

Forestry isn't just about the forests: Serious games for understanding communities and complexity

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NZAIA 2018 Conference
29 November 2018



**Weaving
the Korowai**

Outline

- Introduction to serious games.
- Serious games for understanding impact.
- Serious games in practice.
- Final thoughts.



More than just fun and games

- Games that have an educational purpose, helping achieve pre-defined objectives while engaging the user.
- Serious games as a tool for social learning and environmental problem-solving.
- Include subset of role-playing games, where participants adopt positions or roles that are different to their own.

Understanding impact through serious games

Identifying and communicating complexity

- Broader context for policy, decision-making, and development.
- Relationships, values, priorities, resources, barriers, and enablers across scale, power, and time.
- Accounting for the “big picture” – who and what’s involved beyond yourself and/or your own organisation.
- More complete picture of yourself, each other, and the problem.
- Different impacts for different people.



Understanding ourselves, understanding each other



- Participants immersed in different views and approaches.
- Empathy for other peoples' situations by walking in someone else's shoes.
- Reflection on your own approach and methods → change in your behavior?
- Context-sensitive decision-making.

Facilitating collaboration and engagement

- Risk-free, low-stakes environment.
- Opens up space for diverse views and values.
- Negotiating collective goals.
- Depowering and empowering stakeholder voices.
- Developing mutual understanding and a shared language for continuing collaboration.
- Working together with a different mind-set.



Catchment 2030

Background

- Severe erosion on the East Coast of Aotearoa New Zealand.
- Complex problem with many different causes and effects and involving a large number of stakeholders
- Afforestation the dominant method of addressing the erosion, however ...
- Old ways of working are not achieving the results that are needed in the context of this multi-faceted issue.




Photo: Tui Warmenhoven

Design

- Background: erosion and environmental problems in a fictionalized future catchment.
- Variable number of individual characters who are fictionalised to keep the game “safe” but represent real roles and organisations in the catchment.
- Includes “traditional” and “disruptor” characters.
- Different characters bring different values, priorities, and resources to the simulation – funding, human resources, ideas ...

Sample character profile

	Your organisation	Your role
Title	Eastern Regional Council (ERC)	Regional Economic Development Manager
Description	Government authority responsible for the administration of Eastern municipality and Eastern Region.	<ul style="list-style-type: none"> ➤ You're responsible for planning and implementing economic development activities across Eastern Region. ➤ You are based in <u>Easternville</u>.
Goals	<ul style="list-style-type: none"> ➤ Advance the social, cultural, economic, and environmental development of Eastern municipality and Eastern Region. ➤ Become the first choice for people, lifestyle, enterprise, and environment. 	Improve economic and social conditions across Eastern Region.
Values	<ul style="list-style-type: none"> ➤ Leading through support. ➤ Looking ahead. ➤ Working together. ➤ Learning together. 	<ul style="list-style-type: none"> ➤ Matching resources with needs. ➤ Investment in the region with an outlook for strong economic return. ➤ Culture of respect, fostering connections and efficient delivery
Relationships	Regular interactions with local and central government agencies and non-governmental institutions.	<ul style="list-style-type: none"> ➤ You have a strong network of contacts within ERC and central government departments. ➤ Strong relationships with national-level businesses and investors.
Resources	<ul style="list-style-type: none"> ➤ ERC employs over 300 departmental staff. ➤ Long-term regional funding crunch, but willingness to invest \$2 million in economic development opportunities in the catchment. 	
You are here because ...	Economic development of the County catchment is one of several priorities for the Eastern region.	You have an interest in ensuring that economic development goes hand in hand with any environmental management plan for the County catchment, and is feasible on-the-ground.

Sample character groupings



Structure

Your own character

- Get to know yourself by reading your character profile.

Intra-group dynamics

Your own group

- Get to know your other group members by introducing yourself.
- Decide on common goals and strategies to achieve your goals within your group.
- Decide who you need to meet with to make your group goals happen.

