With the Web 2.0 the amount of content that may be used as a learning resource is rapidly increasing. This comprises freely available educational content, so called "open content" as well as user generated content to be found on YouTube, Slideshare or Slidestar. Similarly, services for competency development are becoming more and more popular: Wikis, blogs or bulletin boards are gaining in their relevance for personal competency development though they are not explicitly designed for learning. Learners increasingly access such Web 2.0 resources, as they are a rich source of up-to-date knowledge on a multitude of topics. Besides, web 2.0 platforms are used to exchange experiences and knowledge with others e.g. in wikis or blogs. There exist plenty of communities in the Web, in which people make new contacts, ask and answer questions or otherwise cooperate in a learning process. All these scenarios have in common that the learning process is organised by the learner and does not follow predefined didactic paths. Learning takes place beyond institutional specifications, as an informal and self-directed learning process. Self-directed learning provides enormous opportunities but also imposes numerous challenges. Learners must autonomously sift through the Web to find high quality information that is both relevant and reliable. In the process of doing so, learners master a variety of subtasks. The goal of CROKODIL is to systematically support self-directed, resource-based learning and to integrate it with both collaborative learning within communities and instructional design. For this, a novel Web 2.0-platform (the CROKODIL platform) and novel didactic concepts will be developed that will be field tested in scenarios of professional education and training. Technologically, this goal is to be achieved through the design, development, provision and evaluation of the CROKODIL learning environment. The platform supports the learner in all significant tasks involved in resource-based learning, especially the management of resources. The main focus of L3S is on community-based learning. Novel 'social' services for information retrieval and recommendation will be studied and implemented which exploit phenomena like 'collective intelligence' and successful information propagation across social networks. CROKODIL is funded by the German Federal Ministry of Education and Research and the European Social Fund of the European Union (ESF).