

Technology Assessment and Public Participation: From TA to pTA

Expert and Citizen Assessment of Science and Technology

**Presented to the Science and Technology Innovation Program
Woodrow Wilson International Center for Scholars
Washington, DC
December 6, 2012**

Presentation Overview

- The context for pTA
- World Wide Views process & results
- Circulating the results
- Lessons Learned & Action Items

The context of pTA





U.S. Congress Office of Technology Assessment (1972 – 1995)

- Organization
- Goals and productivity
- Participatory sentiments



Participatory Sentiments

- Proponents included Rosemary Chalk, Hazel Henderson, public interest groups
- Some ideas
 - Public Interest Group Advisory Panel
 - Broad dissemination of RFPs
 - “Impacted party” representation in studies

The Demise of OTA

- Cut wasteful government spending
- Alternative providers (CRS, GAO)
- Limited public support
- Partisan agendas

pTA Across the Pond

Input for plans on:

- Climate change adaptation
- Developing green industries
- Identifying areas of genetic technology to promote or avoid
- Regulate groups of chemicals



U.S. Openings...

- Epistemic modernization
- U.S. leadership in deliberative democracy
- Collaborative tools
- OGI

ECAST Founding & Activities

- Need for coordination of science centers, S&T policy researchers, participation advocates
- Professional conferences
- Collaborations
- World Wide Views on Biodiversity – largest project to date

The World Wide Views Project





WWViews: Two Global Consultations

- World Wide Views on Global Warming
 - September 26, 2009
 - 44 sites in 38 countries
 - UNFCCC – Copenhagen climate summit
- World Wide Views on Biodiversity
 - September 15, 2012
 - ~34 sites in 25 countries
 - CBD – Hyderabad biodiversity summit
- Coordinated by Danish Board of Technology

WWViews on Biodiversity Sites

- Africa

- Cameroon
- Dem. Rep. Congo
- Nigeria
- South Africa
- Uganda
- Zambia

- Asia

- China
- India (4)
- Indonesia
- Japan
- Maldives
- Nepal
- Palestinian Territory
- Philippines
- Vietnam

- Europe

- Denmark
- France (2)
- Germany

- Latin America/Caribbean

- Bolivia
- Brazil
- Dominican Republic
- Saint Lucia
- Saint Vincent and Grenadines

- North America

- Canada (3)
- US (4)



China

Citizens voting on WWViews questions



Palestinian Territory

Organizers provided husbands and fathers with alternative on site activities so that women could participate

WORLD WIDE VIEWS ON
Biodiversity

Uganda Citizens' Consultation on Biodiversity
 Workshop, 15th September 2012

Hotel Africana, Kampala

Facilitator: CHOICE AFRICA

In collaboration with:

Sponsor: Japan Biodiversity Fund

2011-2020 United Nations Decade on Biodiversity

CBD










Uganda



Cameroon



Germany



Brazil



Museum of Science, Boston



WWViews Design Criteria

- Cheap and easy
- Clear link to policy-making
- Both global and national
- Clear and comparable results
- Informed citizens
- Deliberation
- Qualitative and quantitative



WWViews on Biodiversity

Project managers in front of the Danish environment ministry at project launch, March 28, 2012

Welcome



Introduction – 30 min.



Thematic sessions

Thematic information video – 5 min.

Deliberate about 2 or 3 multiple-choice questions – 45 min.

Vote on questions – 15 min.

