

Resolving wicked problems: key factors and resources

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Problems in public policy that involve complex social issues are often wicked in nature. That is, they are difficult to define, offer no apparent final solutions, potentially affect a vast array of other problems and have long been resistant to effective intervention. Oft-cited examples include climate change, obesity, and health inequalities. These 'wicked problems'¹ present unique and difficult challenges, but they are not insurmountable. This summary document is meant to highlight key factors and resources for dealing with wicked problems and to offer readers some practical examples for how these may be addressed. Our hope is that it will be useful to public health actors by helping to focus their approach to the specific problems their organizations are faced with and by suggesting resources that might be helpful.

Three key factors

A variety of authors writing about wicked problems stress that several factors are key to their resolution. Three of these stand out and, though they overlap and are in many ways interrelated, they merit individual treatment. The three factors are collaboration, shared understanding, and dialogue. These are used explicitly and intentionally in some forms of problem resolution (for example, Dialogue Mapping) (Conklin, 2006; Seybold, 2013), and in less formal ways by others (cf. Rubery, 2003). Keeping these in mind when attempting to approach a wicked problem might help one avoid the temptation of 'taming' a problem – that is, of attempting to turn it into a solvable problem by asserting that it has one definition or that there are a limited number of solutions and one must be chosen from among these (Conklin, 2006), or of imposing a solution in a situation where to do so might create or exacerbate other problems. For example, the adoption of 'Broken Window' policing whereby minor and quality of life offences are ticketed with the assumption that more

serious crime will be averted, not only lacks evidence of being related to a reduction in other crimes, but has perhaps been a factor in increasing the distrust that many minority communities have toward the police (Childress, 2016).

The three factors of collaboration, shared understanding, and dialogue are discussed below.

Collaboration

Wicked problems are not uncommon in public policy where competing interests often battle for position and seek to have their preferred solution prevail. In some protracted cases, these battles have persisted for years or even decades without successful problem resolution (Seybold, 2013). Indeed, the states of exhaustion and frustration brought on by seemingly never ending attempts to resolve a wicked problem often signal the point at which competing interests are finally able to agree to collaborate (Conklin, 2006). Some examples of these types of problems might be how to cope with the dramatic increase in opioid overdoses or with the migrant crisis. If collaboration is to be successful, it would ideally include *all* stakeholders and while this might not always be attainable, including as many as possible is crucial. For those involved in policy and program decision making, collaboration almost certainly means hearing and taking seriously stakeholders that are not always part of these types of discussions. This implies full buy-in on the part of collaborators and also requires that the process to be followed be transparent and agreed upon in advance. In the case of protracted wicked policy problems, it is probably best to begin by outlining a limited number of meetings and specific points for discussion lest past disagreements prevent any potential progress. (Brown et al., 2010; Seybold, 2013)

¹ For a fuller discussion of wicked problems, how they are defined, and how they relate to health inequalities, see our Fact sheet at:

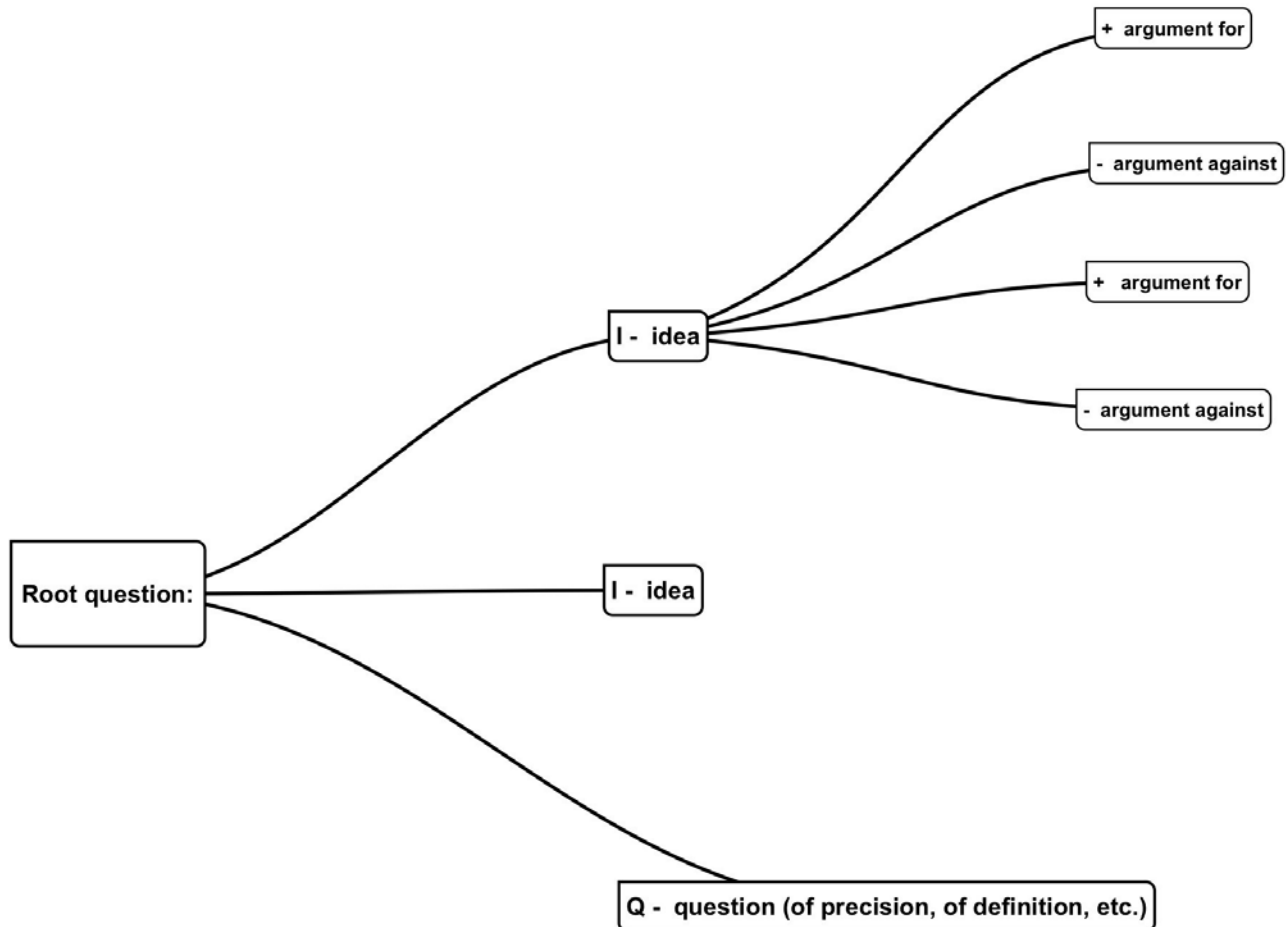
http://www.ncchpp.ca/130/Publications.ccnpps?id_article=927.



Shared Understanding

Shared understanding refers not to agreement on all of the issues but to an understanding of each point of view and a commitment to documenting the process of collaboration in such a way that it allows all participants to see – usually in a visual

representation – that their views and positions are given equal weight. The diagram below shows an example of how mapping out a dialogue process might capture a discussion. Each idea, question, and argument for or against is represented on the map and remains there as both a memory aid and as a representation of the discussion.²



This type of visual representation is particularly useful when collaborating over a period of time (Seybold, 2013). Because everyone has access to a quick summary of how issues have been discussed, there is no need to return to past discussions or to waste time and energy rehashing old arguments (Conklin, 2006, p. 53). It can also leave participants with a representation of the ground they have covered and a sense of accomplishment in advancing towards a possible resolution.

Benefits of shared understanding

- Reduction in duplicated effort and rework
- Minimized number of issues that fall through the cracks
- Coherent individual efforts that move the group forward
- Decisions that stick
- Better visibility of critical issues

² This example is a very simplified version of a Dialogue Map (Conklin, 2006). The formal version uses a specific software tool (Compendium), not used here and a language – Issue-based information system (IBIS) – that is only approximated in

this rendering. For direction to a full account of the Dialogue Mapping process, see the Resources section of this document.

