

CANP Review First Results

ICMI

**Capacity and Network
Project**



Step 1: Brief overview about CANP

CANP is a development project of ICMI supported by IMU, UNESCO and the International Council for Science (ICSU) as well as regional governments and institutions.

The CANP program series objectives are:

- Strengthening mathematical education through regional development for mathematics teacher educators,
- Forming self-sustainable networks concerned with mathematics education,
- Assuring better quality education,
- Enhancing the mathematical and didactical potential of the region

Between 2011-2016 five CANP Workshops and several follow up events have been held: a total of more than 400 participants from more than 25 developing countries in 5 regions.



Capacity and Networking Project (CANP)



CANP1-EDiMaths: Sub-Saharan Africa/ for francophone Western Africa region (started 2011)

2011: CANP-EDiMath1: first workshop was held in Bamako In 2012

CANP-EDiMaths2: second workshop was held in Dakar, Senegal.

Main outcomes:

- 1) Constitution of EDiMATH, a network for the education of mathematics teachers in the sub-region of Western Africa and election of national committee members
- 2) Online publication of regional report (French, 2013)
- 3) Presentation of EDiMaths at EMF 2012 in Geneva, Switzerland.

Current Projects:

- Organization of a third edition of EDiMaths
- Opening of the EDiMaths network to Anglophone and Lusophone countries of the sub-Saharan region.
- Translation regional report into English, Publication with Springer



CANP 2 Central America and the Caribbean (started in 2012)



First workshop held in Costa Rica had 67 participants from Colombia, Panama, Venezuela, Dominican Republic, Spain, Mexico, Cuba, Costa Rica.

Main outcomes:

- Founding of the Mathematics Education Network of Central America and the Caribbean <http://www.redumate.org>
- Follow up meeting: First Mathematics Education Congress for Central America and the Caribbean and GA of Network held in Dominican Republic, November 5th–8th, 2013.
- The regional report published in English and Spanish

Current projects:

- Next GA and conference will be held in Cali, Colombia in 2017.

CANP 3 Southeast Asia (Mekong) (started 2013)



The initial Workshop was held 14th–25th of October, 2013 in Phnom Penh, participants from Cambodia, Laos, Thailand, and Vietnam and facilitators from the region and overseas.

Main outcomes:

- a regional report, a vision for the future document (focusing on secondary mathematics education) and plans for follow-up activities in 2014 & 2015
- Participants met in 2015 during the EARCOME (Philippines)
- infrastructure of a regional network established

Current projects:

- inter-country visits planned

CANP 4: East Africa (started 2014)



First Workshop was held September 1st–12th, 2014 in Dar es Salaam, Tanzania with participants from Tanzania, Kenya, Uganda and Rwanda

Activities: public and plenary lectures, workshops for secondary school teachers, panels, round tables, visits to schools, cultural events)

Main outcomes:

- Creation of regional network of mathematics teacher-educators, collaborating mathematicians, mathematics educators, and mathematics policy-makers in East Africa.
- Follow up-workshop in 2015 in Rwanda
- The Regional report was published by Springer „Mathematics Education in East Africa Towards Harmonization and Enhancement of Education Quality“

Current Projects: Strengthening network activities

CANP 5 Andean Region and Paraguay (started in 2016)



- The fifth Capacity and Network Project Workshop was held February 1 -12, 2016 in Peru. More than 100 participants from Bolivia, Ecuador, Paraguay and Peru as well as international scholars from Canada, Costa Rica, France, Italy and the USA.
- The workshop was held in Spanish and English consisted of different activities and themes of Mathematics and Mathematics Education.
- A follow up meeting and constitution of a Mathematics Education Network in the region is planned for 2017 (Ecuador).

CANP Review STEP 2: Results of the SURVEYs with CANP Participants and Organizers

Summary about the two SURVEYS:

Survey 1: Target Group: CANP Participants from all 5 CANP regions:
71 Total Responses from 250 participants of the five workshops,
January 27, 2016- July 1, 2016

Survey 2: Target Group: Organizer from all 5 CANP regions:
20 Total Responses from IPC, Program Manager, Local Chair (total 45)
March 22, 2016- July 12, 2016

Note. Presentation is a very small selection of data—see full reports which will be posted on the ICMI website by July 2017 for more information.

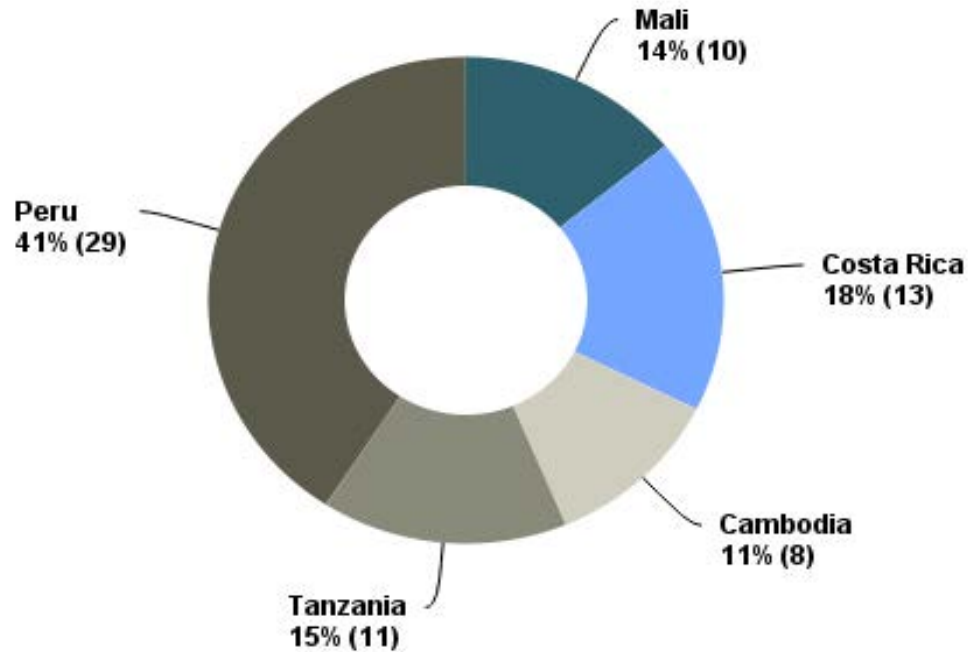


CANP Review Survey topics

1. Motivation to participate in CANP
2. Did CANP meet
 1. the original aims and objectives,
 2. benefits for participants
 3. other impacts
3. Status quo of regional network
4. Financial efficiency and financial support
5. Feedback about structure of CANPs
6. How should/ could existing CANPs be further supported?
7. What is the CANP future and first conclusions

Distribution: Country of Workshop (answer from participants)

Answered: 71 Skipped: 0



Which of the following best describes your current position best?

