



How to support girls' participation at projects in makerspace settings

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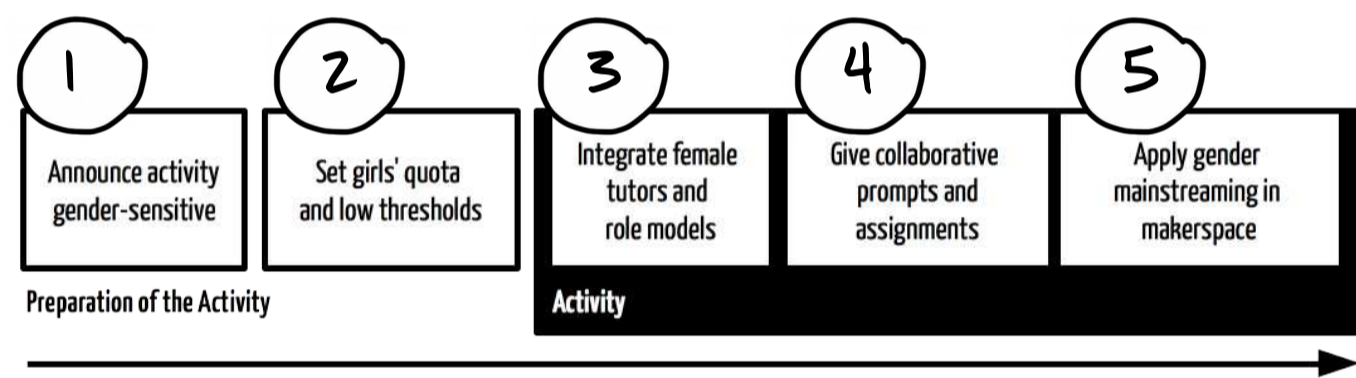
Background and research question

For our future activities we have looked for relevant literature that gives us advice on how we can reach (more) girls in our activities within makerspaces as they are currently underrepresented. This includes answers on the following sub-questions: What do others do to reach girls? What do they recommend?

Methodology and Sources

Therefore we collected existing experiences from projects and research (including literature on girls and maker education, girls in makerspaces, girls and robotics from the last five years in the ERIC database (2013-2018). The resources can be found within the corresponding short paper published in the EduRobotics 2018 proceedings.

Overview



1 Announce activity gender-sensitive

- Titles and Events should give a sense of value of the activity, e.g. "Robotics for gardeners" (and not „Robotic workshop for children“).
- Less appealing are activities referring to professional identities that are less common among girls, e.g. „Making for (future) engineers“.
- Gender-sensitive language and gender-sensitive illustration are important, this includes e.g. that girls are shown as active participants in the marketing materials.



2 Set girls' quota and low thresholds

- If it is planned that children have to be registered for an event, the proportion of girls may be smaller – as participation of boys is more actively supported by parents.
- An enrolment procedure also allows a quota to be set for girls.
- It is a must to set a 50 percent quota in co-operations.



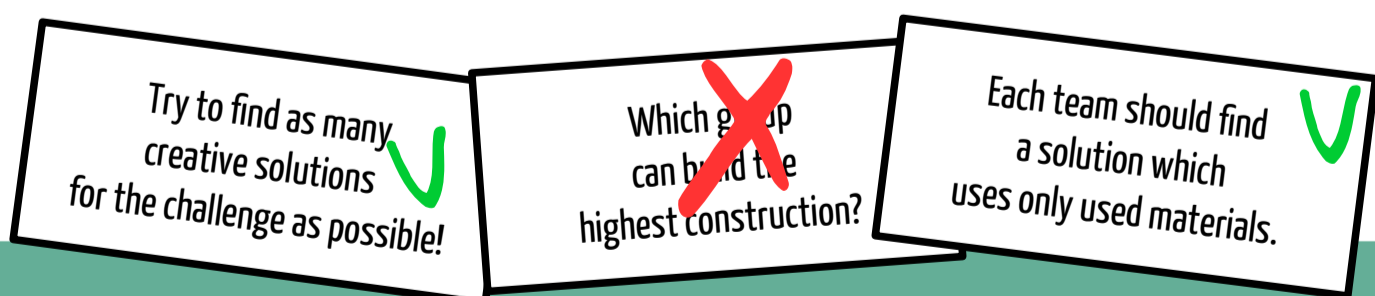
3 Integrate female tutors and role models

- A same-sex role model seems to be a strong supporter to help girls to get in touch with technology.
- Role models are great especially if they can as well tell stories how they failed or other personal stories.



4 Give collaborative prompts and assignments

- Girls prefer activities that are collaborative.
- Females will prefer activities that are collaborative, meaning that they have a positive outcome for all that are involved - and are not a competition.

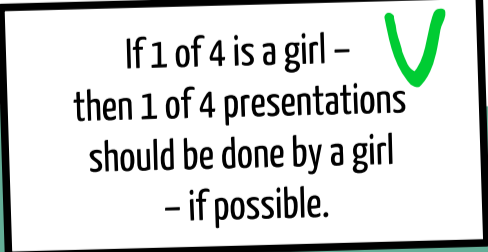


5 Apply gender mainstreaming in makerspaces

Active gender mainstreaming in maker activities could therefore include gender mainstreaming along the whole activity,

- e.g. when tutors spends as much time talking with girls as with boys,
- or when girls participate equally as presenter of results as boys.

It should be noted here that such a conscious - but not compulsive - proposal does not necessarily meet with public approval.



License



Read more

Sandra Schön, Margarethe Rosenova, Martin Ebner and Maria Grandl (2018). How to support girls' participation at projects in makerspace settings. Overview on current recommendations. In: Proceedings of the EduRobotics 2018 in Rome, Springer.

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