(repeated 4 times)



**Question focused on national issue
Can be qualitative or quantitative**



Goodbye

The flow of each
WWViews
national meeting



WWViews Project Launch

Koshland Museum of Science

June 5, 2012

Barbara De Rosa-Joynt, *Dept. of State*

Carolyn Lukensmeyer, *AmericaSpeaks*

John Fitzgerald, *Society for Conservation
Biology*

Naba Barkakati, *GAO*

Expert Panel

Angela Bednarek, The Pew Charitable Trusts

David Blockstein, Nat. Council for Science and Environment

Thomas Lovejoy, Biodiversity Chair, Heinz Center

Paul Thompson, Michigan State University

Stuart Pimm, Duke University

Mary Barber, RTI International

Daniel Clark, AmericaSpeaks

John Fitzgerald, Society for Conservation Biology

Kenneth Green, American Enterprise Institute

Naba Barkakati, U.S. Government Accountability Office

Leonard Hirsch, Smithsonian Institution

Andrew Light, Senior Fellow, Center for American Progress



CBD Strategic Plan for Biodiversity 2010 - 2020

- Continued biodiversity decline
- Focus on implementation
- 5 goals, 20 targets



Results - Concurrence

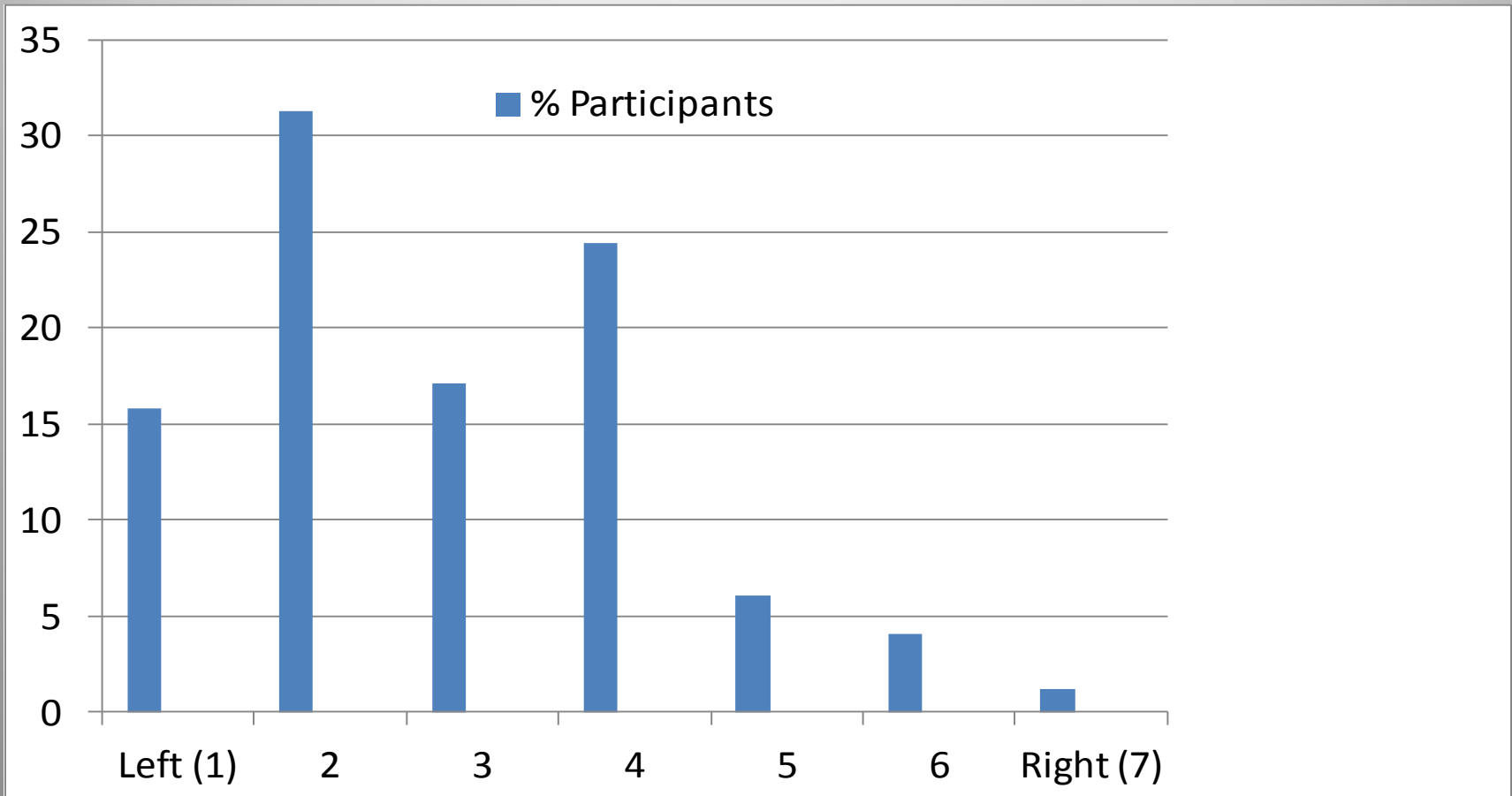
- “Very concerned”
- Willing to expand regulations
- Recognize need for trade-offs