Participants: Answered: 58 Skipped: 13

Answer Choices	Responses	
Practicing teacher in a school, Profesor en ejercicio en un colegio/ Professeur dans une école	12%	7
Teacher Educator (University/ College)/ Profesor Educador (Universidad/ Colegio profesional) / Formateur d'enseignants (Université / École normale supérieure, etc.)	72%	42
Mathematician Matemático/ Mathématicien	3%	2
Administrator/ Administrador/ Administrateur, inspecteur	3%	2
Student/ Estudiante/ Étudiant (are you/ eres/ êtes-vous:	0%	0
Undergrad/ no graduado/ Baccalauréat/ licence	0%	0
Graduate/ graduado/ Master	0%	0
Post-grad/ con un posgrado/ doctorat)	2%	1
Other Otros Autre	7%	4
Total		58



Key Results Survey:

1.) Motivation to participate in CANP



CANP Mali

Why did you
participate
in CANP?

To develop in a new thematic area or field

To deepen my area of interest/

To get to know new teaching methods/

To meet colleagues from the region

For professional development as a teacher

For professional development as a teacher
educator

For professional development researcher
in
math education/

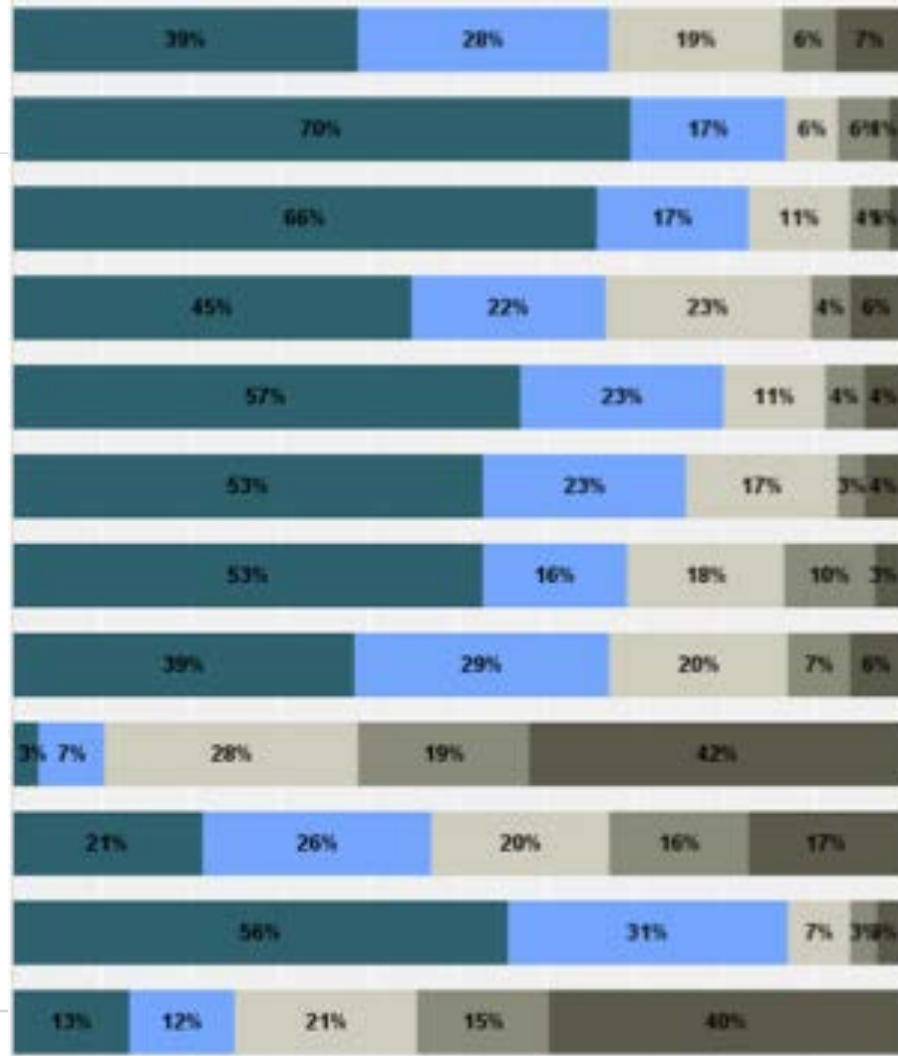
To meet colleagues from outside the
region/

Chance to travel /

To improve my career profile

To support cooperation in the region/

Because I was asked to attend
conference



2) a) Did the CANP workshops meet the original aims and objectives

b) What were the benefits for the participants?

c) Other CANP impacts?



