

Development of stargazing party for local elementary school students

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Abstract. School science teachers of Kudan secondary school requested cooperation with some astronomers and graduates of a Kudan high school astronomy club in order to organize the stargazing events using a telescope for public, especially local elementary school students. We organized about 70 stargazing events for the local children since November 2009. The total number of applicants is 5366. Through the stargazing events, we succeeded in establishing a cycle to educate the next generation.

Keywords. Sociology of astronomy, Stargazing event, Education for the next generation

1. Introduction

Chiyoda Ward Kudan Secondary School has a 15 cm refracted telescope[1]. School science teachers of Kudan secondary school wanted to organize stargazing parties using the 15 cm refracted telescope for public, especially local elementary school students. However, no one knew how to use the telescope. In order to organize the stargazing parties for the local elementary school students, the teachers requested the cooperation with some astronomers and graduates of a Kudan high school astronomy club[2].

2. Stargazing Events

The first stargazing party was held for the Kudan secondary school students in October 2009, in order to train the staffs of the stargazing parties for the elementary school students. At this party, there was not only observation of stars but also lectures on how to use the telescopes and astronomical simulation software (Table 1).

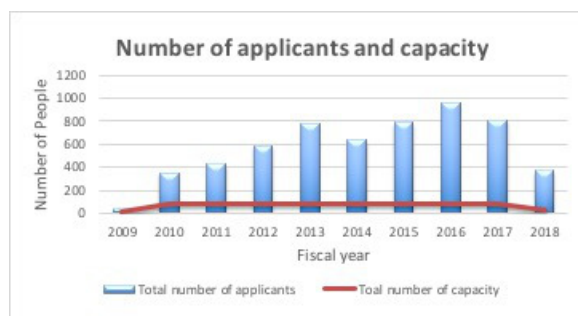


Figure 1. Total number of applicant (bar) and capacity (line) for every fiscal year from November 2009 to July 2018.

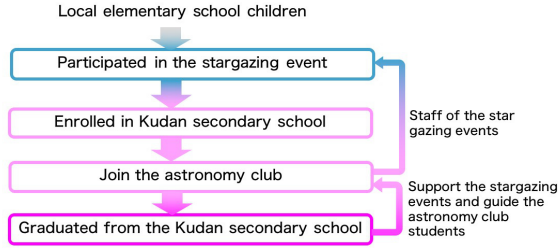
Table 1. Our stargazing event program.

Lecture	30 min.	Astronomers gives lecture to the children.
Making a star wheel	30 min.	The students teach the children how to make a star wheel.
Star gazing at the roof	25 min.	The children gaze stars with 4-5 small telescopes. The students teach the children how to use the telescope.
Star gazing at the dome	25 min.	Stargazing with the 15 cm refracted telescope.
Closing	10 min.	The children write essay of the stargazing event, and get a certificate of completion.

In November 2009, we organized the stargazing party for the local children. In order to look for participants, we informed the public through posters and the homepage. The participants of this event limit 10, because the participants take a lecture from real astronomers as active learning. At this event, we decided 10 participants by drawing lots, because there were 24 applicants. A few of the students who participated in the first stargazing party helped this event as a staffs. We have held about 70 stargazing parties for the local children since 2009. The number of applicants is 5062 (Fig. 1).

3. Reviving astronomy club

Recently, the students who participated in the stargazing parties when they were elementary school students are enrolled in Kudan secondary school. Some of them join as a staff of the stargazing parties. Furthermore, college students who graduated from the Kudan secondary school have supported the stargazing parties and have been teaching the student staff. We shall pursue to establish such cycles (Fig. 2).

**Figure 2.** Conceptual diagram of the cycle to educate the next generation.

4. Summary

The teachers, the graduates and some astronomers cooperated to design the stargazing events at Kudan secondary school for local elementary school children. From November 2009 to July 2018, we held 76 stargazing events, and the number of total applicants is 5715 (capacity 760). Through the stargazing events, we succeeded in establishing a cycle to educate the next generation.

References

Kudan secondary school homepate <http://www.kudan.ed.jp>
 Isseikai 2009, *Uchu*