

Broadening the Mission of the CMS Education Committee

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In an article published last March in the second issue of Volume 57 of the *CMS Notes*, our esteemed colleague Prof. Miroslav Lovric shared his reflections and ideas regarding the work of the CMS Education Committee, which he currently chairs.

Allow me to summarize certain elements of his remarks (paraphrased here for the sake of brevity) on which I would now like to build.

At the university level, there are two distinct populations involved in mathematics education. Population 1 includes academics (used here, and throughout this text, in a broad sense)—often affiliated with mathematics departments—who teach mathematics courses and who, for the most part, do not engage in research on mathematics education. This population—who may be described as practitioners of mathematics teaching at the university level—can itself be divided into two subpopulations: Population 1a, made up mostly of research faculty; and Population 1b, encompassing those whose job descriptions reveal a clear predominance of teaching responsibilities. Population 2 consists of academics—often affiliated with faculties of education—who are primarily researchers in mathematics education or mathematics didactics.

It should be noted that the alphanumeric coding (1a, 1b, 2) is used—rightly or wrongly—purely for the sake of future reference. It must not be interpreted as implying any hierarchy of importance or value.

While collaboration between these two (or rather, three) populations is both desirable and has proven mutually beneficial in the past, Prof. Lovric argues that the primary focus of the CMS's educational efforts should be to serve Population 1b.

He is not wrong in pointing out, in support of his position, that academics in Populations 1a and 2 have access to a well-developed infrastructure—organizations, conferences, funding, publications, etc.—that meets their needs and supports their interests, whereas academics in Population 1b have very few such opportunities. This analysis strikes me as quite accurate. However, I would like to advocate for a broader perspective: rather than focusing primarily on Population 1b, the CMS Education Committee should, in my view, aim to foster the greatest possible degree of collaboration and connection among all three populations (1a, 1b, and 2). For while it is true that Population 1b lacks sufficient structured opportunities for professional development, it is equally true that fruitful exchanges between the various academic communities engaged in mathematics teaching remain rare—and therefore precious.

It is essential to go beyond simply recognizing this divide and to begin thinking about concrete ways to strengthen the connections among these communities.

Within the university, the combined influence of institutional structures and research dynamics tends to promote specialization. Specialization, however, almost inevitably leads to a degree of intellectual siloing. This is not, in itself, a bad thing: no one can claim mastery of all disciplines, and the deepening of knowledge requires long-term engagement with focused problems. But a truly vibrant academic culture cannot be content with this alone.

At present, opportunities for meaningful dialogue between mathematics educators, pedagogical specialists, and mathematics instructors (whether or not they engage in research) are too few. Each population operates within its own network, with its own references, publication venues, and standards of recognition. This compartmentalization limits the circulation of ideas, mutual enrichment, and ultimately, the quality of mathematics education at the postsecondary level.

Some mathematicians regard didactic research as too far removed from their practical concerns or as an unwarranted critique of their teaching expertise. Conversely, some didacticians perceive mathematics instructors as resistant to educational research or indifferent to the theoretical foundations of teaching. These mutual perceptions—often exaggerated—sustain the distance between the populations rather than encouraging collaboration.

The aim is not to deny these differing perspectives, but to create the conditions for sustained and structured dialogue. For example, joint study days and co-development groups could serve as practical ways to (re)build bridges. These shared spaces would allow common challenges to emerge, facilitate the sharing of effective practices, help identify actionable strategies for better supporting students, and provide a venue for reflecting together on more coherent assessment frameworks.

In this light, the Education Committee's mission should not be limited to serving just one of the three populations (1b), but rather to play a catalytic role. Not by replacing existing initiatives, but by facilitating connections among networks, supporting the implementation of collaborative projects, and highlighting work that emerges from these intersections. This also means acknowledging the plurality of expertise: that of the didactics researcher, who analyses learning conditions and epistemological obstacles; that of the experienced instructor, who understands the realities of classroom dynamics; and that of the mathematician, who masters the content and its structural complexities.

Rather than weakening disciplinary rigour, such collaboration strengthens it. It allows for a better understanding of how students appropriate concepts, enables teaching to be adapted to contemporary realities without sacrificing depth, and fosters collective reflection on the goals of university mathematics education.

By encouraging such cross-pollination, the CMS would not be compromising scientific excellence or disciplinary standards; nor would it be endorsing a relativistic stance in which all opinions are equal regardless of foundation. On the contrary, it would affirm that disciplinary expertise is most meaningful when it can engage in dialogue with other forms of knowledge and analysis. It would also reaffirm the society's educational mission through a genuine academic culture rooted in listening, dialogue, and mutual recognition.

In short, the Education Committee's mission should aim to strengthen the connections between all the academic populations involved in mathematics education. It is within this effort to connect—demanding, at times uncomfortable, but intellectually fruitful—that lies the potential for a lasting renewal of mathematics education at the postsecondary level. The professional development of some, the research directions of others, and the overall quality of higher education in mathematics would all stand to benefit.