Participants: In which areas did you benefit most from the CANP program? Order of 1-5 (1 = highest/ 5 = lowest)

Getting to know and discuss innovative teaching practices

Deepening knowledge on the teaching and learning of specific mathematical domains

Creating new regional contacts and networking

Deepening knowledge on teacher education issues& practices

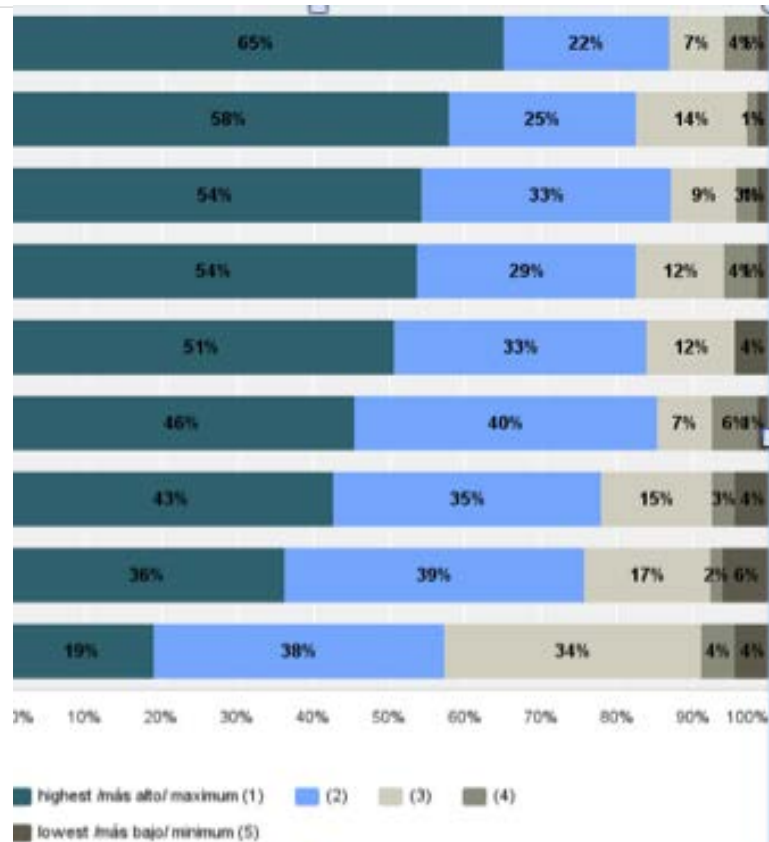
Learning about teacher education in the region

Connecting math education with living maths

Learning about specific issues of regional interest

Confidence working with others

Developing competences in the educational use of digital technologies



Participants: In the following we list some statements regarding CANP. Please indicate to which extent you agree./

The CANP workshop was useful to my job.

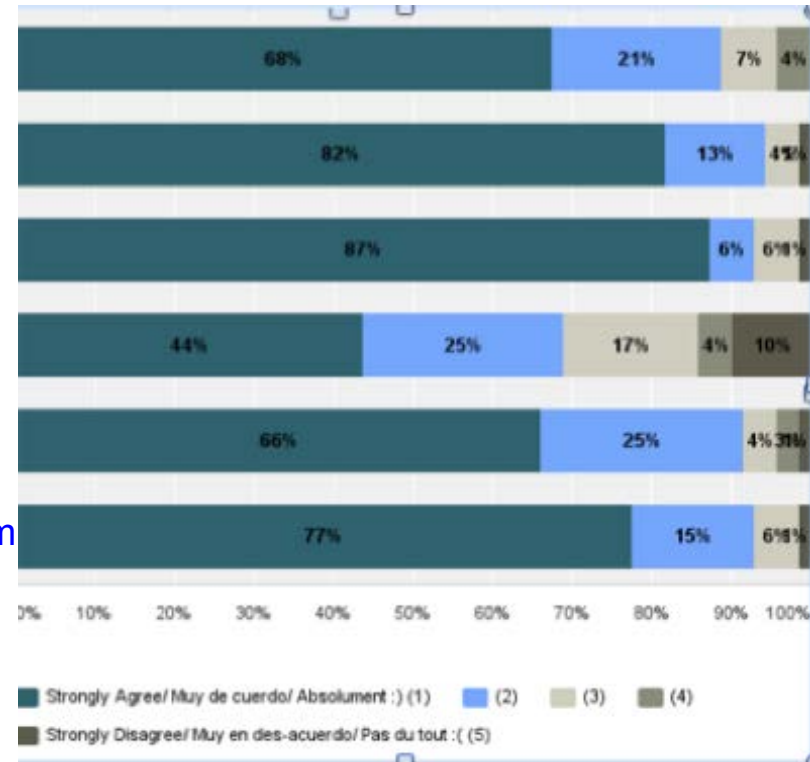
I would recommend CANP to colleagues.

I would be interested in attending a follow up, more advanced workshop.

The workshop was useful to meet colleagues from my country.

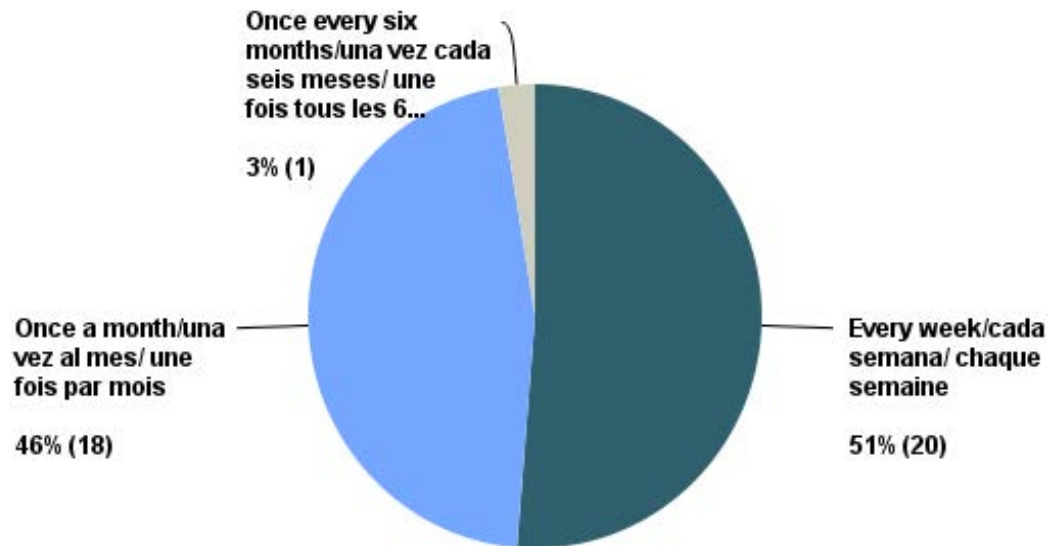
The workshop was useful to meet colleagues from the region.

