

DIVERSITY (GENDER AND OTHERS) SITUATION:

WHAT?

WHEN?

WHY?

ACTIONS?

IN OUR ENVIRONMENT?

GENDER

- ¿Exists?: yes mainly for STEM careers
 - ¿When?: already at the level of primary school, but much more differences at the highest positions (University, Research, Private firms,...)
 - ¿Which is the motivation?: Familiar traditions, primary school teaching?,... but also very important the familiar conciliation,....
 - ¿What to do?: A good education from the start, promote STEM for all childs, not prioritizing for men and not for women. Campaigns of sensibilization to the society. Programs favorizing the familiar conciliation, Equality programmas at the University, Research centers,... A politic of equality directed to private environment,...
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- ¿What about in our context?: Communicators, scientists, educators,....
 - We can provide specific programmes oriented to primary school, but also to general public

Diversity problema in other contexts?. Could increase also the problema of gender due to cultural traditions,...-→ see ASPIRES Project from UK

ASPIRES Project from UK

(study was kindly funded by the Economic and Social Research Council (ESRC))

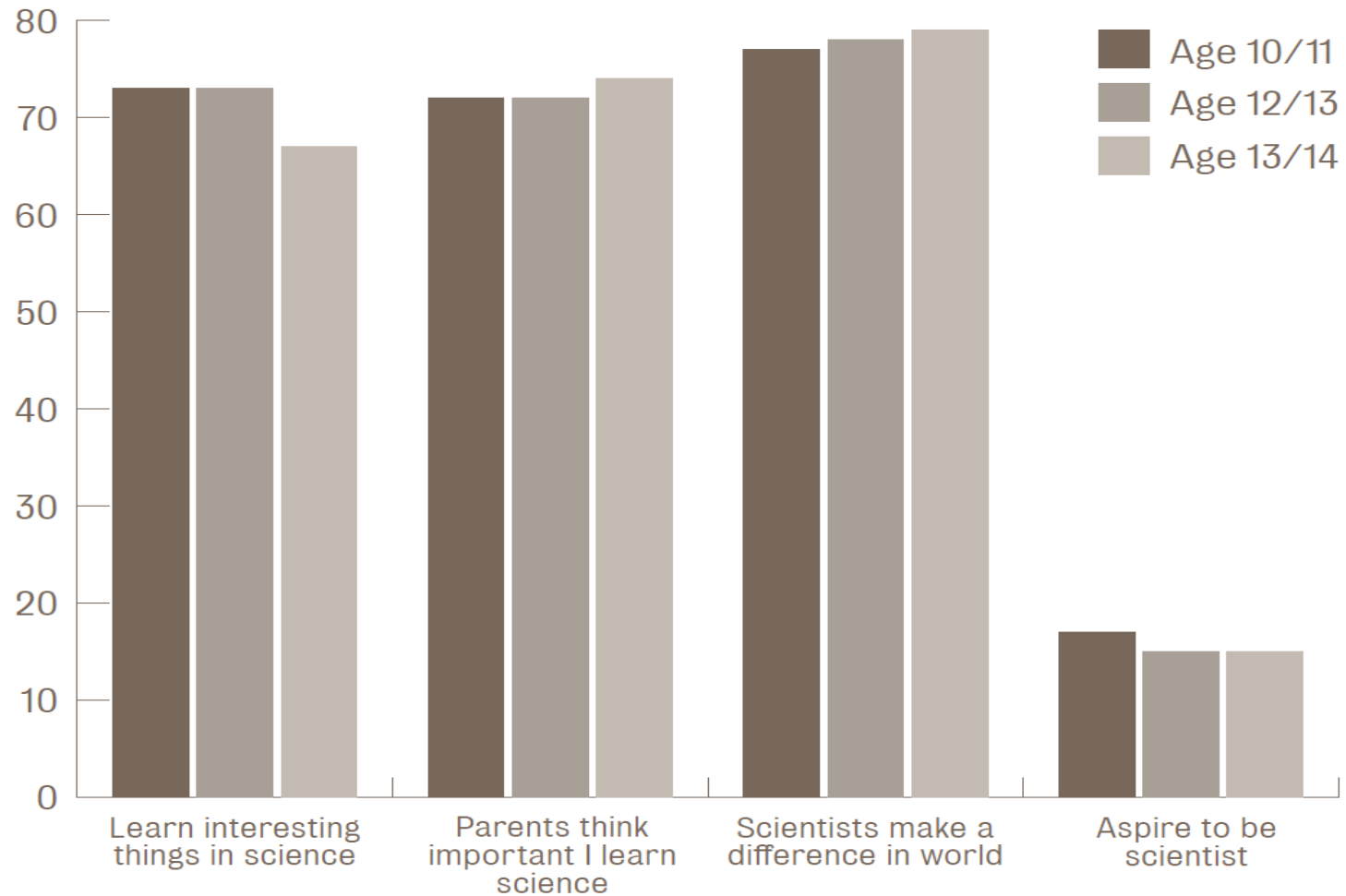
<https://www.kcl.ac.uk/sspp/departments/education/research/ASPIRES/ASPIRES-final-report-December-2013.pdf>

