

MATHEMATICS TEACHERS AND PROFESSIONAL DEVELOPMENT

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There is general agreement that the most successful teachers are those who seek opportunities for professional growth throughout their careers. In this brief paper, I highlight some obstacles to the professional growth of Mathematics teachers, and suggest ways in which they can advance professionally by forming links with a subject association.

Obstacles to Professional Development

The adverse effects of examinations on teaching and learning have been widely recognised by educators. Teachers are judged by the general public largely in terms of the number of students who "pass" almost irrespective of their true quality and the quality of the curriculum and the support facilities provided. This, implicitly, is the view of most school managements, officials in the Ministry, principals, and even some teachers. The result is that teachers are put under pressure to teach for passes, not for understanding. In many schools, particularly in senior forms, the main resource for teachers and students is "Notes and Examples". In Mathematics, students are drilled and coached for model answers. Under these circumstances, even innovative teachers tend to place a low priority on self-improvement or professional development.

Another obstacle to teachers' self-improvement appears to be their working conditions. Many mathematics teachers carry heavy workloads and teach large classes; they may not find enough free time or motivation to consider professional aspects, interact with colleagues, try new ideas, or read books other than the teaching texts. Even those who are prepared to take the initiative do not see any reward for their

efforts. On taking up appointment, new teachers usually find themselves without professional guidance and support.

Many heads of Mathematics in our schools are young and inexperienced, and it would be unreasonable to expect them to provide much professional advice and leadership. The Curriculum and Advisory section of the Ministry of Education in Fiji is limited to just one adviser in each subject, and these officers are expected to perform a variety of functions; the opportunity for them to interact with teachers and get to know their concerns is very limited.

The Fiji Mathematics Association (FMA)

In response to some of these concerns, a group of teachers in Suva got together in the mid-1970s under the leadership of Peter Sanders, a Mathematics Education lecturer at the USP to form the Fiji Mathematics Group. The group gradually extended to western Viti Levu and to Vanua Levu, and by 1980, the Fiji Mathematics Association (FMA) was formally constituted.

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The FMA was successful in bringing Mathematics teachers together to discuss issues related to mathematics curricula, examinations, resources for teaching and learning, and alternative techniques for presenting mathematical concepts. The activities of the Association took many forms: monthly meetings at branch level; annual national conferences at which leading Mathematics educators from overseas shared their expertise; publication of regular news letters and competitions for students.

It was through the efforts of the FMA that the Ministry of Education in Fiji saw the need to revise the Fiji Junior Mathematics prescription. The Ministry began to recognise the importance of the Association and its contributions to Mathematics education: Teachers were even granted special leave to attend the annual conferences of the FMA.

The Association ran actively until 1986 and then went into a long period of hibernation. A number of key members of the FMA and personnel from the Curriculum and Advisory Services left the country. On the positive side, attempts are now underway to revive

the Association: A group of interested staff at the USP, school teachers and officers of the curriculum unit have met and formed an interim committee and have produced the first issue of the news letter for 1992. The Committee feels strongly that an active Association is needed now more than ever before to address a number of pressing issues facing mathematics education in Fiji.

It is hoped that primary and secondary teachers in Fiji will get actively involved in the Association and contribute constructively towards improving the teaching and learning of mathematics in our schools.