

On the occasion of Gerhard König's retirement as editor-in-chief of ZDM and MATHDI

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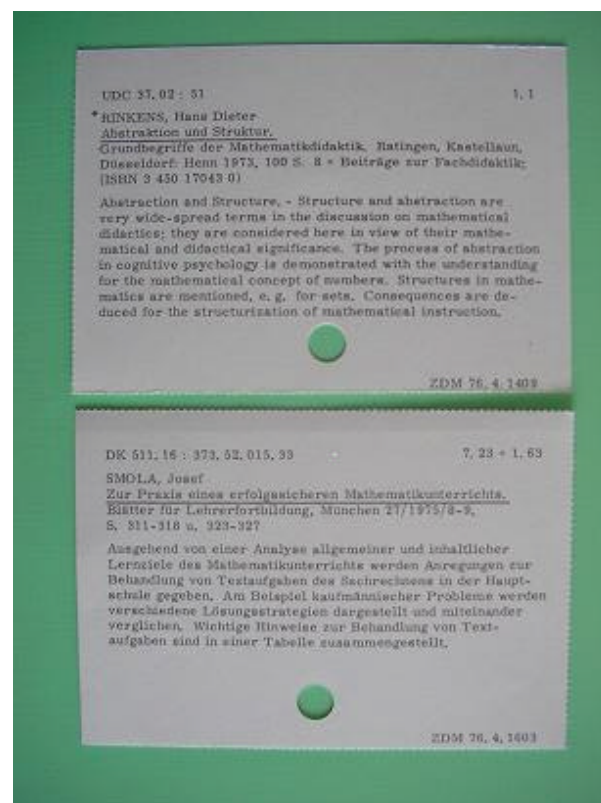


On occasion of the retirement of Gerhard König as Managing Director of ZDM/MATHDI in summer 2005, we would like to honour his contribution to the development of the German as well as the international mathematical didactics.

After studying mathematics, physics and pedagogy and passing a teacher's degree, a diploma as well as the second states examination for teachers in Berlin, Gerhard König started his job at the Klett Verlag Publishing House on the 1st of April in 1968, where his task was to establish a new conception of the Lambacher-Schweizer school book serial and to develop a new serial of topic based exercise books of mathematics for the upper secondary level.

At the same time, in 1967, a discussion was going on among the chief editor for mathematics and physics at the Klett Verlag publishing house, Emmanuel Röhrli, Hans-Georg Steiner, at that time working at the Behnke Seminar in Münster, and Heinz Kunle from Karlsruhe University dealing with the conception of a journal for information and review in mathematics education. Thus in 1968, in connection with the move of Hans-Georg Steiner to the newly established Centre for Didactics of Mathematics at the University of Karlsruhe, the „Zentralblatt für Didaktik der Mathematik“ was founded with the support of the *Internationale Mathematische Unterrichtskommission* (IMUK) (International Mathematical Commission of Instruction) who agreed to serve as co-editor. The Klett Verlag Publishing House supported the new project as publisher and through editorial advice which more and more became Gerhard König's job. In June 1969, the first issue of the new journal, later better known by its short name ZDM, was published. From the very beginning, each issue contained

a documentation section, which was declared as core part of the ZDM, and an articles section containing analyses, reviews and information. The documentation section was standardised in the first issues, as each page consisted of eight file cards. Each of these cards included an identification code indicating the title and contents of the publication besides bibliographical details. The backside showed the same information in English. The ZDM was published simultaneously as journal edition and as file cards which contained the documentation on amplified cardboard and which could be separated from each other by perforation.



These cards enabled the users to search for literature. The initiating and most successful idea of ZDM was that an articles and a documentation section were published together in the same issue. The aim was not only to give an overview over new publications in the documentation section, but also to provide a platform for consideration and reflection on the actual discussion going on in mathematics didactics. Publishing activities of the ZDM from 1969 until 1976 were in the hands of Hans Wäsche, a retired high school teacher from Lübeck who agreed to manage the ZDM for a couple of years. After Hans-Georg Steiner had moved from his position as professor at Bayreuth to the newly founded *Institut für Didaktik der Mathematik* in Bielefeld he dedicated himself to develop the international orientation of the articles section in which he was very successful. Until his death in 2004 Hans-Georg Steiner was closely related to the ZDM and kept to be involved in the internationalisation of the journal. ZDM became increasingly popular amongst its readers, but some financial problems had to be solved.

For the first years, the Klett Verlag bore all publishing costs of the ZDM alone, but slashed the money in 1974. In the following years, first, the teacher education centre of the integrated school region of Karlsruhe/Pforzheim as a pilot model of the Federal State Commission bore the greatest part of the costs until ZDM was integrated into the *Fachinformationszentrum* Karlsruhe, a non-profit organisation set up to provide information and information services for academic and industrial research & development within the framework of a federal initiative.

