

**Maps for the Future:  
Children, Education and Internet**  
Joint ICA Symposium



Children map the World

## **MAP DRAWING COMPETITION FOR CHILDREN IN INDONESIA**

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**Abstract:** The National Coordinating Agency for Surveys and Mapping of Indonesia (BAKOSURTANAL) has been organizing map drawing competitions for children in Indonesia as a way to popularize map to children. These competitions were always handled seriously and such competitions were always participated by more than expected numbers of children. This paper will share how BAKOSURTANAL organized the competitions, from the publication until the judgments to get the winners.

### **Introduction**

The National Coordinating Agency for Surveys and Mapping of Indonesia (BAKOSURTANAL) is a government body that is responsible to conduct governmental duties in the field of surveys and mapping according to prevailing regulations. As the coordinating agency for survey and mapping activities in national scope, BAKOSURTANAL has an obligation to disseminate information about services and products of survey and mapping activities, especially the ones performed by BAKOSURTANAL. It is also necessary to raise awareness about maps and the usages to various levels of community, including the children. Some of the methods used to raise public awareness include organizing various exhibitions, workshops, seminars, trainings, map adventure games, and map drawing competitions.

The map drawing competition was initially inspired when the International Cartographic Association (ICA) in cooperation with UNICEF invited BAKOSURTANAL to coordinate a map drawing competition in Indonesia. The best five drawings were then sent to Durban, South Africa, to be enrolled in an international map drawing competition held during ICA Congress in 2003. That was

the first time BAKOSURTANAL, in cooperation with ICA and also Indonesian Cartographic Association (AKI), organized a national map drawing competition.

Following the success in 2003 and considering the number of children participated in the competition, BAKOSURTANAL organized the next national map drawing competitions in 2005, 2007, 2009 and 2011, and always sent the best drawings to go into Barbara Petchenik competitions in the year. In addition to the national competitions, BAKOSURTANAL also held local competitions in various areas:

- 2005 in Cibinong (West Java),
- 2006 in Surabaya (East Java) and Jakarta,
- 2007 in Jakarta,
- 2008 in Bandar Lampung (Lampung),
- 2010 in Pontianak (West Kalimantan).

Children map drawing competitions, which allow the children to explore their imaginations in drawing, have been used by BAKOSURTANAL to introduce maps to children. By following such competition, children will be driven to open their atlases and learn about the world, such as the richness and beauty of their country or even province, through maps. Hopefully, this competition would (directly or indirectly) contribute to Cartography education in Indonesia, and to increase the children's care and respect to their country and the Mother Earth.

## **Organizing map drawing competitions**

The map drawing competitions held by BAKOSURTANAL always participated by an unexpected number of participants. The national competition in 2003 was followed by 1045 participants from 27 provinces in Indonesia, in 2005 by 1002, in 2007 by 1377, in 2009 by 1179, and in 2011 by 1205 participants. The local competitions in various regions in Indonesia were also interested by no less than 200 children. Here will be explained how BAKOSURTANAL organized the competitions.

## **Preparation**

The preparation to organize a map drawing competition was started since about the middle of the preceding year, i.e. when BAKOSURTANAL prepared the budget for activities in the subsequent year. The organization of a national map drawing competition was somewhat different from that of a local competition. For the national competitions children drew at home or school then sent the result to BAKOSURTANAL, so the children had plenty of time to draw. For the local competitions the children came to the venue and drew on the site for about 3 hours.

Initial stage in executing a map drawing competition was to form an organizing committee at the beginning of the year when it will be run. The organizing committee of the national competitions comprised about 10 to 15 staff of BAKO-

SURTANAL, where as for the local competitions, especially the ones held outside Jakarta or Cibinong area, we collaborated with other institutions as the local hosts. In 2006 we cooperated with Surabaya State University (UNESA), in 2008 with Yayasan Xaverius Tanjungkarang, and in 2010 with Tanjungpura University, Pontianak. In general, the organizing committee consisted of three teams:

- Secretariat team who was responsible to do administrative tasks, accept the drawings or registrations (for local competitions), collect data about the drawings, and answer any questions regarding the competitions that were asked by the public.
- Publication team who was responsible to let general public know about the ongoing competition through advertisements in mass media (national newspaper, radio etc.) and/or brochures that were distributed to schools and other public areas.
- Selection team who was responsible to communicate with the juries about selection criteria, prepare and assist the juries during the judgment.