The workshop was useful to meet international colleagues from outside the region.



Answered: 71 Skipped: 0

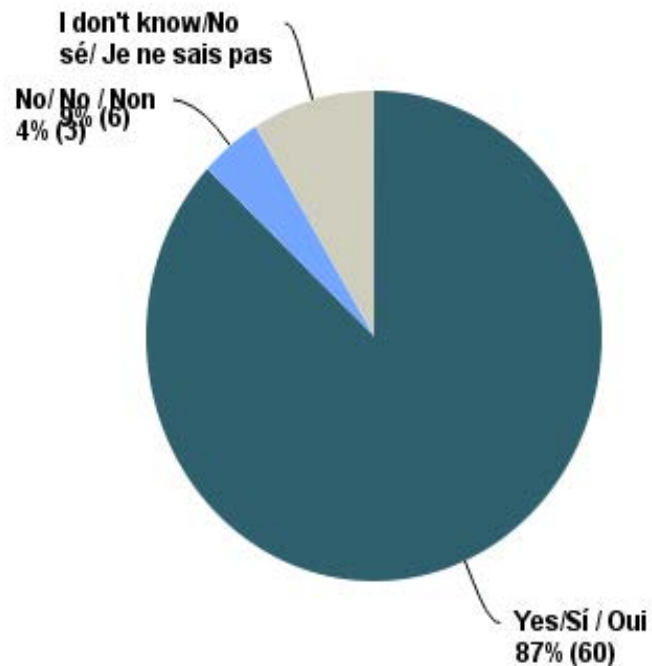
Participants: How often are you using teaching techniques/ teaching strategies/ideas or perspectives you learned at the CANP workshop in the classroom?



Answered: 39 Skipped: 32

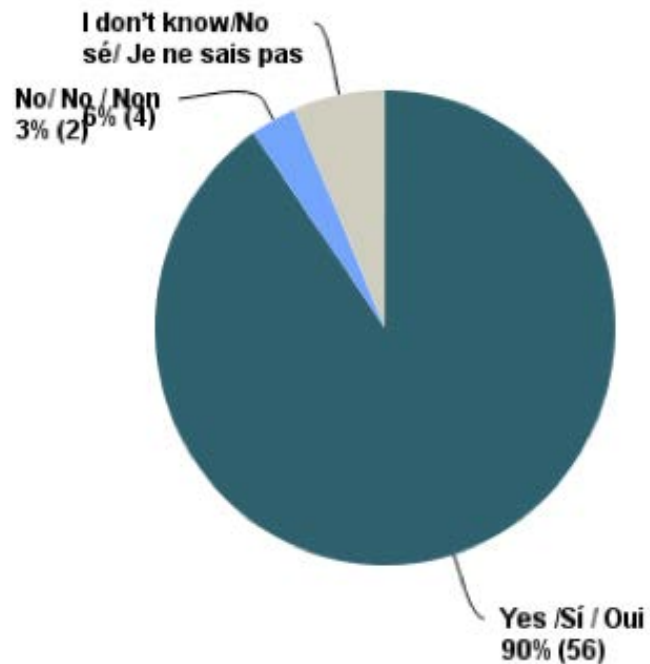
Has CANP influenced your attitudes in teaching mathematics or in administration?

Answered: 69 Skipped: 2



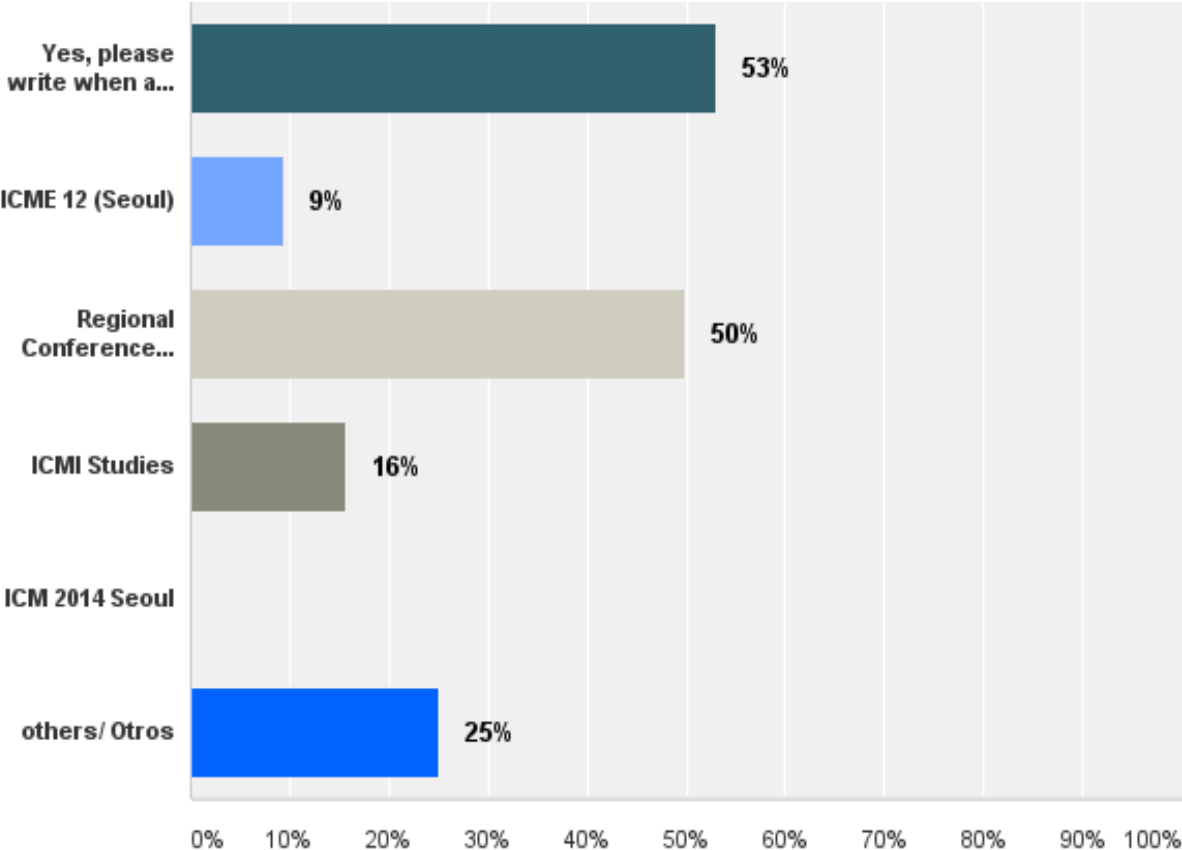
Are you using information from the regional reports in your professional life?