Thus, in 1976 the ZDM together with the *Zentralblatt für Mathematik* became part of the scientific service institution *Fachinformationszentrum* for Energy, Physics, Mathematics, under the condition that the ZDM would be modernised and mechanised. From that moment on, the internationalisation of the documentation section of the ZDM began, supported and financed by the Federal Ministry of Education and Research. Since that, one of the main functions of the ZDM was to review international literature on mathematics didactics and to give access to those data to users by means of a retrievable database. On the 1st of September in 1976 Gerhard König took over the position as project manager, and on the 1st of December in 1976 he succeeded Hans Wäsche as Managing Director of ZDM, a position which was strongly related to the responsibility as editor-in-chief of the journal's articles section. The latter function he fulfilled until he retired in May 2004. The changes concerning ZDM were presented for the first time to the public in 1976 on the 3rd International Congress on Mathematical Education (ICME-3) in Karlsruhe by Gerhard König and Hans Wäsche. Until his retirement Gerhard König always presented the ZDM on all these conferences, promoted the ZDM and called together the editors from all international journals in the field of mathematics didactics.

During the first stage, Gerhard König vitally spurred on the mechanisation of the ZDM, which meant computerised input and data processing. At the beginning of 1979, the ZDM database was transferred into an accessible retrievable database which provided individual information services in the area of mathematics didactics. Since 1985 the database is online.

The automation of ZDM developed simultaneously with its internationalisation, predominantly guided by Gerhard König. Thus, already in 1978, publications in non-German languages, especially literature in English language were reviewed; e.g. special agreements were made with the ERIC database from which selected documents of journals were included in the ZDM database. Already in 1979, all relevant journals on mathematics didactics from Britain and the United States were completely evaluated. In 1981 40% of the publications in the documentation section of ZDM were non-German publications. Since 1984 special emphasis was put on the evaluation of literature from Eastern Europe. Compared to the analyses section, the database became more and more important and finally became an autonomous database, called MATHDI.

Close cooperation with national and international institutions and organisations and numerous international contacts led to the fact that Gerhard König was asked to assist in many projects, such as

- ?? Editorship of a special issue with papers from ICMI Congresses or of special sections within the report section
- ?? Editorship of special issues of the report section for specific working groups of international congresses as basic working material
- ?? Papers at international congresses and meetings, mostly presenting reports on new trends
- ?? Editorship of bibliographical overviews on important topics or about the didactical discussion in didactical journals.

During the last years, it was upon Gerhard König's instigation that the database was developed further and internationalised: MATHDI was incorporated into the information system STN so that the service was internationally available. Then, in 1998, MATHDI was integrated into the European Mathematical Information Service. Since November 2005 access for research is exclusively available via www.emis.de. Simultaneously, each year, a CD-ROM is published in order to make the database also available offline by means of a convenient search machine.

Further changes are to be done or have already been accomplished: In 2001 the former articles section of ZDM was separated from the printed service, and is now only produced electronically. The editorship of this electronic journal has been transferred to the *Fachinformationszentrum* Karlsruhe, the Association for Didactics of Mathematics (GDM) and the European Society for Mathematics (EMS).

In future, the name MATHDI (MATHematical DIDactics) will be changed into MATHEDUC (MATHematics EDUCation) because it is easier to understand and to be kept in mind by an international community.

The printed version of the database, the well-known turquoise-coloured DINA4 brochure continues to be published bimonthly and contains the newest information on publications from the database. From 2006 on it will be published under the name MATHDI/MATHEDUC – International Reviews in Mathematical Education, in order to manifest the close relation to the database.

From 2006 on the title *Zentralblatt für Didaktik der Mathematik* will only be used for the electronic journal. This former analyses section of the printed version was originally only available for subscribers and only after one year freely accessible for everyone. Now, the journal can be subscribed to separately, but the contributions will no longer be available by free access like before.

Looking back, we can say that during the last decades ZDM/MATHDI has undergone significant international changes which would not have been possible without the intensive commitment of Gerhard König. For this he

must be honoured with due respect, not only by the German but also by the international community of mathematics didactics. Up to now, MATHDI/MATHEDUC is still the only international database for mathematics didactics which provides access to more than 115.000 references.

Gerhard König regularly participated in all important international congresses and meetings over the last decades where he always presented ZDM/MATHDI with much passion. His expertise was regarded invaluable by numerous editors of international journals.

The successors of Gerhard König at ZDM and the MATHDI/MATHEDUC database will do all their best to continue and to develop Gerhard König's work in his sense.

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