In addition to the organizing committee, at this initial stage were also formed boards of juries. For the national competitions, because we expected to have more participants than the local ones, we prepared two kinds of juries, namely: internal juries and national juries. The detailed duties of these juries will be explained later in this paper. The juries were selected considering their knowledge in cartography and art.

The organizing committee would then create a theme and rules for the competition and set up some important dates, including: when were the promotions, the last day to receive drawings/registration, the judgment, the winner announcement, and the delivery of best drawings to ICA (for national competition). The theme and rules for national competitions would stick to those of Barbara Petchenik competitions, including the drawing groups based on the ages of the authors (group A for ages below 9 years old, group B for ages 9–12, and group C for ages 13–15). For local competitions, we classified children into three groups based on their school grades (group A for grade 1–3, group B for grade 4–6, and group C for grade 7–9).

## **Drawing Collection**

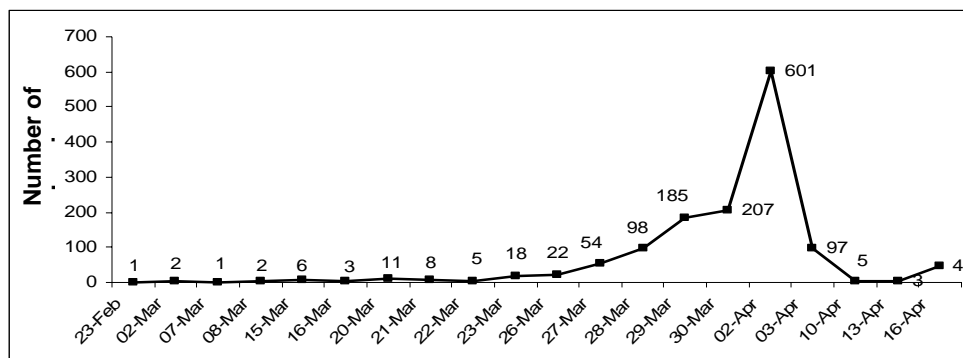
After the organizing committee was formed and the information about the competition was open to public, the secretariat team got ready to accept registration or to collect the drawings by preparing a database to store data of the participants. The database was developed using Microsoft Access and for the national competitions it included data about the authors (name, school and home addresses, date of birth, etc.) and the drawings (title, received date, etc.). Every drawing received was stamped and given a unique ID number. For local competitions the database prepared for the registrants was much simpler. Data entry was performed soon after the drawings arrived.

The screenshot shows a web browser window with a form titled "LOMBA GAMBAR 2009". The form contains the following fields and values:

- NO PESERTA: [Empty]
- NAMA PESERTA: Helvina Rafrafi Puramasari
- TEMPAT LAHIR: Magelang
- TANGGAL LAHIR: 23/03/1998
- UMUR (THN): 11
- JENIS KELAMIN: P
- KELOMPOK UMU: B
- ID GAMBAR: 16
- JUDUL GAMBAR: Persahabatan antar agama di dunia
- ALAMAT RUMAH: Jl. Singosari Paten Jurang 1 RT 01 No 16
- TELEPON/HF: 085060455152
- SEKOLAH: SDN Rejowinangun Selatan 2
- KELAS: [Empty]
- NAMA SANGGAR: [Empty]
- TGL MASUK: 03 April 2009

**Figure 1.** Database form to enter participant’s data during national competition in 2009

During the national competitions, where the participants sent drawings to our address, the packages were usually delivered near the end of the deadline. Figure 2 showed the number of drawings received on a specific day during the national competition in 2007. The deadline at the time was post stamped on 30 March 2007. We can see from the graphic that most participants sent the drawings on or slightly before 30 March 2007 such that most drawings arrived on 2 April 2007. From this experience, since the following national competition in 2009 the deadline was no longer the delivery date, but the date the drawings were received by the organizing committee.



**Figure 1.** Number of drawings received on a specific day during national competition in 2007

The data entry was a crucial step during execution of map drawing competitions. We used the data entered in previous years to inform participants about succeeding events. For local competitions, the registrant data were used on the competition day when children came to the venue. The children were asked to re-register so they could get an ID badge, T-shirt and snacks. Children who did not register beforehand were allowed to register at the time only when the space was available for them.

