Senior Citizens and Science Centres
New Opportunities for Old Schoolers

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IN DEPTH

New opportunities for old schoolers

LUIZ AZEVEDO RODRIGUES
SARA MIRA
Why engage seniors?

By 2020, in OECD countries, people over 65 will represent...

- Approximately 40%* of the size of the working population
- More than 40%** of total consumption across all markets

More than 20%* of total population

*Infographic: BNP Paribas
Engaging seniors

Saturday 11 Jun 2016
09:00 - 10:15

Session speakers

**Sara Mira**
Science Communicator Manager
Centro Ciência Viva De Lagos
Lagos Portugal

“High & Lows with Seniors”
Introducing science concepts might not be the right way for communicating science for adult and senior public, but rather transforming their empirical knowledge into scientific information. Ciência Viva Lagos Science Centre developed science activities to active senior groups or to home care institutions. There are several topics that contribute for a successful session-high and lows on the implementation of senior’s activities will be discuss from our experience.

**Ivone Fachada**
Executive Director
Science Centre of Bragança
Bragança Portugal

“Science activities for seniores: can we talk about anything?”
Bragança Ciência Viva Centre has a science outreach program for seniors. The main goals are to acquire knowledge in areas of greater scientific importance such as nanotechnology or astronomy; to stimulate critical thinking and to prevent physical inactivity and loneliness. Until 2015 we had over 800 seniors involved. In this session we are presenting the activities developed, how we keep seniors motivated, and a direct result of this outreach program - an intergenerational Marathon of science.

**Ayman Elsayed**
Director
Bibliotheca Alexandrina Planetarium Science Center
Alexandria Egypt

“Participate & enjoy parenting-our kids, our treasure” The Planetarium Science Center of Alexandria offers educational, supportive and customized workshop sessions to parents of children aging 5-9. Understanding middle childhood development, encouraging social-emotional competency, responding to school and family life challenges, fostering positive peer relationships, communicating effectively and strategies for effective, positive discipline in the middle years, are some of the topics addressed.

**Ewa Janowska**
Project Manager at Science and Art Events Lab
Copernicus Science Centre
Warsaw Poland

“I feel like I can fly.” “I love this place and don’t know why I come here so late.” “Again I can feel like a very young woman asking lot of questions”. Although seniors who come to Copernicus Science Centre are very pleased about their visit, even tough they are only 1.4% of our public. Usually they are thinking about themselves as grandparents focusing on arranging good time for grandchildren. They simply don’t know why Copernicus is also a place dedicated to them. We are trying to improve contact with older public in two ways. First, constantly making our offer better according to seniors needs and expectations. Second, we are inviting seniors as mentors, experts and

Convenor

**Lúcio Rodrigues**
Director
Centro Ciência Viva De Lagos
Lagos Portugal

Twitter
"ageing is one of the greatest social and economic challenges of the 21st century for European societies. It will affect all EU countries and most policy areas. By 2025 more than 20% of Europeans will be 65 or over, with a particularly rapid increase in numbers of over 80s."
Longevity Revolution

Resident population 65+ (%) 1960 and 2015 EU28

1. Italy 9.3%
2. Greece 8.3%
3. Germany 10.8%
4. Portugal 7.9%
5. Bulgary 7.5%

24. Poland
25. Cyprus
26. Slovakia 6.9%
27. Luxembourg 10.8%
28. Ireland 11.0%

% of Japanese population aged over 60
1950: 7.7% 2050: 42.7%

Sources: Eurostat | NU | Instituto Nacionais de Estatistica - Recolha de Dados Rapido, Joint, Nowcast PORDATA
Last update: 2017-03-06
Silver Economy

End of 2017
70% of disposable income in the USA will be in the hands of people over 60 years

What should be the positioning of SCM’s?
Silver Economy

Active and healthy ageing offers also great opportunities. If we are prepared to change our systems for health and social care, we can benefit from those.

