Evaluating Quality in Education: NASE new metrics

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Abstract. The Learning Services Management System of the Network for the Education of Astronomy in the School (IAU-NASE) has been developed following the guidelines of the ISO 29990: 2013 Standard, which understands on the "Learning services for non-formal education and training", and which aims to improve quality of learning services and facilitate comparison on worldwide basis.

Keywords. NASE Program, ISO 29990:2013

1. Introduction

The Network for Astronomy School Education (NASE) has performed more than 110 courses between 2010 and 2017 on the Globe and reaches more than 5000 professors. The benefits arising from the work under a International Quality Management System (QMS) ensure not only quality in teaching-learning processes, but also a method to evaluate the service and produce continuous improvement. Based on specific indicators we could analyse quantitatively the impact of the activity under different contexts and cultures.

Figure 1. NASE connections: ambassadors(a); NASE translations(b); NASE traction curve(c)

2. QMS New Metrics

The evaluation of the process of Quality, which means make plans, evaluate performance and set indicators was followed to analyse the impact of NASE. In this sense, evaluations of the assistants pre and post workshops, satisfaction poll and mid and long term evaluation as well us other techniques like traction curves (Fig. 1c) were used to conclude that NASE is one of the most successful IAU programs on Education.

3. Conclusion

The progress of NASE can be summarise in the following topics: expansion (110 courses since 2010, in 4 continents), translations (didactic material in 7 languages), connection (NASE ambassadors teaching in different countries), communication (books, newsletters).