## Judgement

### National Competition

As mentioned previously, for national competitions we had two boards of juries: internal and national. The internal juries comprised of 3-5 staff of BAKOSUR-TANAL who met the criteria as a jury for map drawing competitions. The national juries comprised of 3 persons; at least one of them came from BAKOSUR-TANAL with a strong knowledge about cartography, and at least one of them came from an art institute or was a professional artist who had experience in judging children's drawing competitions.

The mechanism of judgment for national competitions was as follow: before being evaluated by the boards of judges, the drawings were selected by the selection team of organizing committee based on their administrative completeness. The drawings that used paper size other than A3, had incomplete author's identity (such as no address or date of birth written either on the back of the drawing or on a separate piece of paper) and were out of the predefined theme, were eliminated. In fact, many drawings did not include maps or only had maps, so these drawings were considered out of theme.

If the number of drawings were more than 250, then the judgment would be done in 3 steps for every group; the first step was performed by the internal juries to eliminate about a third or half of the drawings, the second step was performed by the national juries to select 15 best drawings for each group, the last step was also performed by the national juries to select the best drawings to be enrolled into Barbara Petchenik competition and 3 best drawings from each group.

If the number of drawings were equal to or less than 250, then the judgment would be done directly by the board of national juries to select 10-15 best drawings for each group, then select the best drawings to be enrolled into Barbara Petchenik competition and 3 best drawings from each group.

During the selection process performed by board of internal juries, each of the juries was given an evaluation sheet to evaluate the drawings, as shown in Figure 3 below. The drawings were hung in front of the juries, 20 drawings at a time, and each of the juries decided whether each drawing had the following criteria: composition of world map, scale proportion of the map features (applicable for group B and C), relative position of the map features (applicable for group C only), theme suitability, color composition, and creativity. Each jury checked the criteria that existed in the drawing, and let the organizing committee do the counting.

**LEMBAR PENILAIAN TAHAP I  
LOMBA GAMBAR PETA UNTUK ANAK  
BAKOSURTAHAL 2009  
KELOMPOK A**

*Penilai :*

No	No. Gambar	Kriteria						
		Komposisi peta dunia	Proporsional skala	Posisi relatif peta	Kesesuaian tema	Komposisi warna	Kreativitas	Jumlah
1								0
2								0
3								0
4								0
5								0

**Figure 3.** Evaluation sheet for internal juries



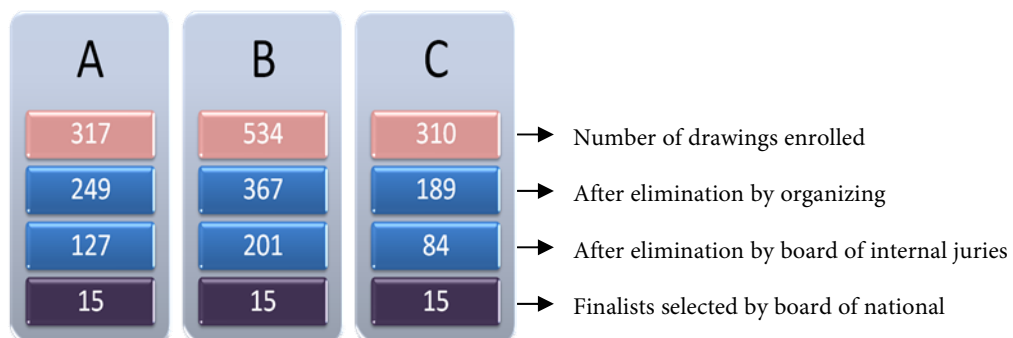
**Figure 4.** Judgment by board of internal juries

During the selection process by board of national juries, it is important for the juries to be able to see all drawings at once. Therefore, all drawings from each group were put on the floor with the drawing side up. The juries then looked around and eliminated the drawings by turning the drawing side down. It was not so hard in the beginning, but as the drawings got fewer, the juries would discuss to determine the best 15 drawings.



**Figure 5.** Judgment by board of national juries

Figure 6 showed the result of judgment during the 2009 competition. At that time we received 1179 drawings, 13 were sent by children whose ages above 15 years old and 5 had no author's identity, thus 18 drawings were eliminated from the competition.



