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The Fruits of Research
Editors' Perspectives on Publishing Work from ICME-13

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Abstract

The Thirteenth Meeting of the International Congress on Mathematical Education (ICME-13) convened in Hamburg, Germany, in July, 2016. There were two Topic Study Groups (TSGs) dedicated exclusively to adult learners and the authors of this paper served on the organizing committees of these groups. Arrangements were made by the congress committee for the publication of peer-reviewed papers from each TSG by Springer International Publishing AG in a series of edited books. In this paper we focus on our experiences as editors of the monographs resulting from our two TSGs.

Learning the Landscape

The International Congress on Mathematical Education meets every four years. The thirteenth congress (ICME-13) was held in Hamburg, Germany, from July 24 to 31, 2016. Among the sessions offered on the program are TSGs whose purpose includes the promotion of high-standard discussions of a variety of perspectives on the theme of the TSG as well as giving a broad overview on the state-of-the-art for that specific topic. TSGs serve as mini-conferences and are intended to display the progress of the discussion in the intervening years since the previous ICME, enabling the newcomer to get a broad overview on the state-of-the-art and allowing the experts to lead discussions at a high level; they represent 'the fruits of research' on each topic. The 56 ICME-13 TSGs covered a broad range of topics from pre-school to university mathematics education and included TSGs with historical, theoretical and philosophical foci, for example, TSG11 covered 'Teaching and Learning of Algebra' and TSG25's focus was on 'The Role of History of Mathematics in Mathematics Education'. Each TSG organizing team provides the members of their TSG with an overview on the international discussion as broadly as possible and allows for insight into less well-known strands of the discussion from under-represented countries. For ICME-13, the TSG was the major arena for participation. Participants were expected to associate themselves with one TSG and to stay in that group for all sessions (http://www.icme13.org/topic_study_groups).

ICME-13 was the fifth congress to recognize adult learners as a viable category of mathematics learners. There were 'adult' Working Groups for Action (WGAs) or TSGs at ICME-8 (Seville, Spain), ICME-9 (Tokyo/Makuhuri, Japan), ICME-10 (Copenhagen, Denmark), and ICME-11 (Monterrey, Mexico) and a TSG on 'Mathematics Education In and For Work' at ICME-12 (Seoul, S. Korea) as well as at ICME-13. The practical and financial organisation of an ICME is the independent responsibility of a Local Organizing Committee, operating under the auspices and principles of the International Commission on Mathematical Instruction (ICMI). Consequently each ICME has both broad international scope and a distinctly local flavour.

The International Programme Committee (IPC) for ICME-13 decided to offer two TSG topics specifically related to adult learners and invited people to join an organizing committee for each TSG. TSG3, entitled "Mathematics Education In and For Work", addressed vocational mathematics education. TSG6 embraced any aspect of adult mathematics education, as shown in its title, "Adult

Learning of Mathematics – Lifelong Learning". Each TSG was encouraged to publish an optional pre-congress survey of their topic area. TSG6 did so and the TSG6 survey can be found at http://www. springer. com/us/book/9783319328072. There are 25 other topical surveys available on a variety of aspects of mathematics education and all are open access so readers may wish to view the series catalogue in addition to accessing the TSG6 volume.

It is common practice for TSG organizing committee members to publish congress papers after the conclusion of the congress. Edited books emanated from the 'adult' TSGs of ICME-8, ICME-9 and ICME-11 through a range publishers (Coben & O'Donoghue, Eds., 2011; FitzSimons, 1997; FitzSimons, O'Donoghue & Coben, 2001). ICME-13 differed in that each TSG's monograph[1] was assured in advance of publication by Springer. Also, all initial versions of papers to be presented had to be submitted in advance via the ICME-13 portal. These were strictly limited to eight pages in length with a uniform editing protocol in place. This should have made the eventual monograph editing easier since these papers were, in effect,early versions of the final chapters. However, a variety of factors meant that this was not necessarily so. For example, not everyone took readily to the online system for submission of papers. Also, many authors were not native speakers of English and ICME-13 had not funded a language editor for the series. But that is getting ahead of the story.

