

Planning and Development of Science Communication Tool on Astrobiology

ARAI, Mayumi^{1*} ; NITAHARA, Shota² ; MOCHIZUKI, Ginko³ ; KUWABARA, Junko³ ; SAITO, Keiko³ ; AMIKURA, Kazuaki⁴ ; FUJII, Yukiko⁵ ; YAMAGISHI, Akihiko²

¹Miraikan, ²Tokyo Univ. of Pharmacy and Life Sciences, ³Japan Astrobiology Network, ⁴Tokyo Institute of Technology, ⁵Nature study and squirrel research

In August 2013, during the summer school we opened a workshop named "Let's make playing cards on astrobiology" for graduate students and specialists on the origin of life and astrobiology. There are two main goals for this workshop.

Number 1, strengthening interaction between summer school participants.

Number 2, as a part of science communication training, astrobiology specialists can practice communication skills using simple science terms and illustrations while making the astrobiology cards. The players were presumed to be high school students that they would like to encourage interest in astrobiology while they are visiting university campus opening day. Twenty eight participants, students and specialists were divided into four groups. Then each group made reading cards, face cards and gave short explanations on cards which included at least one key word about astrobiology. After this step was completed, each group introduced the contents of playing cards and discussed how to utilize the cards.

Later on, the cards were improved by the production team, a group of volunteers refinishing the playing cards on origin of life. The main target was for children, but we also included intermediate contents for high school students and professionals, so they could also enjoy playing. Each card contains one key word. A simple question is under the picture to tie with the key words. More information and explanations are offered on the reverse side of the card. Illustrations and diagrams are added to keep the information easy.

The card set "Playing Cards on Origin of Life" was completed in April 2014, and an event for elementary school students was held in May. Later in 2014, additional events were held for graduate students and specialists in the field of astrobiology and life sciences. Both children and adults registered high satisfaction.

This playing cards set idea is originated from summer workshop's 26 participant's draft on evolution, life sciences and astrobiology. The cards were later revised and improved. Special thanks to all participants.

Keywords: Astrobiology, Science Communication, Origins of Life, Educational Tool, Karuta; Traditional Japanese playing cards