Results - Patterns

- Attentive to participatory instruments
- Support retroactive payments for genetic resources
- Someone else's problem

Political Orientation



Education level

	U.S. WWViews Sites	U.S. Census
No HS diploma	4.3%	14.4%
High school	10.3%	28.5%
Some college	24.5%	28.9%
Bachelor's	30.3%	17.7%
Graduate	29.2%	10.4%

Environmental membership

WWViews	World Values Survey (2005)
Active member – 10.4%	Active Member – 6.1%
Inactive member – 15.3%	Inactive member – 9.9%

Should we heed the results?

- Not an opinion poll
- Method based on interaction of different views
- Building new tools for democracy in a global society
- Where else is there informed discussion among citizens on important policy issues?

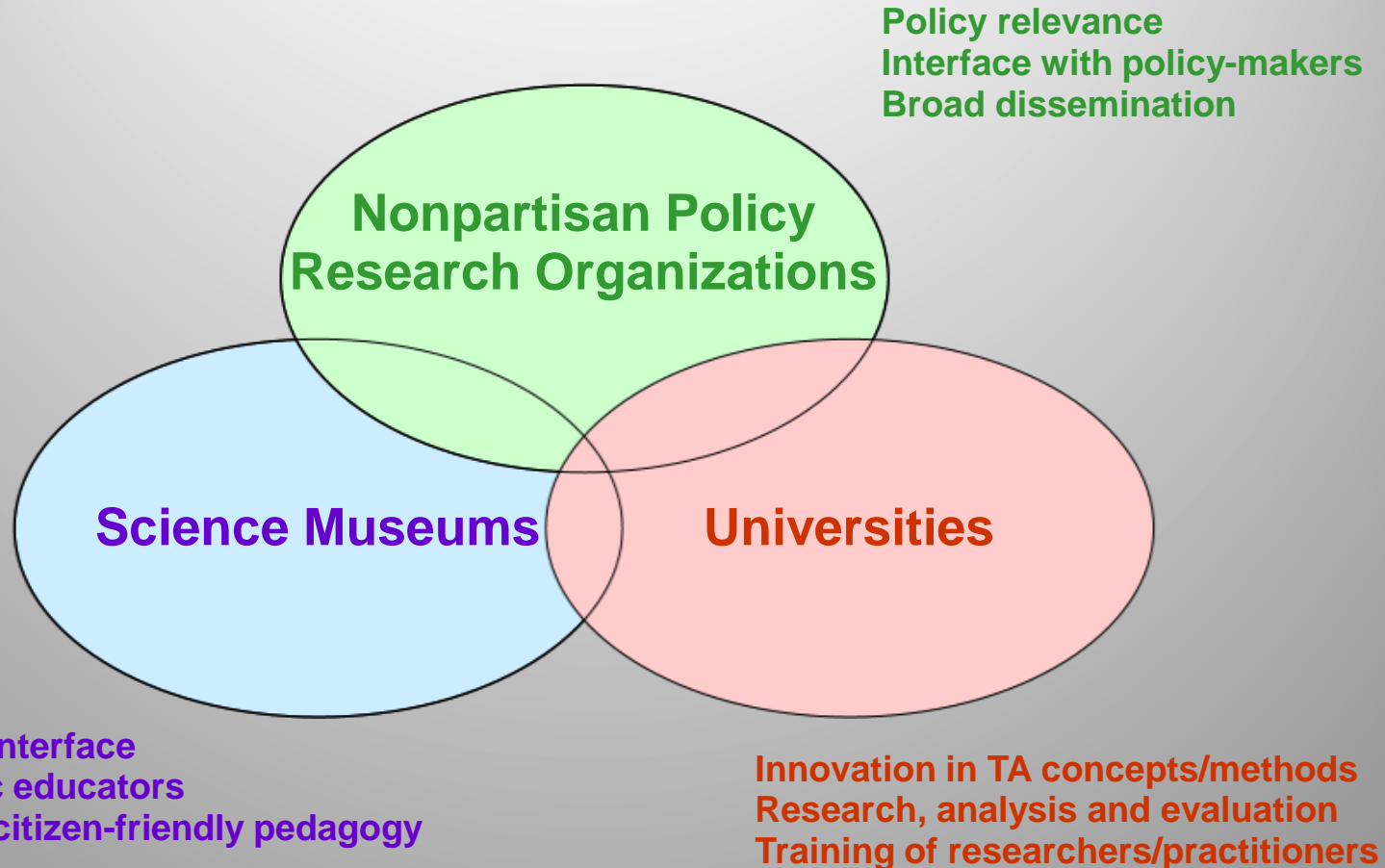
Circulating the results



CBD and US Dissemination

Target	Dissemination
Cop 11 Delegates	<p>Inclusion of the CBD Secretariat in the project's Steering Group</p> <p>3000 copies of the results report</p> <p>A "side event" as well as a "special event" organized by the Secretariat</p>
U.S. Delegation for Cop 11	<p>ECAST engagement with delegates 1 year prior to Cop 11</p> <p>Press release with most significant results for U.S. audience</p>

An Institutional Network Model



Informal Science Education **PES Developments**