Answered: 38 Skipped: 33



Participants: Have you participated in any ICMI or IMU activity since you participated in CANP?

Answered: 32 Skipped: 39

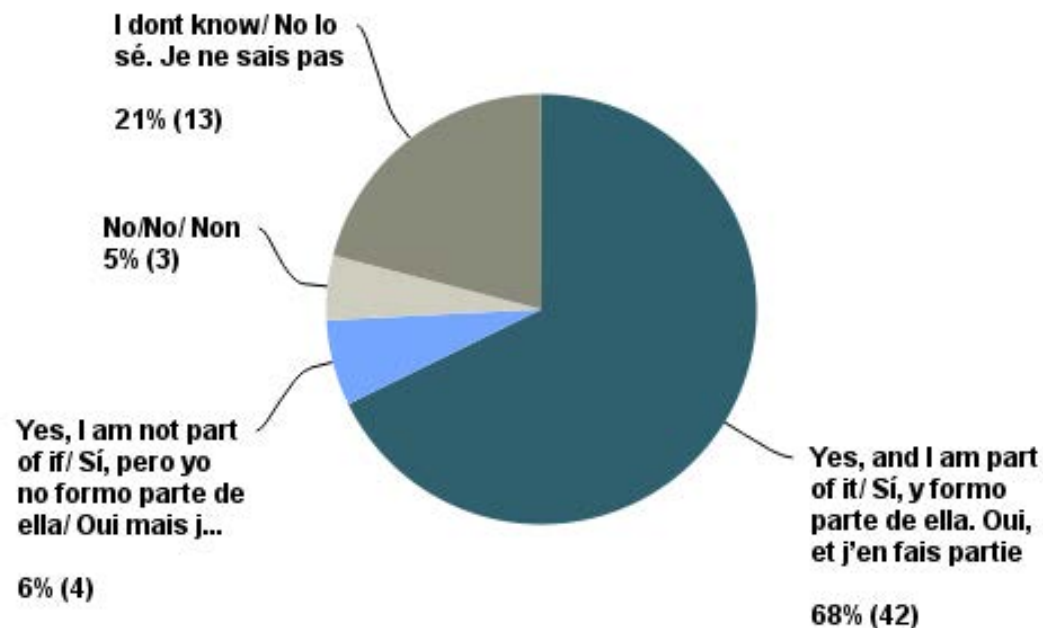


3) Status quo of regional networks



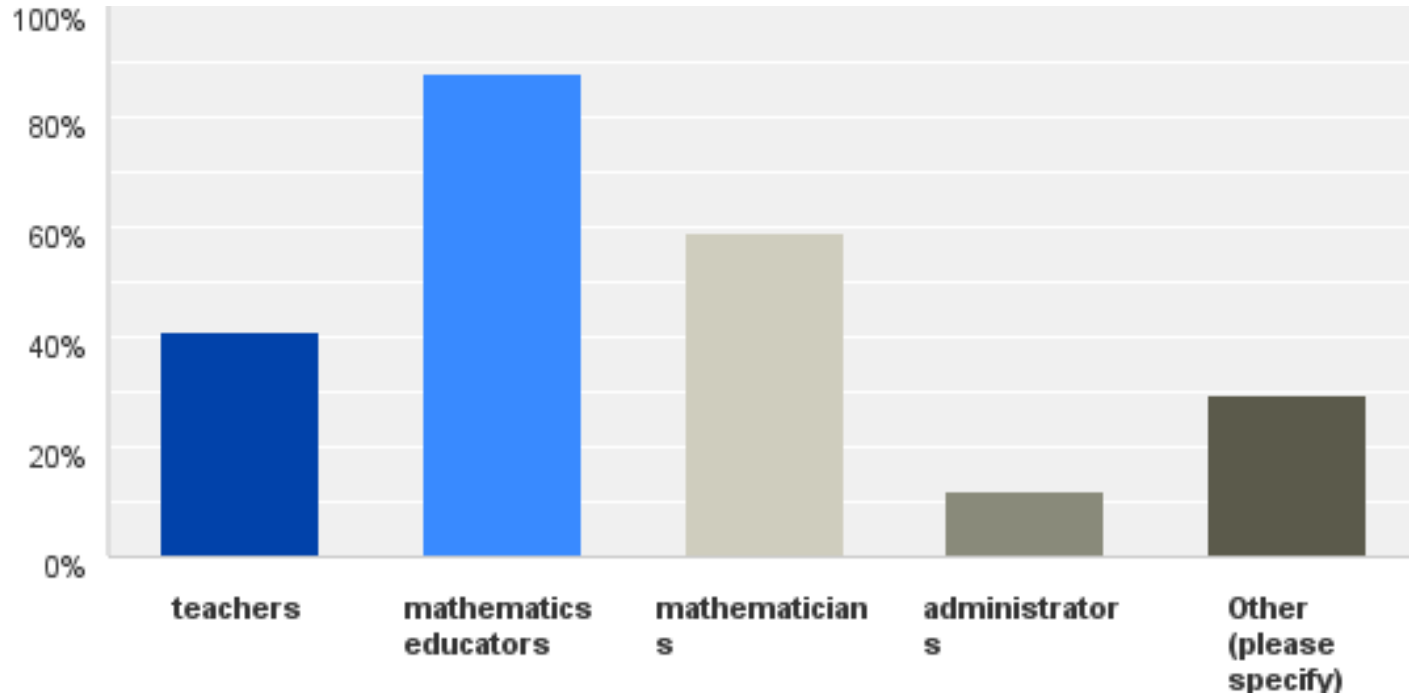
To the best of your knowledge, has the CANP workshop created a regional networks of teachers, mathematics educators and mathematicians in which you participate?

