

**Discussion paper.**

## **On the future of C46.**

In the following years, Commission 46 has to establish new objectives, new roles for its members and a new way of working, with new activities. It will have to make a rupture with its past role.

The reason for this is direct and clear.

At the General Assembly in Rio de Janeiro in Brazil, the IAU Strategic Plan “**Astronomy for the Developing World**” was adopted. As a first result, the Office for Astronomy for Development (OAD) was established at the SAAO headquarters in Cape Town, South Africa. It is directed by Kevin Govender. In a second step, all operational programmes of C46 were moved out of C46 and put under the umbrella of the OAD. The OAD will revise them, where necessary reform or replace them, and support them further. This left C46 without operations, without financial means, and apparently without further significance or future.

The new C46 will become a strong partner of the OAD, strengthening it with what it will certainly need in its future development: *scientific research in all sorts of methodological transfer of astrophysical knowledge towards different publics, including their involvement and engagement.*

The items below can be discussed in a first round during the administrative session of the General Assembly. However, they will be addressed further during the first year in an open forum with all the members of C46. Conclusions will be drawn at the end of year 1. The implementation follows in the year 2 and 3.

### **1. As a first step towards this renewed existence, the mission of C46 needs to be redefined.**

The present mission of C46 is:

*‘The commission seeks to further the development and improvement of astronomical education at all levels throughout the world, through various projects initiated, maintained, and to be developed by the Commission and by disseminating information concerning astronomy education at all levels’*

Proposed new proposal with to some extent the same wording but with a clear shift in activity:

*‘The commission seeks to further the development and improvement of scientific research into education and specifically astronomical education at all levels throughout the world, through stimulating, gathering and exchanging scientific research in the field. This research should address epistemological questions, as well as innovative teaching and learning processes appropriate to the needs of astronomy education. The commission will further encourage and develop efforts to disseminate this information at all levels.’*

## **2. Introducing other experts in the activities of C46:**

To address the research issues (at the GA in Brazil, Paulo Bretones and others already showed the clear lack of research in the educational field). To cope with this, C46 should involve researchers in the field of education, members of teacher training schools involved in developing innovative best practices, etc. Besides interested IAU astronomers, these experts should be invited and engaged in the activities that C46 will develop.

## **3. The activities of C46:**

In general terms: stimulation of research in transferring astrophysical knowledge towards different publics.

In practice organizing relevant conferences and colloquia, a specific newsletter with a high PR level, supplying relevant information to OAD Task Forces.

In the coming 3 years:

- a. Establishing a newsletter that distributes news on research into astrophysics education in the broadest sense and reports best practices in the field.
- b. Encourage astronomers in the field to participate in and contribute to conference on research in education and on stimulating young people to study sciences.
- c. Have its members organize at least one colloquium or symposium on the subject.
- d. Provide regularly advice to the Task Forces of OAD based on research.
- e. Again based on research, and if deemed necessary, advise the EC of the IAU on eventual modifications to the decadal plan.

## **4. Developing relationships.**

- a. C46 will build up a community of thinkers who could contribute to education research with a focus on astronomy.
- b. Strengthen the relationship with other commissions on specific topics. These topics need to be defined.
- c. Relationships with task forces TF1 and TF2.

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