- **Public Understanding to Public Engagement**
- NSF Pathways award (DRL 1010831, Dimensions of Public Engagement with Science, L. Bell), the Museum of Science, Boston
- Association of Science - Technology Centers PES CoP (Oct 2010)



ISE Dissemination

- Syndicate PES activities for the ISE community (Museum of Science, Boston)
- ICT to expand the national conversation about biodiversity conservation (Marian Koshland Science Museum)
- Multi-site ‘youth and zoos’ engagement (CSPO ASU)
- Informal Science Education (ISE) professional network

Downloadable Biodiversity Quests



eol Encyclopedia of Life

Urban Biodiversity MOS

This is a citizen-science enabled collection in the Encyclopedia of Life
4 in this collection observed

[Add Observations](#)

Observations / Map
Atom / KML / CSV

Checklist 4 taxa observed

Top Contributors

- brad**
2 species, 2 observations
- marie**
1 species, 1 observations
- katecrawford**
1 species, 1 observations

[View leaderboard](#) - [View all members](#) -

About

This is a companion activity for the [World Wide Views on Biodiversity](#). This activity, along with companion activities for 4 other habitats is designed as a fun way to visit your





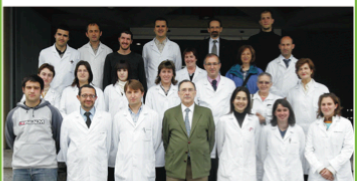
WHO SHOULD PROTECT BIODIVERSITY?


