ASTROJUNIOR: AN EDUCATIONAL PROJECT FOR INTERACTIVE TEACHING OF PLANETARY SCIENCE

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Introduction: It is commonly known that astronomy has the power to generate a passion among individuals since early age, and when there is fascination, the learning process comes with little effort. However, this natural science is rarely met in the school curriculum, despite its capability to generate critical thinking and scientific reasoning.

The Bucharest Astroclub (AB) [1], is a non-profit organization aiming to bring together amateur and professional astronomers, and support the learning, teaching and popularization of astronomy. In the AB community resides a group of enthusiasts active towards teaching astronomy to children.

The AB - Junior: The project started in 2018, with visits to schools, augmenting the usual program with astronomy and planetary science workshops for children. During the Covid-19 pandemic, we implemented a fully on-line interactive workshop. The idea was to introduce activities during the teaching process, so the children can stay focused, and learn by engaging with the lectors, thus making the course more memorable.

Activities: The courses include activities in the form of games, which facilitate the learning process. Among the activities, we include:

- ✓ crafting a planetarium using household materials.
- ✓ planets to scale – the kids are teached to draw the planets of the Solar System and place them in their room, keeping the scale of each planet's distance to the Sun.
- ✓ guess the meteorite/asteroid/crater.
- ✓ learning by drawing – the children are guided into drawing the observed distinctive features of the planets and moons (phases, craters, rifts, mountains, etc)
- ✓ drawing contests.

Awards: After each module, we conducted a small ceremony to offer astronomy themed prizes; the majority of which, were handmade by a part of the lectors. This added an unique value, and thus, further teaching the children the usefulness of acquiring a crafting skill.

Summary: Astrojunior project was a success, as most participants are already looking forward for the next programme. The on-line workshops are beeing implemented for a long-term schedule, as we have enthusiasts participanting from all over Romania, which otherwise could not have joined. Though we had no mandatory homework, we have found that the informations acquired from activities are easily remembered by the participants. Hence, confirming the fact that the peak of the learning process resides at the intersection of passion and creative educational activities.

References: [1] https://www.astroclubul.ro/ .