- Lasting impact on group's productivity
 - Fewer and better meetings
- (Cognexus Group, n.d.)

Shared understanding also implies that participants commit to attempting to understand the points of view of other collaborating partners. Understanding how different groups frame a problem or see it as affecting them and their lives is crucial in building common ground towards resolving a wicked problem. Within many policy circles, certainly those that deal with public health, scientific evidence is considered *the* most critical information and a basis for action on its own. This frame, however powerful in scientific and medical circles, is often not the most central one when it comes to many wicked policy issues. Rubery (2003), for example, discusses the rise in vaccine hesitancy of parents who have fears about the effects of immunization:

“Parents are naturally concerned for the safety of their child, that is their responsibility. The Government and public health doctors look at the same issue from a population point of view, because that is what they are trained to do. Neither perspective is ‘wrong’, but tensions can arise if there is not some recognition of the fact that these different perspectives mean that the same data is viewed and valued differently by the two groups when making a decision. If the two sides start to lose sympathy with each other and demonise the ‘other side’, then rigidity sets in, people start to call for the ‘truth’ about the issue (...), and progress towards an agreed way forward becomes increasingly problematic.” (Rubery, 2003 p.4)

It is less important then, that all parties agree on a definition or cause of a problem than that they come to share an understanding of each position and accept its validity. This, although not easy, can be accomplished through collaboration and dialogue.

Dialogue

If collaboration is the basis upon which wicked problems can begin to be resolved and shared understanding is an important path to getting there, dialogue, whether in one of the many more formal processes of deliberation or in ways which are less structured, is the key to both (Browne et al., 2010; Seybold, 2013). The table below presents the characteristics and goals of discussion, debate, and dialogue and clearly illustrates that when grappling with most policy and program issues, it is most common to find people engaging in a combination of discussion and debate and only rarely are attempts made to resolve problems through dialogue. With wicked problems, however, it has been shown to be an invaluable tool.³ There are a number of different practical exercises that a collaborating group can participate in, including ones focused on active listening and on how to ask exploratory questions and mirror (repeat the ideas and claims of other participating members in order to ensure a full and agreed upon understanding of each other's viewpoint) each other.⁴ Having participants agree to engage in such a process requires that they enter into it knowing that they will be asked to listen to diverging positions and resist the temptation to ‘convert’ other members to their point of view. The success of such a process can be measured by the extent to which members are able to understand different positions, find shared meanings and finally, find the spaces of agreement which will allow them to move forward.

³ See, for example, *The Delta Dialogues*, in the Resources section below.

⁴ See *The Dialogue Handbook* in the Resources section.

Table 1 The Characteristics and Goals of Discussion, Debate, and Dialogue

Discussion	Debate	Dialogue
Present ideas	Succeed or win	Broaden perspectives
Seek answers or solutions	Look for weakness	Look for shared meaning
Persuade others	Stress disagreement	Find spaces of agreement
Share information	Focus on 'right' and 'wrong'	Bring out ambivalences
Solve our problems	Advocate one perspective	Invite/allow differences of opinion and expertise
Give answers	Search for logic flaws	Discover collective meaning
Achieve preset goals	Judge other perspectives as inferior or distorted	Challenge our preconceived notions
Listen for disagreement	Listen in order to counter	Listen in order to understand
Avoid areas of conflict and difference	Focus on conflict and difference as advantage	Articulate areas of conflict and difference
Retain relationships	Disregard relationships	Build relationships

Source: adapted from Kachawa, 2002.