Scientific credibility to address biodiversity


Likelihood of protecting biodiversity


Fairness in considering who is impacted

SCIENTIFIC ORGANIZATIONS



...should protect biodiversity

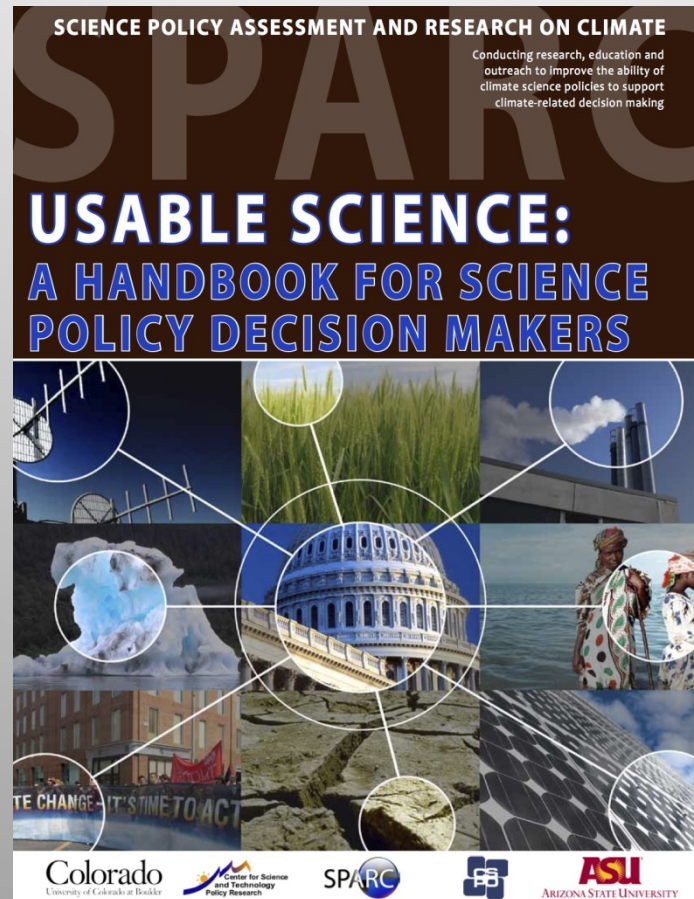
Organizations like the National Academy of Sciences make biodiversity policy recommendations based on work done by the National Research Council and the Institute of Medicine. These organizations are staffed with leading experts on scientific topics who serve as “advisors to the nation” and work for free. They have no independent method of enforcement without the support of some governing body.