**Figure 2.** Elimination process during judgment of national competition in 2009

After we found the 45 finalists, the juries would then determine the overall winners who would represent Indonesia in Barbara Petchenik competition. The juries individually nominated 2 drawings for each group, totaling 18 drawings. A drawing that was nominated by most juries automatically became an overall

winner. The juries would then discuss to select the drawings nominated by only 1 jury until we obtained 5 overall winners. Each jury would then give a score of 1-100 to the rest of 40 finalists, considering map contents, theme suitability and creativity. The score was necessary in case the winner candidates failed verification process.

Because the drawings enrolled in the national competitions were drawn at home or school, we need to verify that the drawings were really the work of arts of the children. Therefore, we established a verification process when we came to their home or school and asked them to prove that they drew it by themselves. During the verification process, we also checked the children's date of birth from their school report or birth certificate in order to assure that they really belonged to an age group and thus were eligible to follow the competition.

### Local Competitions

Local competitions were usually held from 9 a.m. to 12 p.m. in a hall provided by the local hosts. The children, unaccompanied by their family members, sat on the floor according to their ID numbers. After all participants sat in the place assigned to them, organizing committee distributed drawing papers to be used. The judgment process begun soon after the organizing committee collected all the drawings.

Board of juries for local competition usually comprised of 3 persons: at least 1 of them came from BAKOSURTANAL and at least 1 jury taken from a local paint artist who had experience as a jury for children's drawing competitions. Similar to the judgment process of national competitions, here all the juries together determined the best 15 drawings from every group, to get the total of 45 finalists. The winners were determined by the total scores given by all juries.

During the scoring stage, every jury individually evaluated each drawing based on certain criteria. Each component of the criteria was given a weight: suitability with theme of competition (weight = 30), map contents (weight = 20), creativity (weight = 20), color composition (weight = 15), and drawing technique (weight = 15). The juries gave a score of 1-100 to every criteria component for each of the 45 finalists. The organizing committee then assisted the juries to calculate the final scores. Table 1 and 2 below illustrates how the final score of the drawings were obtained.

**Table 1.** Sample of initial scoring sheet by individual jury

Drawing ID	Theme Suitability	Map Contents	Creativity	Color Composition	Drawing Technique	Total Score by Jury 1
1	95	90	80	80	80	86,5
2	90	95	85	80	80	87
3	95	90	80	80	80	86,5
4	95	95	90	90	90	92,5
...	...	...	...	...	...	...



**Table 2.** Sample of final scoring sheet

Drawing ID	Participant ID	Score by Jury 1	Score by Jury 2	Score by Jury 3	TOTAL SCORE
9	26	93,65	76,85	93,95	264,45
8	21	94	73,95	95,7	263,65
4	20	92,5	75,85	94,95	263,3
11	2	79,25	75,95	92,1	247,3
...	...	...	...	...	...

## Winner Announcement

Winners of local competitions were announced soon after the final scores were obtained, and the presents were given directly to the children. BAKOSURTANAL provided presents in forms of money, BAKOSURTANAL's products, trophy, certificate, and school equipments.



**Figure 7.** The champion's drawing of group A (grade 1–3) at local competition in 2008, entitled “Natural Resources of Lampung”, created by Syifa Putri Atalia Sadil in less than 3 hours

Winners of national competitions were announced at BAKOSURTANAL website, national newspaper, and a letter was sent to each winner. The winners who resided around BAKOSURTANAL office were invited to pick up their presents. For those who lived in other areas, the presents were delivered by mail and the money was transferred to their bank accounts.

## Conclusion and recommendation

BAKOSURTANAL has been successfully organized map drawing competitions for children in Indonesia since 2003. The high number of participants showed that the information about these competitions was well distributed. However, most of participants for national competitions were from Java Island. For example, percentage of participants coming from 6 provinces in Java Island was 73.93% in 2007 and 83.88% in 2009. This data suggested that BAKOSURTANAL needs to socialize maps to children outside Java Island, perhaps through local map drawing competitions. BAKOSURTANAL can also establish partnership with regional institutions, such as universities, local government or even painting studios to organize map drawing competitions in the region. Hopefully, BAKOSURTANAL's task to raise awareness about maps and the usages to entire levels of community can be well implemented.

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