Resources

The resources listed here are likely to be helpful to public health actors faced with wicked problems in their organizations, whether these involve large-scale problems that affect broad segments of the populations they serve or more circumscribed resistant organizational problems that impede their work on a narrower scale. Each of the resources deals with one, two, or all three of the key factors of collaboration, shared understanding, and/or dialogue but, where appropriate, the factors most clearly associated with each are underlined and bolded inside the boxes at the beginning of the entry. It is hoped that all of them will prove useful whether that be in providing conceptual, descriptive, or practical tools or, as in two of the cases, as detailed examples of how dialogue and group deliberation have been used elsewhere.

DIALOGUE MAPPING

Collaboration **Shared Understanding** **Dialogue**

Dialogue Mapping is a tool designed for dealing with wicked problems. This book of the same title details the context, theoretical underpinnings and specific techniques for the process. Jeff Conklin, a leader in wicked problem research and resolution, provides guidelines for conducting Dialogue Mapping sessions using the two primary tools: Compendium (a software program) and Issue-based information system, or IBIS (a language used for problem solving). This resource is the go-to book for Dialogue Mappers and contains valuable information on how to approach mapping as a means of resolving wicked problems.

For more information:

http://www.cognexus.org/dm_book.htm

COGNEXUS GROUP

Collaboration Shared Understanding Dialogue

Jeff Conklin, author of the Dialogue Mapping book outlined in the previous section, is the founder and President of the Cognexus Group, and their general website provides ideas and tools, with further examples of the use of Dialogue Mapping in understanding and dealing with wicked problems.

For more information: <http://cognexusgroup.com>

HELP! I HAVE TO THINK!

Collaboration Shared Understanding Dialogue

This book and content on the related website is written by long-time Dialogue Mapping instructor and practitioner KC Burgess Yakemovic and provides an everyday user guide to mapping questions, both tame and wicked, using IBIS (Issue-based information system) and simplified mapping tools (from software to pen and paper). Yakemovic's tools are easy to understand and use without losing the ability to grapple with complex issues. This resource is a very useful introduction to using 'IBIS thinking' as a way to capture dialogue.

For more information: <http://helpihavetothink.com>

THE DIALOGUE HANDBOOK

Collaboration Shared Understanding Dialogue

Mette Lindgren Helde's resource, *The Dialogue Handbook – the art of conducting a dialogue and facilitating dialogue workshops*, includes a general introduction to dialogue and its uses and provides a great number of examples of exercises, different types of dialogues and dialogue facilitation. This handbook is an invaluable resource for anyone looking to work through problems and issues they may face in their work or their organizations.

For more information:
<https://duf.dk/materialer/produkt/the-dialogue-handbook/>

TOM WUJEC ON MAPPING

Collaboration Shared Understanding Dialogue

In this short TED Talk, Tom Wujec presents the value of collaboration and mapping in understanding and resolving wicked problems. This resource is particularly useful for addressing organizational problems and challenges.

For more information:

https://www.ted.com/talks/tom_wujec_got_a_wicked_problem_first_tell_me_how_you_make_toast

THE DELTA DIALOGUES

Collaboration Shared Understanding Dialogue

The Delta Dialogues resources, available at the link below with additional information and links on the Cognexus Group website above, provide information, description, analysis and insight related to a Dialogue Mapping project focused on the complex and ongoing concerns about water use and policy on the Sacramento-San Joaquin Delta in California. The site includes blogs, articles, and other resources which detail how the project came to be and how it unfolded, and provides valuable learning material for others seeking to bring together a disparate group of people with varied, and sometimes conflicting, interests in a very challenging issue.

For more information: <http://delta.groupaya.net/why-delta-dialogues/>

THE ALBERTA CLIMATE DIALOGUE (ABCD)

Collaboration Shared Understanding Dialogue

This resource consists of both a website with rich information on the Alberta Climate Dialogue, a series of dialogues that took place on climate change over a period of several years in Alberta, with a description and analysis of each of the dialogues and of the process itself, and a book. The book contains chapters which cover topics including the conceptual and theoretical arguments for deliberative

dialogue, the economic and political context of climate policy in the province of Alberta, description and analysis of each of the dialogue sessions, as well as reflections on representation and outcomes of the process.

For more information:

<https://www.albertaclimatedialogue.ca/>

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