SCIENTIFIC ORGANIZATIONS

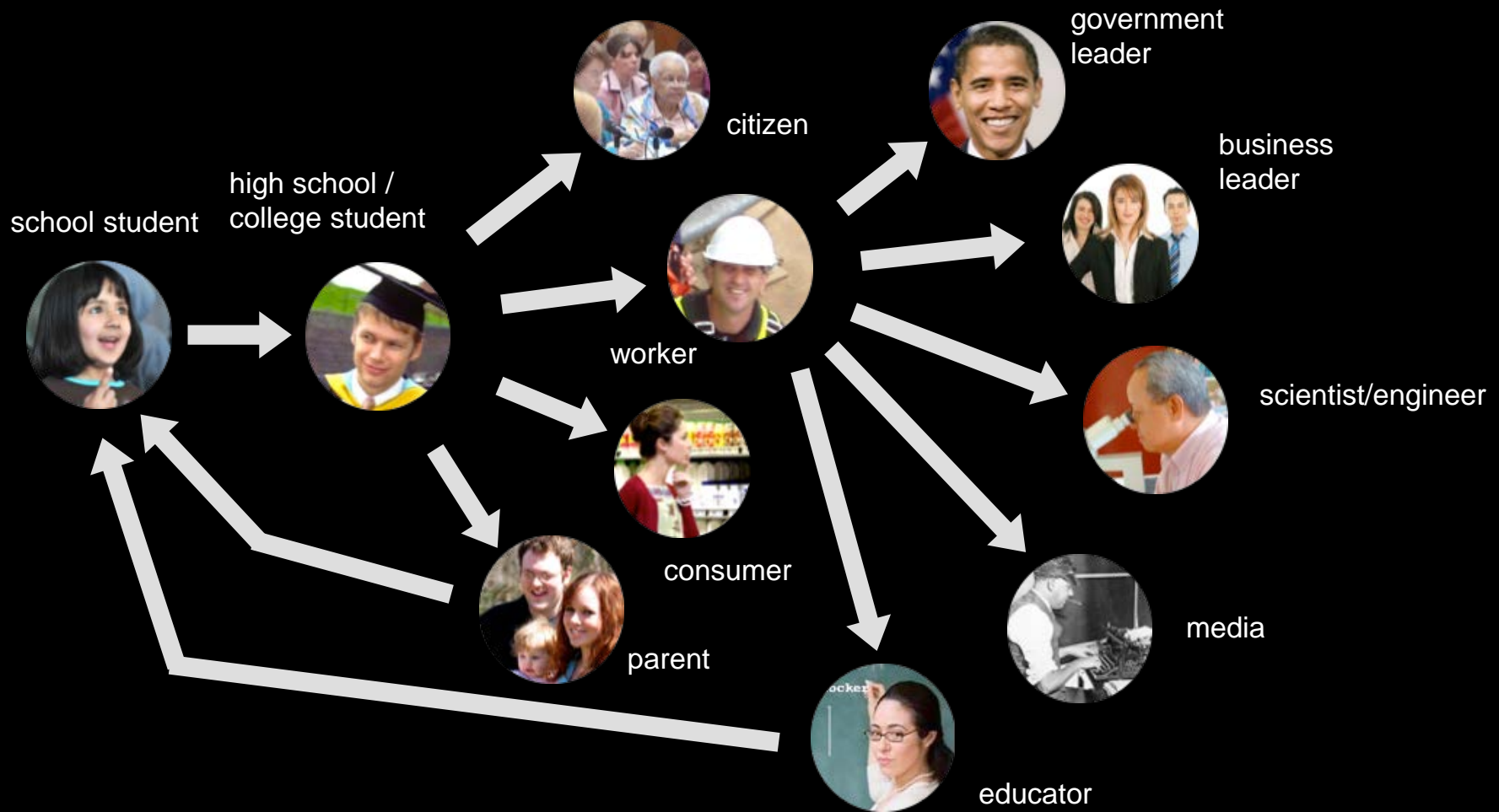
GROUND RULES:

- All ideas are OK
- No interrupting
- Give everyone a chance to speak
- Stay on topic
- Listen to the perspectives of others
- Be respectful of others’ opinions

Useable Science: Useable Public Values



Pielke, Jr., Roger, Daniel Sarewitz, and Lisa Dilling. 2010.
Useable Science: A Handbook for Science Policy Decision Makers.



Lifecycle of a Decision-maker

Wrapping up



Points of Promise

- Positive reception at CBD
- Learning by participants plus citizens
- Mobilization of the ECAST networks
- Expert respondents for the National Question as an ECAST model

Challenges to address

- Difficulty in getting media attention
- Need for increased PES capacity in science centers
- Essential to get independent assessment