Today Europeans over 65 have a spending capacity of over €3,000 billion.

Ageing in good health allows us to:
- Travel
- Learn new things
- Work for more years
- Prepare our homes for living independently for the many years to come

Europe has what it takes to benefit from these new opportunities.

@SilverEcoEU

European Commission
What are the new “silver products and services”? Solutions to promote autonomy, regular activity and health for seniors!

- **Connected home**
  - Connected objects to furnish the home

- **Remote assistance**
  - Remote services to increase autonomy

- **Mobility**
  - Solutions to improve communications and transport

- **Insurance**
  - Offers that provide more protection

 Health Literacy
 Active Ageing
 Digital Literacy

BNP Paribas
## How to engage seniors?

<table>
<thead>
<tr>
<th>Active ageing</th>
<th>Sharing Experience(s)</th>
<th>Volunteer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hands-on and Minds-on Activities</td>
<td>Life / Skills Experiences</td>
<td>Volunteering</td>
</tr>
<tr>
<td>Health Literacy</td>
<td>Intergenerational programs</td>
<td>Citizen Science projects</td>
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</table>
How to engage seniors?
Science Has No Age
Lagos Ciência Viva Science Centre

program in science communication and outreach for senior citizens (since 2014)
Science Has No Age

Hands-on and Minds-on Activities

Molecular cooking
Photography
Light Painting
Microscopy
Chemical reactions
Botany
Cosmetics
Shells - Bivalves and Gastropods
Bees & Honey
Pin hole
Organic Pigments
Microwave Cooking
Science Talks
Math and Biology of knitting
Science Has No Age

2 Municipalities involved

Lagos
active ageing program
health literacy
vaccines
healthy food
plants and health
others

Silves
science outreach
cognitive and neurological stimulation
Molecular cooking
Photography
Light Painting
Microscopy
Chemical reactions
Botany
(….)
A CIÊNCIA NÃO TEM IDADE
A CIÊNCIA NÃO TEM IDADE
Number of participants (2014-2017)

877

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Knowing more about science will help me save energy more money</td>
<td>32.4%</td>
</tr>
<tr>
<td>I’m more confident in making decisions about my health</td>
<td>37.8%</td>
</tr>
<tr>
<td>I am more aware of my impact on the environment</td>
<td>32.4%</td>
</tr>
<tr>
<td>I feel more active</td>
<td>24.3%</td>
</tr>
<tr>
<td>I feel more interested in the environment</td>
<td>27.0%</td>
</tr>
<tr>
<td>I developed my interests and hobbies</td>
<td>21.6%</td>
</tr>
<tr>
<td>I met people who share my interests</td>
<td>10.8%</td>
</tr>
<tr>
<td>I have more interest in science subjects</td>
<td>27.0%</td>
</tr>
<tr>
<td>I feel more confident to read and talk about science issues</td>
<td>24.3%</td>
</tr>
<tr>
<td>I better understand the issues addressed in the media</td>
<td>32.4%</td>
</tr>
</tbody>
</table>

Benefits of participation in activities, identified by participants.
Who are we?
Ciência Viva Science Centres as a national network (21)

Every Centre offers a different experience, integrated in the heritage, history and tradition of the region, in touch with the local community.
What Did We Learn?

Program time for peer socialization
What Did We Learn?

Generate **empathy** both with the team, scientist or facilitator
What Did We Learn?

Start from the group's **interests** and **experience/expertise**
What Did We Learn?

Be aware of physical and cognitive specificities of this group
What Did We Learn?

Motivation management
What Did We Learn?

Most relevant aspects to consider

**Motivation management**
Generate **empathy** both with the team, scientist or facilitator

**Adequate topic selection**
Start from the group's **interests** and **experience/expertise**
Select carefully the **partners** and **stakeholders** to work with

Be aware of **physical** and **cognitive specificities** of this group

Program time for **peer socialization**
Thank you for your attention!

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