Filling the dance card[2]

The invitation to submit a paper to a Topic Study Group was issued in the announcement for the congress. Potential participants completed a paper or poster for consideration by the TSG organizing committee. Each paper was independently peer-reviewed by two people and the organizing committee then developed a program of presentations that spanned the assigned time slots on the congress program. All TSGs met at the same time; those with a large number of papers were allotted additional slots. TSGs with the opposite problem, a small number of submissions, were permitted to invite authors from other TSGs, or even people not attending the congress, to submit papers for their monograph but not to present in the TSG program. The organizing committee selected papers for peer review with a view to subsequent publication by Springer.

TSG3 was well-subscribed but the TSG6 organizers encountered two problems while 'filling their dance cards'. The first was the result of the overlap of the three TSGs that would attract adult mathematics educators since research in one area does not preclude its utility for the other two. The field is small compared to other mathematics education research and arguably congress participants were spread too thin. This was tied to the second problem, namely that attendees had to commit exclusively to one TSG. Participants were not allowed to submit papers to more than one TSG and invited plenary speakers (a special category within the congress strata) could not be invited to publish a paper in a TSG monograph, even on a topic radically different from that of their plenary talk.

Herding the cats[3]

While it was determined before the conference who would edit the post-conference publication, the real work on the volumes commenced in August, 2016, with authors submitting revised versions of their eight-page papers. The procedure to be followed was helpfully set out by Prof. Dr Gabriele Kaiser, the Convenor of ICME-13, in guidance issued to TSG organising committees. Accordingly, each paper was double peer-reviewed and this work was shared between members of the respective TSG organizing committees and external reviewers as required.

Record keeping was critical in order to monitor progress though the editorial process, keep track of submitted papers and reviews and chase up any that were missing. The TSG editors created spreadsheets modeled on the one used to monitor contributions to the ALM International Journal. These were used

[1] A monograph is a publication that focuses on a limited and specific topic.
[2] In earlier times, women attending a dance held a card that contained the names of their partners for the evening's dance programme; similarly, at ICME-13 the TSG organisers had the task of organising their programmes.
[3] Cats, or academics in this case, are notoriously difficult to organize and control.

to track the peer reviewers assigned, the dates papers were sent out for review and returned, and the dates authors received their reviewers' anonymous comments and then returned their amended papers. For TSG6, only one author declined the opportunity to amend a paper and this was omitted from the final manuscript submitted for publication.

There were, of course, problems with intended deadlines and at times we felt we were herding cats. The authors, editors and reviewers were all gainfully employed and these work responsibilities necessarily took precedence over their original and amended submissions. The TSG6 editor took a light-hearted approach to prompting the authors, sending a reminder of publication deadlines at the beginning of each month. For example, the November, 2016, entry read:

> "Dear Authors,
> Can you believe that another month has flown by? I hope that your article is taking shape and that you have a tentative date for submitting it to me. Please let me know how you are doing."

This approach kept both the editors and authors aware of the progress of the volumes.

Working with idioms[4]

Good communication between editor and authors, and understanding, or not, of the language used was crucial. English was the language of the congress and also of the TSG monographs. Each TSG team was allowed to choose a variety of English; the TSG6 team chose American English and the TSG3 team chose British English.

The international nature of the conference meant that many of the authors were not native speakers of English. The TSG6 editor-in-chief was the only native English speaker of the three editors so had the task of editing all submissions by authors whose manuscripts might need to be edited for clarity. This is always a delicate task. The editor walks the narrow line between correcting and clarifying - or altering - the author's intended message. In the event, all the authors graciously accepted suggestions and the editor emerged confident that she had not sullied the gist of the author's concept.

