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The role of ICT in supporting the development of professional knowledge during teaching practice.

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Summary: Prospective mathematics teachers often start their practice with images of learning situations quite different from current curriculum orientations. Such is the case of Fabio, who, at the beginning of his practicum, proposed mostly exercises and promoted unidirectional communication. We analyse the contribution of a teacher education setting based on ICT (email and forum) in developing his professional knowledge, looking especially at tasks and forms of communication. The qualitative and interpretative case study of this prospective teacher is based on interviews and on the analysis of the documentation generated in the teacher education setting. The results show that, in addition to exercises, the prospective teacher began to suggest more open and challenging tasks, and to promote contributive communication in his classroom. In planning his lessons, Fabio's professional knowledge showed improvement in the diversity of tasks that he adopted, in the attention he gave to student activity, in the adequacy of instructional materials that he used, and in the forms of communication that he promoted, which involved more students in the classroom activities. By reflecting on his actions, he developed his ability to gather information about his practice, how to interpret it, question it, and reshape it. The reconstruction of particular parts of the practice helped Fabio to expand his professional knowledge and to see practice as a source of learning to teach.

Classification: D49 U79 D39 U59

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