There is a drop in numbers expressing science aspirations around the end of primary and the reason is not so much that school classes are boring, rather :

- Lack of science capital at home/family, so children are not able to envisage where science could take them (mainly middle-class have more science capital)
- School careers info is generally too little, too late
- stereotypes become anchored of science careers being for Asian male middle-class (worse for white, the worst for black people due to multiple inequalities)

Science capital refers to science-related qualifications, understanding, knowledge (about science and ‘how it works’), interest and social contacts (e.g. knowing someone who works in a science-related job).

COMPARISON OF SURVEY RESPONSES FROM
YEAR 6, YEAR 8 AND YEAR 9 STUDENTS
(% STRONGLY/AGREEING)



Implications:

1. Shift the policy discourse – from ‘increasing interest’ to ‘building science capital’
2. Earlier intervention – from primary school
3. Break the ‘science = scientist’ link
4. Embed STEM careers awareness in science lessons
5. Tackle multiple inequalities
6. Bust the ‘brainy’ image of science/science careers
7. Broaden post-16 science options
8. Build science capital with students and families

Somme comments

IPPOG might want to consider developing a programme specifically for end primary, taking into account the role models you project, as this is such a pivotal point for stereotypes to set in.

It's not good to do events dedicated to promote the gender equality in which are only women participating

Promoting the gender (and other diversity) perspective should be done on a continuity basis, not just a day dedicated each year

It would be necessary to eliminate stereotypes in primary education

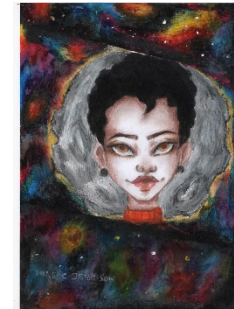
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Several activities made in Santander with occasion of 11 February, International Day of the women and girls (IFCA had a big protagonism, but all the research Institutes were participating in different events. The activities lasted about two weeks)



- Visibility of our own women scientists, with video showing their research, in order to push the youngest ones to do HEP research

- First competition of comics for primary and secondary school, dedicated to scientific women



Women IFCA: <https://www.youtube.com/watch?v=80k0xSqDrjw>

Women IFCA - Athena: <https://www.youtube.com/watch?v=ibwoR2ZfMzk&t=2s>

WomenIFCA - CMS: <https://www.youtube.com/watch?v=Pkp-QBEglzg>

¿Qué son las ESTRELLAS DE NEUTRONES? with Javier Santaolalla:

<https://www.youtube.com/watch?v=9Zp844pufc0>



Pecha Kucha vol. 5 - Dedicated to women and girls in science :20 slides in 20 seconds, with the collaboration of many women scientists of IFCA



Interesting and funny plays to do in group, made by one of our women scientists. She has dedicated the play to scientific women in the history

