Funder efforts to support and improve engagement and evidence use

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Assessing the Impacts of Engaged Research and its Use

October 3, 2023
What can funders do over time?

A natural experiment unfolded over 16 years of funding coastal research at the National Estuarine Research Reserve System.

Generation 1 (1998-2001)
“Pure Science”

Generation 2 (2002-2006)
“Applied Science”

Generation 3 (2007-2009)
“Knowledge Systems”

Generation 4 (2010-2014)
“Collaborative Science”

Interaction Intensity†

<table>
<thead>
<tr>
<th>Grantmaking Period</th>
<th>Coproducing</th>
<th>Collaborating</th>
<th>Match-making</th>
<th>Linking</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998-2001</td>
<td>5</td>
<td>12</td>
<td>16</td>
<td>21</td>
<td>25</td>
</tr>
<tr>
<td>2002-2006</td>
<td>8</td>
<td>8</td>
<td>16</td>
<td>21</td>
<td>25</td>
</tr>
<tr>
<td>2007-2009</td>
<td>5</td>
<td>12</td>
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<td>2010-2014</td>
<td>5</td>
<td>12</td>
<td>16</td>
<td>21</td>
<td>25</td>
</tr>
</tbody>
</table>

Evidence of Use

<table>
<thead>
<tr>
<th>Grantmaking Period</th>
<th>Non Use</th>
<th>Indeterminate</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998-2001</td>
<td>12</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td>2002-2006</td>
<td>7</td>
<td>18</td>
<td>5</td>
</tr>
<tr>
<td>2007-2009</td>
<td>9</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>2010-2014</td>
<td>17</td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>

† Adapted from Klenk et al., 2015, Science

Arnott et al., 2020 GEC

n = 120
What can funders do at (close to) this moment in time?

Opportunities arising from literature & 61 interviews

<table>
<thead>
<tr>
<th>Solicitation elements</th>
<th>Proposal review</th>
<th>Implementation support</th>
<th>Evaluation &amp; learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Require engagement</td>
<td>• Include users</td>
<td>• Convening users &amp; researchers</td>
<td>• Societal impact evaluation</td>
</tr>
<tr>
<td>• Solicit user input</td>
<td>• Augment training</td>
<td>• Funder engagement with project</td>
<td>• Evaluation of use</td>
</tr>
<tr>
<td>• Impact statements</td>
<td>• Diverse expertise</td>
<td>• Collaboration guidance</td>
<td>• Provide evaluation frameworks</td>
</tr>
<tr>
<td>• Alternate formats</td>
<td>• In person presentation</td>
<td></td>
<td>• Desire to do more</td>
</tr>
</tbody>
</table>

+ many, many other individualized tactics

What can funders do in extraordinary times?

*In transitioning to virtual work, what types of surrounding distractions/challenges have you encountered in your project? Mark all that apply:*

<table>
<thead>
<tr>
<th>Distraction/Challenge</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of access to adequate childcare</td>
<td>31</td>
</tr>
<tr>
<td>Additional work responsibilities</td>
<td>25</td>
</tr>
<tr>
<td>Lack of adequate workspace</td>
<td>17</td>
</tr>
<tr>
<td>Lack of adequate internet</td>
<td>14</td>
</tr>
<tr>
<td>Lack of access to technology</td>
<td>11</td>
</tr>
<tr>
<td>Lack of knowledge about using technology</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
</tr>
<tr>
<td>None</td>
<td>3</td>
</tr>
</tbody>
</table>

Data collected **September 3 – November 17, 2020**

n = 44

Arnott et al., unpublished (posted to SSRN 2020)
Learning about ER through targeted capacity building actions

**Career Stage/Role**

**Students**
- Opportunities to meet & listen to societal partners

**Early Career**
- 1:1 mentorship; connections w/ societal partners
- ER skills building training
- Clear ways to obtain recognition for ER
- ID/track metrics of societal relevance; align incentives

**Mid/Sr. Career**
- Peer learning; connections w/ societal partners
- ER skills building training
- Methods to evaluate ER success on P&T
- Training for appropriate review of ER proposals
- ID/track metrics of societal relevance; align incentives

**Research Funders**
- Learning from other ER funders
- Intro to ER funding methods
- ID/track metrics of societal relevance; align incentives
- Create dedicated ER funding streams

**Capacity Building Actions**

- Community Building
- Training
- Metrics & Incentives
- Funding Program Mgmt. Innovations

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Building on SOAK discussions; proposal by Timm, Jagannathan, & Arnott; Arnott et al. 2020; Rozance et al., 2020
We are here
Questions for session

How does short-term cost (time and money) get reconciled with long-term gains in ownership and impacts of knowledge by stakeholders including local communities?

Is this a role for ‘infrastructure’?
Maybe should be paid by research institutions as facility cost consistent w/ mission.

What metrics of cost/benefit do communities and other stakeholders use in assessing ‘value-for-money’?

Implicitly, at least: suffering avoided, risks reduced or shared, credibility lent, capacities built, jobs made easier, connections with peers made.

“...co-production risks becoming an end in itself rather than the means for substantive, more effective engagement and knowledge use in decision-making.”
What should funder efforts look like during extraordinary times?

- Build capacities and evidence in tandem
- Help to co-create new mythology for how science serves society
- Go out on a limb!
Thank you for listening!
Additional burning questions

Research agenda questions:

- How do we define and evaluate success in producing actionable knowledge (engaged research)?
- How do we situate & support intermediaries to accelerate actionable knowledge production?
- What is the meaning and role of trust in science-society engagements?
- Is consensus required for informing policies, and what are alternatives?
Reflections & next steps

• Funders make great research partners
• Deriving lessons from their data requires lots of work (for someone). Who bears the burden?
• Huge opportunity cost of not learning
• Limits and extra work when designed without learning agendas in mind (retrospective versus prospective studies)

Future opportunities

Learning about engaged research (ER) through capacity building actions
Exploring burning questions about the science of actionable knowledge
PROGRAM MANAGEMENT STYLES

Expectations for science

<table>
<thead>
<tr>
<th>Problem Solving</th>
<th>Discovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actionable Science</td>
<td>Accountability</td>
</tr>
<tr>
<td>Anticipation</td>
<td>Autonomy</td>
</tr>
</tbody>
</table>

Proactive
Funder management style

“Community” - driven i.e. scientific community-driven

Arnott, 2021, Research Policy
Can we ENCOURAGE EFFECTIVE CO-PRODUCATION IN HOW WE FUND SCIENCE?

Arnott, Neuenfeldt, & Lemos, 2020, *Global Environmental Change*