view of learning as changing participation to conversation analytic methodological stance and using the participants’ categories for describing events and scenarios, and all five papers seem to be educationally oriented in the wide sense. This research situates itself inside the learning as changing participation paradigm, but transcends it through a micro-analysis of the mechanisms by which learning—as described in that paradigm—is taking place. (Marton, 2009, p 214)

I hope this is enough of an appetizer for checking this special issue on conversation analysis.

*Thirdly*, we are continuing our studies on classroom interaction from an institutionalist or curriculum theoretical point of view. This includes analyses based on classification and framing, classroom discourses based on notions of recitation and specific classroom interaction patterns as well as the school class as a social system. Harling, Hansen & Lindblad (2008) presented a comparison of Swedish LPS recordings with filmed classroom activities in 2008 from a curriculum theory point of view. They conclude:

> To end – we have presented a comparative analysis of classroom interaction based on recorded fragments of lessons from 1968 and 2003. This has given us a picture of differences in classroom interaction and the politics of learning which we think
can be understood as differences in governing. Furthermore, we understand such differences as indications on a changing regime of government. Olof Reichenberg Carlström (2009) developed these historical comparisons further in his examination work on classroom interaction, with a special focus on curriculum codes and identity production. From similar points of view Harling and Reichenberg Carlström (2009) presented a study with a focus on difference-making and identity production in the classroom. At the 2009 EERA meeting in Vienna we are organising a symposium on “Communicating Education: On the social organisation of schooling under a performative turn in European contexts”. This shows rather well a way to theorize classroom interaction from a (neo)institutionalist point of view, dealing with the political in education.

In focus of this symposium are communication and the social organization of schooling under the performative turn, in relation to students’ educational progress. We discuss these matters concerning education in Denmark, Germany, and Sweden and therefore have the possibility to compare similarities and differences in the politics of education in European contexts.

However, what we need to elaborate further is a way of conceptualising classroom content. We have done so in a principal way in relation to curriculum codes, where the Swedish case points towards a move from stronger to weaker framing and classification of lived content. But I think we should work further on the “knowledge” issue – e.g. in terms of knowledge practices and gender. This is at present more of an ambition, however.

Fourthly, we are doing work on comparative studies. Here, we carried out in Spring 2009 an international doctoral course on comparative education, where the LPS was used as an interesting example of international cooperation. We furthermore followed our critical analyses of international comparisons, such as the PISA and TIMSS, which we consider is an important part of the LPS agenda. We are here putting forwards the ideas that international comparisons should focus on different ways of dealing with similar problems and that comparisons are based on conceptual relations, i.e. not on facts and findings in itself. Actually, we are conceptualising this as an important aspect of education systems of today and in the transnational governance of education. As a means to develop research in this direction we are organising a symposium at the EERA 2009 with the title Educating a knowledge society: Governing-Government through floating signifiers, information systems and navigation tools.

A last note; in research on classroom interaction the concept of context is to my understanding of vital concern. Together with David Clarke and Fritjof Sahlström we developed a proposal to the Swedish Research Council for seed money for research in that direction and also for further organisation of data. Since this could be of a more general interest to the LPS consortium I present a summary here, though the risk that we do not get funded at once is rather high:

The context concept is of vital importance in research on schooling and teaching. It is dealt with in different ways and with quite different implications in ambitions to understand and to analyse educational phenomena and their relations to individuals as well as organisations and society. In this proposal we aim to deal with the complex relations between context and classroom interaction. The plan is as follows:

- To present and discuss different approaches to deal with context issues in classroom research in an international consortium
- To explore different approaches to analyse classroom interaction based on recordings in different national and institutional contexts but with similar contents.
- To analyse how context is dealt with conceptually and technically in a set of studies in an international context.
Based on this we will present analyses of how to deal with context in classroom interaction. This is of vital concern for an improved understanding of teaching and learning in institutionalised settings - e.g. in terms of social and cultural asymmetries. Of equal importance is to conceptualise premises for international comparisons of school performances. It is also of large theoretical interest to develop and compare different approaches and strategies in research on educational processes and social systems. These tasks will be carried out in an international research consortium and is having the ambition to improve our international understanding of education.

Hopefully, these tasks will be carried out in cooperation with different teams in the LPS consortium. To do so could be a way to improve the preconditions for comparative studies in LPS.

**Concluding comments:**
I have here tried to report the work of the Swedish LPS team. We are now working further on transcriptions and translations. Hopefully we will have the second data kit available this autumn.

The Swedish LPS team is moving ahead in four different but related ways. There is a continuing work on maths education, and we will recruit one or two more members with that field of interest. Considering conversation analysis the work presented is currently outside the LPS, but hopefully will be re-integrated again. The curriculum theory/institutionalist analyses are on march in a number of studies including historical comparisons and theoretical developments. What is missing here is a more thorough elaboration of international collaboration and comparative studies focussing on vital educational problems and ways of dealing with them rather than going into the efficiency trap. We are trying to deal with that in our current work on international comparisons. This is at present a main focus in our work, and we are very interested in further collaboration in that respect in the LPS consortium.

In appendix an updated list of publications and texts from the Swedish LPS team is presented.

**Appendix: Recent publications from the Swedish Research Team:**


**Missing Reports**

Note: Team Reports were not forthcoming from South Africa and the UK. The USA team, led by Joanne Lobato, withdrew on the conclusion of Spencer Foundation Funding that was supporting their participation. Access to the USA data is managed by David Clarke through the ICCR in Melbourne.