Participants: Answered: 62 Skipped: 9



Organizer: In case yes and there is a CANP network, which of the following group is involved in the network?

Answered: 17 Skipped: 3



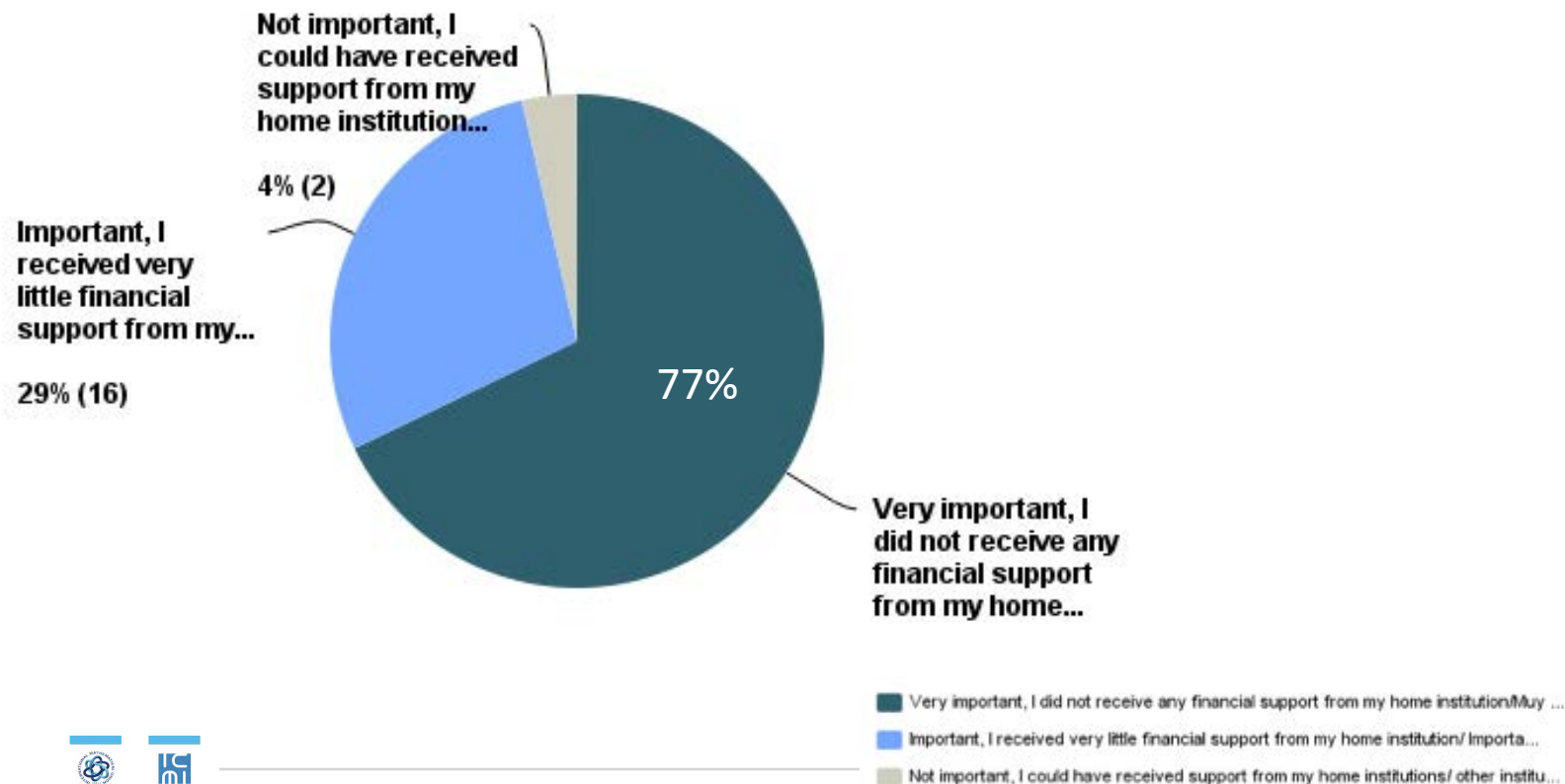
Key Results: 4) FINANCIAL Support and Financial Efficiency

CANP Expenses for ICMI 2010-2016 for five workshops and four follow up network meetings
(excluding expenses paid by local funds)

Total CANP Expenses (under ICMI Budget)	€ 251.000
Grants for CANP (fundraising by ICMI EC and ICMI Administrator), no local fundraising and institutional support included.	
Total Grants from IMU-EC	€ 110.000
Total Grant from IMU-CDC	€ 28.000
Total Grant from ICSU	€ 60.000
UNESCO	€21.200
CIMPA	€ 800
Total grants in support for CANPs	€220.000
Expenses for ICMI for CANP 1-5	€31.000

*The grant for the CANP 5 follow-up to be held in 2017 in Ecuador (EURO 5,000) is not included in this overview.

How important was the financial support of CANP for you to participate?