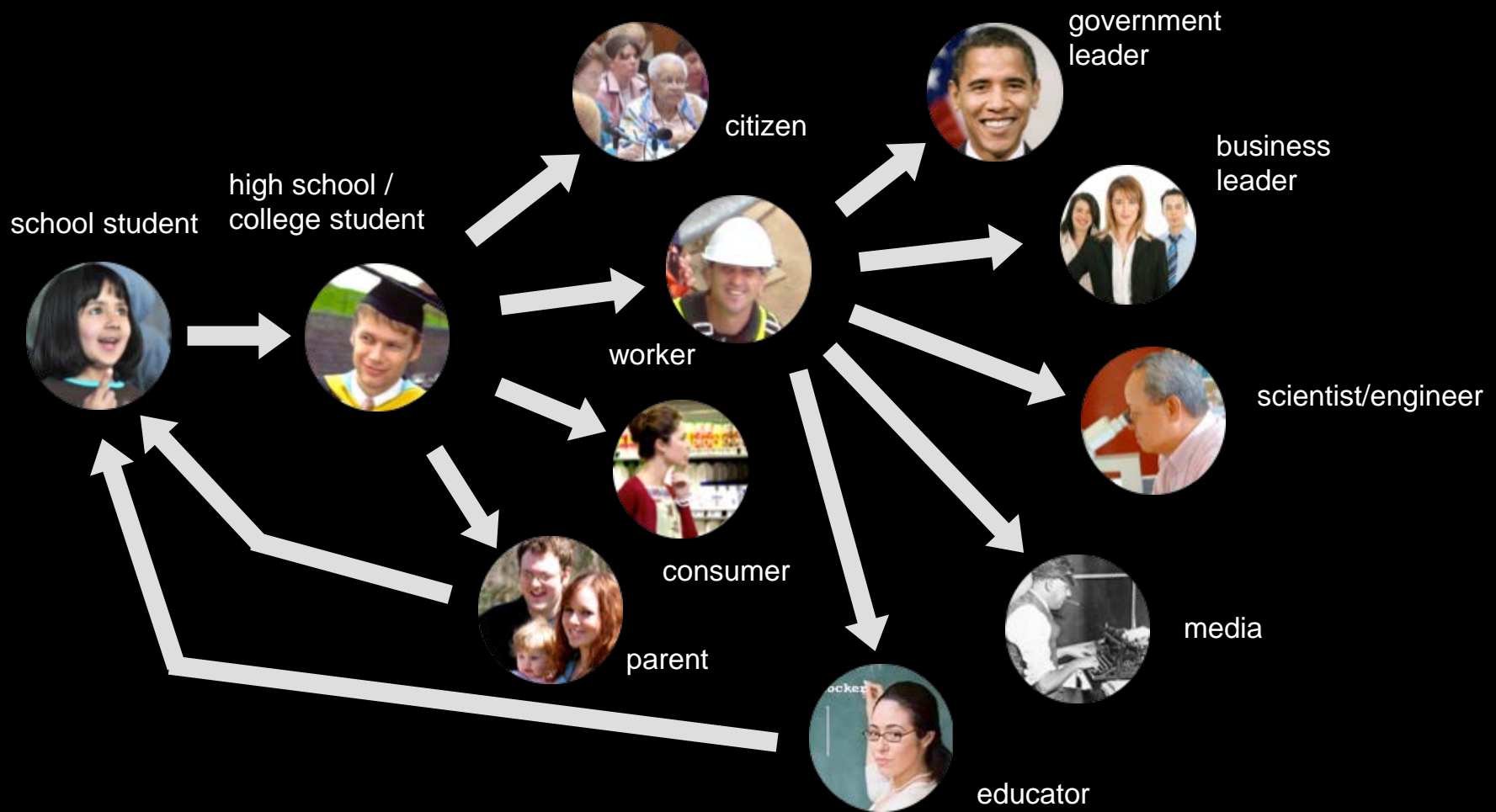


WWViews Action Items

- **Improve recruitment, selection and facilitation** for balanced deliberation
- **Coordinate research activities with deliberation preparations** to enhance lessons learned
- **Invite journalists to be participants.**
- **Incorporate emerging technology issues** (e.g., synbio, geoengineering into the next **deliberation**)

Next steps for ECAST

- **Encourage citizen participation** component of the Open Govt. Initiative
- **Continue building partnerships** with industry, government, nonprofit, and academic sectors
- **Leverage/tap into** EPTA and WWViews Alliance networks.
- **Work to build capacity** in science museums for the skills needed to implement Public Engagement With Science.



Lifecycle of a Decision-maker



Thank you!