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## Roles in the eCraft2Learn ecosystem

The **eCraft2Learn digital platform** is easy to approach and use. The platform encourages the learner to share thoughts and ideas. It contains videos on creating DIY artefacts and references for accurate information. At the same time, the platform works as a portal where earlier projects are documented. On the eC2L working platform, there is a chance to get online help from an expert who has the requisite knowledge. Experts encourage students to ask questions and present their ideas. Experts give concrete examples, share their own knowledge and expertise and give constructive and positive feedback. In the online platform, students can utilise carefully planned prompts in order to help them to proceed to each stage. The design of the working platform is visually tempting and is made to respond to girls' interests.

**Learners** work together as peer learners with their strengths and weaknesses. As the project advances, they learn with and from each other. Students can take on roles during the process of building their personal skills. Everyone has a chance to participate with his/her own know-how. According to Robertson et al. (2013), design team members may work in different roles during the process, e.g. project manager, technology specialist, design partner, researcher, learning scientist, collaboration facilitator, etc. In this way, students learn that more heads are better than one and that different people have different expertise, which contributes to richness. They learn how to collaborate, communicate and reason (critical thinking skills) and how to be creative in a group.

The role of the **teachers** or 'coaches' is to facilitate and steer the learner and the project 'back on track' when needed. The teacher, who most likely already knows his/her students, encourages them to explore and seek information from different sources instead of giving complete answers. The teacher also encourages peer learning, discussion and exploration. According to Boling and Smith (2014), the one who works as an instructor spends the working time discussing with students and confronting their challenges.

**Experts** assuming different roles work to support the learner through challenges encountered during the project in online or face-2-face situations. The expert's role varies during the five steps of eCraft2Learn's project-based learning. The student can be seen as an active worker who works in the group, explores, finds solutions to authentic challenges, searches for information and solves problems. Experts can work with coding, robotics and design. Below there is a more detailed description of the stages of craft- and project-based learning with the role descriptions included in each stage.