5) Feedback: STRUCTURE of CANP



Participants: Please rate the following aspects of the CANP workshop

The Overall program

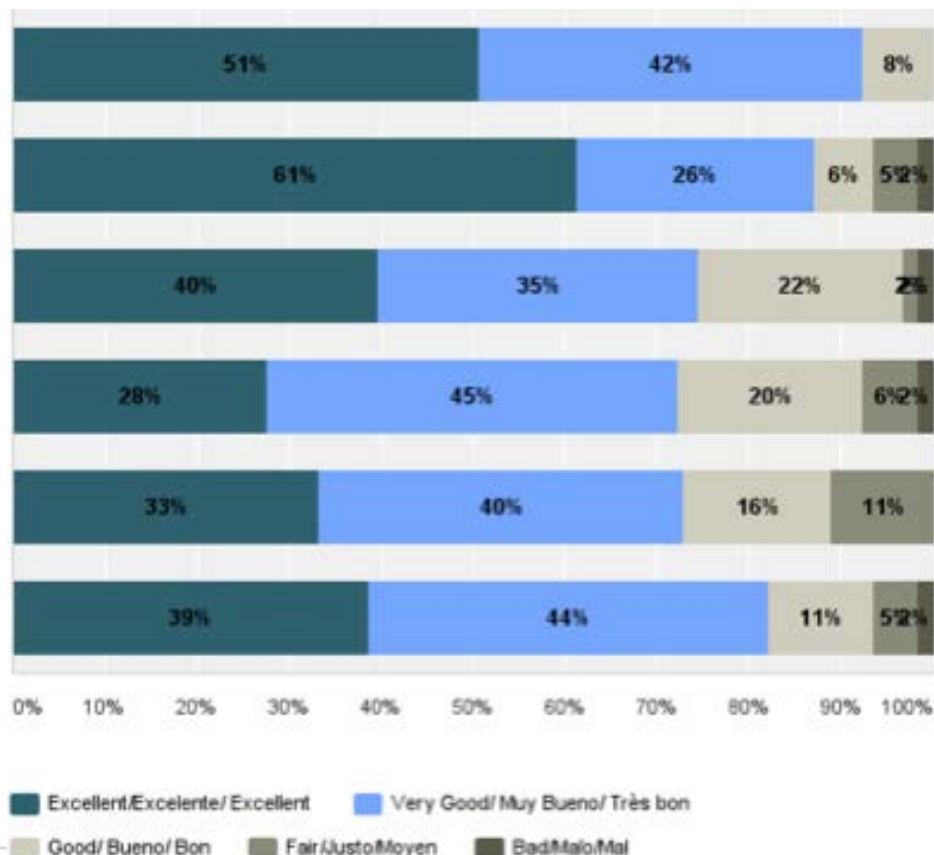
International support during the workshop

Social Activities

Time to discuss and meet colleagues

Enough attention was given to the specific needs of our region

Enough attention was given to my professional needs

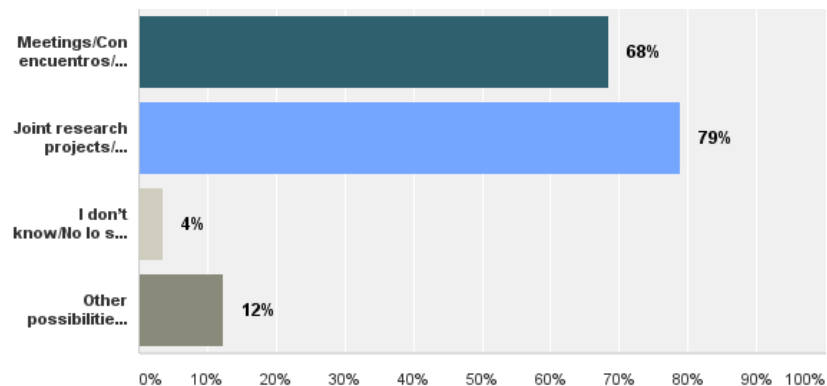


6. How should/ could existing CANPs be further supported/ sustainability of CANP?

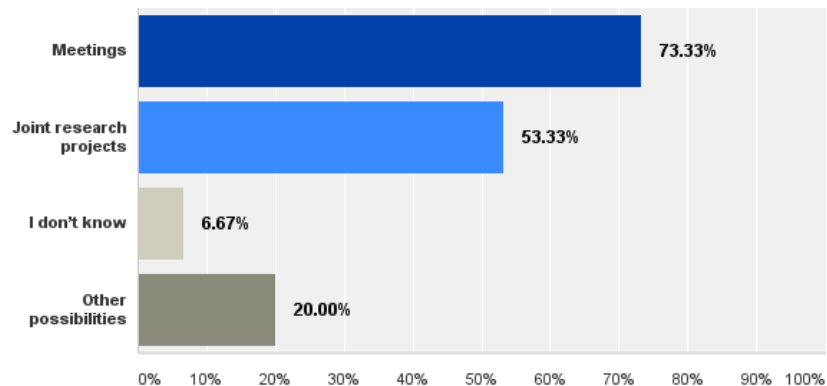


If there is a network: How could the network be strengthened?

