Geographic information systems as an integral part of the teacher and school education

Abstract

The Swedish school education in geography has developed slowly and teaching is dominated by geographical names. To realise the secondary and upper secondary school curricula, teachers need both broad and deep geographical knowledge. For example, teachers need knowledge of geographic information systems (GIS), which are computerized information systems for e.g. analyses of geographical data. This short literature review aims to examine the preconditions for GIS in the teacher and school education. In summary, the preconditions are good for developing GIS-based learning materials that promote active, inquiry-based, cooperative, and problem-based learning. This could make the school education more problem-oriented and interdisciplinary so that it promotes pupils’ opportunities to achieve the competencies that the curricula stipulate. However, this requires committed efforts by university and school teachers. Therefore, it is also essential that teachers have access to the resources and knowledge needed to perform their teaching in the best possible way.

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