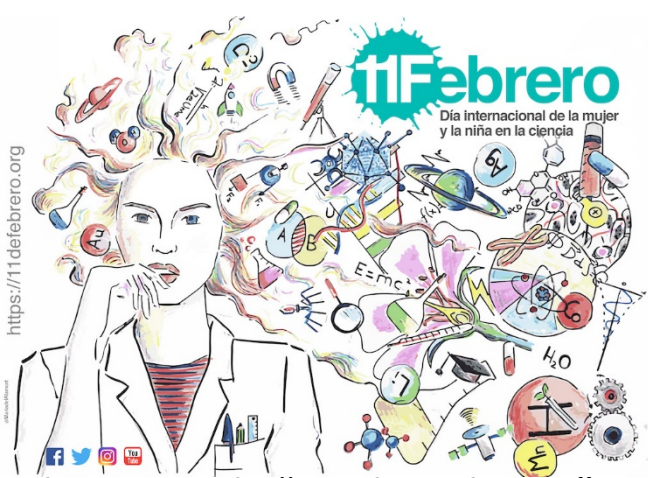


“Discover your female scientists” at the Science Faculty. Talks for the general public

Round-table in the Ateneo of Santander with female scientists of different áreas collecting their experiences: Rocío Vilar, Ana Andrés, Ingrid Mateo, Diana Tordesillas y Carmen Sarabia. The public came from different environments of society and the discussion concentrate on different work, social and academic aspects of the scientists.



All of them are collaborating in the STEM Talent Girl Project



The Spanish “11 de Febrero” initiative was born on September 2016 to commemorate the “**International Day of Women and Girls in Science**”.

The initiative has become a benchmark in the **dissemination of Women in Science issues**, with over **a thousand activities that took place in Spain during February 2018**. Hundreds of talks at schools given by female scientists or about the discoveries of female scientists were dedicated to encourage girls to follow a scientific career and **prevent a gender-biased next generation of scientists**.

Exhibitions, science dating, gatherings to edit Wikipedia, round tables, storytellers, comic or video contests, and many other activities **contributed to make visible the contribution of women in science**.

It is noteworthy that “11 de Febrero” is an open civic initiative launched and run by a few scientists and science communicators on a **voluntary basis and without funding**.

The initiative calls people, institutions, companies, schools, libraries, etc. to organize activities close to the 11th of February, announcing them on a web page (11defebrero.org) and on its social networks. **The webpage offers as well a wealth of materials freely available to use in their activities**.

The Spanish scientific community and the institutions have understood that each of us can make a difference and they are responding massively to the call, participating and organizing activities around the International Day of Women and Girls in Science. 21/04/2018

Alberto Ruiz Jimeno (IFCA- Spain)

The awareness that all this activity is generating will surely last much longer.

CSIC has an award for the gender equality in their work conditions

The award is directed to all the centers and unities of CSIC, and is doted with a máximo of 3000 euros

It pretends to promote the gender perspective as a transversal category in the CSIC and to advance in the process to eliminate the barriers of women in their profesional exercice. Also promote the adoption of innovative activities contributing to eliminate and to prevent discrimination, due to maternity, nursing, adoption,.... Among other recommendations, to promote language non-sexist and empowering the presence of women in the highest positions of management, and tutorize programmes directed to girls and young female researchers

CSIC started in 2002 a Committe of Women and Science to ases the President and to do a study, optimization and following the scientific careers of women in the Organism being pioneer in the general administration of Sapin. CSIC has also an Equality Committee, by delegation of the Presidence to made a diagnosis of the gendre equality and promote activities

The women at CSIC

11.000 workers at CSIC, in 2016, about 50% women, 5.455.

Women are 35,7% of permanent personnel of the institution, 33% of them being IP of competitive national Programmes and 20,58% European Programmes

A couple of years ago, **CERN** set up a task force within its International Relations sector to increase the diversity in CERN's public face. This has given rise to a range of activities, from an internal database sharing recommendations of women HEP speakers (we have 112 on our list), diversity tagging of photos within CERN's huge photo database, to make it easier to find new images to illustrate our activities, outreach activities in the local community sending female physicists into schools for 11th Feb, the start of a refocus on primary ages, support for other international days like the new LGBTstemday, including more subtitles in videos, integrating accessibility into plans for CERN's new website, introducing sign language content and subtitles in Microcosm, Such a programme does not have to be complicated, expensive or resource heavy to carry out. We've found small steps combined to create momentum helped us start to naturally integrate diversity into what we produce across the board.

One more link I wanted to share is from the Women in Technology group here, incase you've not already seen it :

an interview with Sijbrand de Jong <https://cds.cern.ch/record/2293850> which touches on what he has done for diversity in academia.