Participants: Answered: 57 Skipped: 14

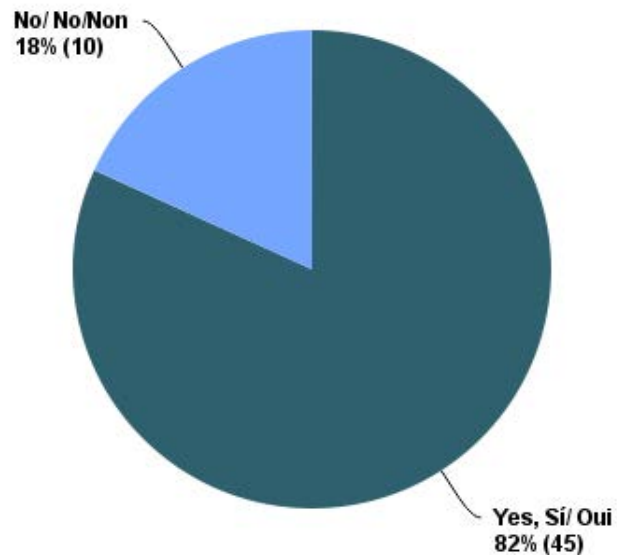


Organizer: Answered: 15 Skipped: 5



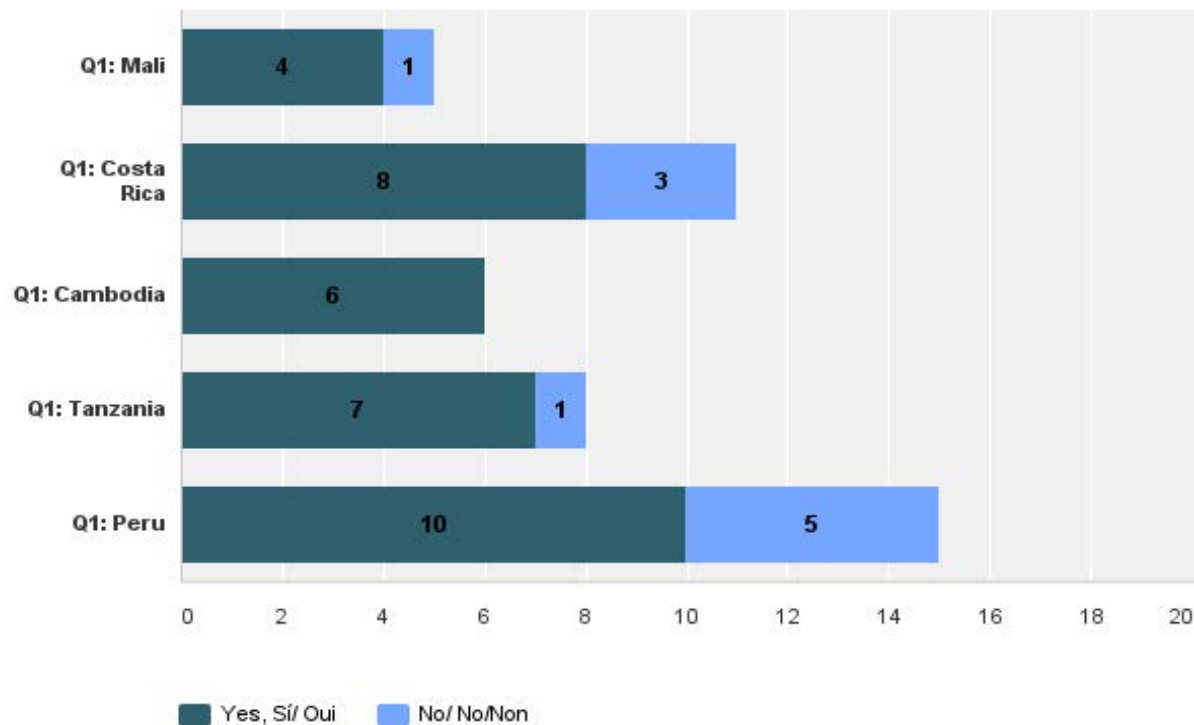
Participants: Would you be interested help organizing a CANP follow up activity?

Answered: 55 Skipped: 16



Participants: Do you think your home institution would be interested to host/support/organize a CANP follow up workshop?

Answered: 45 Skipped: 2



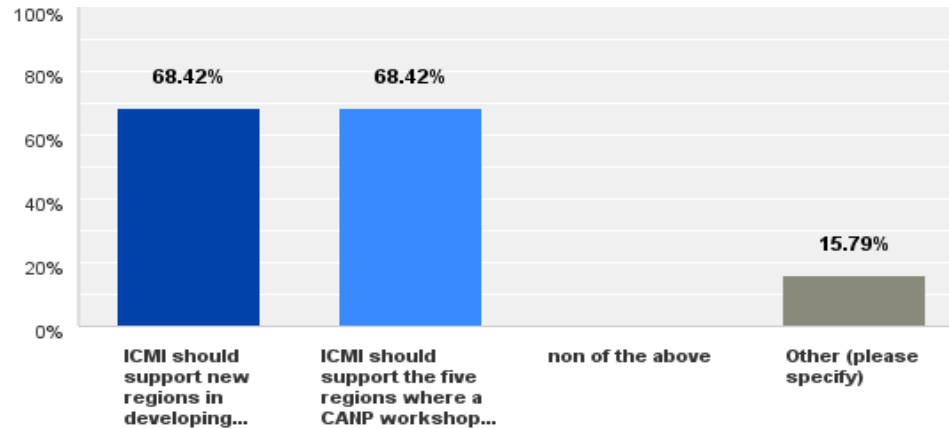
Key Results: Future of the Capacity and Network Project (CANP)

7) The future of CANP and Conclusions



Organizer: What could be the future of the CANP series in general and ICMI's role in it?

Answered: 19 Skipped: 1



Answer Choices	Responses	
ICMI should support new regions in developing countries to hold a CANP workshop	68.42%	13
ICMI should support the five regions where a CANP workshop was held	68.42%	13
non of the above	0.00%	0
Other (please specify)	15.79%	3
Total Respondents: 19		

Conclusions

- CANP fulfilled its aims for which it was created
- General satisfaction of the first five CANP programs by the the participants (based on the results of the survey, reports by the organizers and participants in the CANP DG during ICME 13 in Hamburg)
- CANP 1-5 contributed to improving the individual scientific capacity of the participants and supported network building.
- The visibility of ICMI is expected to increase with the growing of the regional networks.
- There is an interest (by the CANP organizers as well as members from the ICMI community from developing countries) to initiate new CANP programs, but also the five existing networks/ regions request further support.



Conclusions

As a final conclusion it can be stated that CANP 1-5 was a successful development intervention, which fosters regional capacity building and network development in mathematics education in the participating developing countries.

At the same time the review shows that there is still work to be done to sustain the results the CANP workshops achieved and to foster the newly established regional networks and the individual members.

Further survey results as well as a full report about the CANP 1-5 Review will be uploaded by July 2017 on:

www.mathunion.org/icmi

Please contact me in case of further questions:

Lena.koch@wias-berlin.de

icmi.cdc.administrator@mathunion.org