A further complication stemming from the mix of languages and underlining the delicacy of the editorial task was the potential for misunderstanding through the use of idioms. A humorous example of the gulf that can exist between the editor's or author's intention and the recipient's understanding of a message is shown below in a table widely circulated on the internet (Richards, 2015). Other languages could no doubt produce their own versions of the table, which serves to indicate the ease with which lines of communication can get crossed.

Table 1.
What the British say, what they really mean and what others understand

What The British Say	What The British Mean	What Others Understand
I hear what you say	I disagree and do not want to discuss it further	She accepts my point of view
With the greatest respect	You are an idiot	She is listening to me
That's not bad	That's good	That's poor
That is a very brave proposal	You are insane	She thinks I have courage

[4] An idiom is an expression whose meaning cannot be gleaned by a direct translation of the individual words that comprise it.

Quite good	A bit disappointing	Quite good
I would suggest	Do it or be prepared to justify yourself	Think about the idea, but do what you like
Oh, incidentally / by the way	The primary purpose of our discussion is	That is not very important
I was a bit disappointed that	I am annoyed that	It doesn't really matter
Very interesting	That is clearly nonsense	They are impressed
I only have a few minor comments	Please rewrite completely	She has found a few typos
Could we consider some other options?	I don't like your idea	They have not yet decided

Dealing with radio silence

Despite valiant efforts to keep things light, there is a fine line between 'reminding' and 'hounding' the reviewers, fellow editors and authors. Email was the main medium for communication and it is like an arrow - you shoot it off but never know if it hits the mark. Authors - and sometimes also editors - who have fallen behind may be embarrassed or feel harried or be unwell - for a variety of reasons they may not respond to messages. They can, literally, be halfway around the world so the editor does not have the option to appear in their office door and ask "So, how's it going?" or "Can I help?".

Assembling the furniture

While the papers are being finalized, the editorial teams have decisions to make about the ordering, organization and formatting of the volume chapters. How should the volume be organized? Are there categories or themes that emerged from the submissions? This was perhaps a greater dilemma for the TSG6 editorial team as the topics of the papers submitted for the TSG6 book varied widely. After discussion, they decided that the chapters fell into four broad categories: Numeracy; Student Focus; Teacher Focus; and The Crossroads. By contrast, the TSG3 book broadly follows the structure used in the TSG3 meetings in Hamburg and is arranged around four key questions:

> What makes for authenticity in mathematics education in and for work?
> How do we make sense of mathematics in and for work using different research methodologies and theoretical approaches?
> What is the role and place of mathematics in education in and for work?
> What are the advantages and challenges of interdisciplinary approaches to mathematics education in and for work?

As the deadline for manuscript submission loomed, the next challenge was the existence of 'missing authors'. Diplomacy worked and the final TSG6 manuscript was compiled on time. Then it was time to check and double-check the formatting of each chapter. Formatting specifications had been sent from both the congress and Springer and these did not always align. Correspondence with the Springer staff clarified the discrepancies and a compromise template was defined which will be used for both books.

Picking the fruit

Once chapters were selected they were checked for the chosen variant of English spelling and final grammar checks were run. Font size and section numbering were made uniform across the chapters.

Each chapter was then pasted into the manuscript document. A table of contents was constructed for each book after perusing other volumes published by Springer.

Giving birth

The TSG3 book has had a difficult gestation, beset by illness and other delaying factors, so it lags well behind that of TSG6. Either way, once the manuscript has been sent off there is nothing to do but wait for the Springer contract as well as the result of external reviews. Based on these reviews, authors may be asked to make further amendments to their work. That having been done the revised manuscript will be submitted, proofs reviewed, and the volumes published and marketed by Springer.

When published the monographs will add to the growing literature on adults learning mathematics in a range of contexts - a literature to which ALM and ALM members have made and continue to make an important contribution at successive ICMEs and elsewhere. As editors we will be proud 'parents', waving our 'offspring' off to make their way in the world.

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