Research Informing Policy

Anna-Maria Arabia
Chief Executive, Australian Academy of Science
@ayyemm @science_academy
1. The complex nature of policy making and factors influencing decisions

2. How to be more strategic and savvy when presenting the evidence base to decision makers

3. Anna Maria’s top 5 tips on how to use evidence to influence policy
School Education Programs

- Primary Connections
- Science by Doing
- re(Solve) Maths by Inquiry
Diversity and Inclusion

• Science in Australia Gender Equity (with ATSE)
• Women in STEM Decadal Plan
• Early- and Mid-Career Researcher Forum
Policy and Advocacy
Support for Scientists

• Honorific awards
• Research funding
• Conference support
• Travelling Fellowships and bursaries
• Support for Women and for Aboriginal and Torres Strait Islander researchers
In October 2017, Australian Academy of Science launched high-volume, short-form videos for social and mainstream media audiences. These videos satisfy wide audiences and lead them back to quality, evidence-based information.

We have over 711,000 Facebook followers – and growing!
How climate change increases bushfire risk

A bushfire needs dry, hot, dry windy weather conditions and something like a lightning strike to start any type of fire.

As plants grow and when fire returns to the area, young growth is a fire disaster. It means that the fire can spread faster, wider, and deeper than with trees and shrubs that are older and more robust.

How to survive a bushfire

Prepare a safety plan: Know what you will do before, during, and after a bushfire. Have a plan for you and your family that includes where you will meet, what you will take with you, and how you will communicate.

The ecological impact of fire

Bushfires are a natural, essential and complex part of the Australian landscape and have been for millions of years. Our ancient First Peoples have long coexisted with fire, having developed the management practices that complemented their deep understanding of the country and its biodiversity. Some of our ecosystems have evolved to be fire-dependent, and require periodic activity of fire.

The 4 things a bushfire needs

- Fuel
- Climate
- Ignition
- Oxygen

5: Fused to learn

The Australian bush, though it has a reputation for being heavily fire-prone, is a complex ecosystem that relies on fire to maintain its health and diversity. Understanding what causes bushfires is key to preventing them.
Informing policy

There are two things you don’t want to see being made – sausages and legislation

- Otto von Bismarck -
“There is nothing a government hates more that to be well-informed; for it makes the process of arriving at decisions much more complicated and difficult”

- J.M. Keynes, 1937 -
Table 2
Importance attributed by state and federal officials to various means of obtaining research information.

<table>
<thead>
<tr>
<th>Very important/important %</th>
<th>State</th>
<th>Federal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Searching the internet</td>
<td>94</td>
<td>93</td>
</tr>
<tr>
<td>Meetings with work colleagues in my department</td>
<td>91</td>
<td>91</td>
</tr>
<tr>
<td>Emailing or phoning colleagues in my department</td>
<td>88</td>
<td>90</td>
</tr>
<tr>
<td>Meetings with personnel from other departments</td>
<td>77</td>
<td>75</td>
</tr>
<tr>
<td>Involvement in forums/networks that share research</td>
<td>68</td>
<td>54</td>
</tr>
<tr>
<td>Conferences or seminars involving university researchers</td>
<td>63</td>
<td>54</td>
</tr>
<tr>
<td>My department’s library</td>
<td>47</td>
<td>64</td>
</tr>
<tr>
<td>Active involvement in research projects with academics</td>
<td>44</td>
<td>29</td>
</tr>
<tr>
<td>Membership on expert panels or committees involving researchers</td>
<td>43</td>
<td>38</td>
</tr>
<tr>
<td>Commissioning private sector consultants</td>
<td>41</td>
<td>24</td>
</tr>
<tr>
<td>Commissioning university researchers</td>
<td>37</td>
<td>26</td>
</tr>
<tr>
<td>Emailing or phoning academics about their research</td>
<td>33</td>
<td>28</td>
</tr>
</tbody>
</table>
Table 4
Levels of agreement with propositions about ‘policy-making in your department’.

<table>
<thead>
<tr>
<th>Strongly agree/agree %</th>
<th>State</th>
<th>Federal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy-making is driven by budgetary considerations</td>
<td>83</td>
<td>78*</td>
</tr>
<tr>
<td>Policy decisions are based on what is politically acceptable</td>
<td>80</td>
<td>66*</td>
</tr>
<tr>
<td>Responding to urgent day-to-day issues takes precedence over “long-term” thinking</td>
<td>75</td>
<td>64*</td>
</tr>
<tr>
<td>The timeframe to make policy decisions is too short in which to consider all policy options</td>
<td>61</td>
<td>54*</td>
</tr>
<tr>
<td>My policy-related work increasingly involves working with people across different levels of government or even outside government</td>
<td>60</td>
<td>54*</td>
</tr>
<tr>
<td>Research-based analysis is valued by decision makers in my organisation</td>
<td>60</td>
<td>68*</td>
</tr>
<tr>
<td>The media has too much of an influence over policy-related decisions</td>
<td>60</td>
<td>49*</td>
</tr>
<tr>
<td>Policy-making is crisis driven</td>
<td>56</td>
<td>46*</td>
</tr>
<tr>
<td>Senior decision-makers are usually generalists who may lack specialised content knowledge</td>
<td>41</td>
<td>35*</td>
</tr>
<tr>
<td>Policy decisions are based on research data and evidence about what works</td>
<td>41</td>
<td>39</td>
</tr>
<tr>
<td>Policy-making is captured by special interest groups</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>There are too many competing interests to consider when making policy-relevant decisions</td>
<td>25</td>
<td>22</td>
</tr>
<tr>
<td>There is very little benefit in using research to inform policy-related decisions because Heads of Departments and their advisors just ignore it</td>
<td>20</td>
<td>15*</td>
</tr>
</tbody>
</table>

* \( p < 0.05 \) (Pearson chi-squared test of independence).
• Policy decisions made under time pressure, by people non-experts
• There are always competing priorities
• There are almost always resource constraints
• Uncertainty about the precise nature of the problem and the likely outcomes of the decisions
• Evidence needs to be relevant & timely, and is unlikely to be actively sought out
• Decisions usually result in happy and unhappy voters.
Tips for Influence

1. Get involved
2. Build relationships
3. Communicate clearly and widely
3. Clear communication

- Year 10 equivalent comprehension level
- Avoid technical terms and no acronyms!
- Graphics where possible
- Include key facts and stats
- Clearly state why the information is important and what it means for policy
- Two-pages, or a stand-alone executive summary
Tips for Influence

1. Get involved
2. Build relationships
3. Communicate clearly and widely
4. Be timely
5. Be relevant
Advocating for change

- Collaborating with likeminded organisations – alliances work
- Build the case for change – define problems AND solutions
- Generate public interest and support
- Enlist champions and third-party supporters,
- Proactively engage with policy makers