Inter-group dynamics

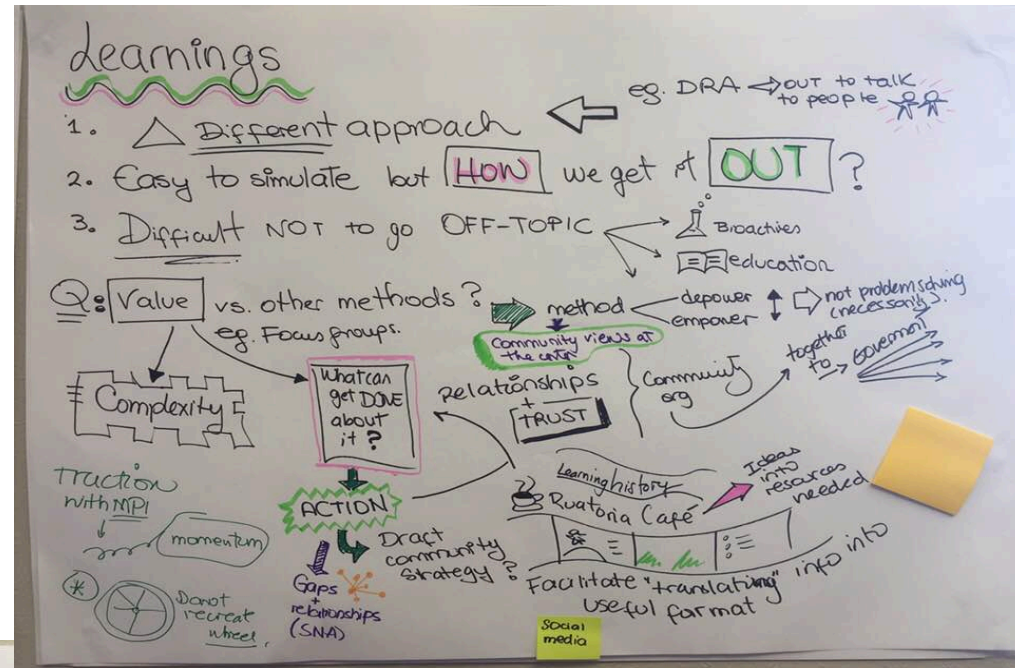
Other character groups

- Get to know the other characters in the room.
- Meet with as many other groups or individuals as you need to achieve your group's goals.
- Find out other groups' key goals, make suggestions and offers, and agree on deals.

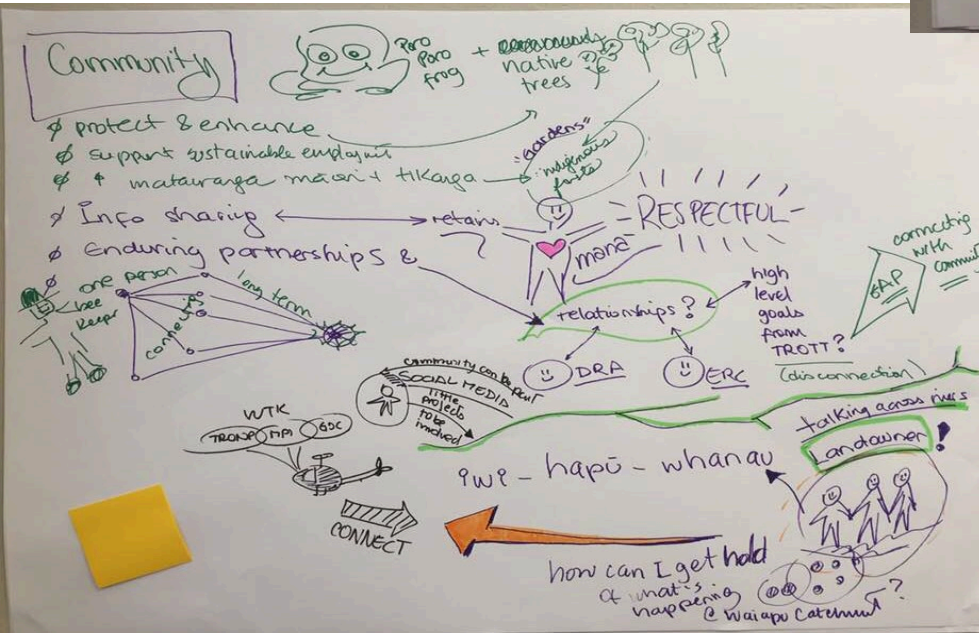
Catchment 2030 in practice

Workshops in

- Ruatoria
- Gisborne
- Wellington X2
- Christchurch
- Invercargill



Games debrief session in Gisborne (Nov 2017)



Results and learnings – complexity

- “[The game demonstrated] the complexity of interactions and relationships involved in matters such as this.”
- The diversity of the gameboard ... opened my eyes to who’s and what’s involved around land.”
- “There are a large number of people with varying goals and it’s hard to figure out who is what and what they can do, which would only become more complicated with various levels of leaders within each collaboration, department, and others.”
- “Governance is not just about organisations, scientists and politicians, but individual people who are stakeholders and have vested interests (e.g., culturally) in the land and resources around them as well as a dependence. There are several things to be taken into consideration.”

Results and learnings – understanding ourselves and others

- “[The game] seems relevant for any situation where government and commercial and social groups have different goals. Awareness of all players.”
- “It’s all about thinking about other perspectives/needs ...”
- “[The game] is relevant to any situation where you are working with other people. It helps to teach the importance of considering your own goals and then asking what others’ goals are rather than assuming. People’s goals may not be as different from your own as you might think.”
- “Really useful for raising understanding of different perspectives within the community.”

Results and learnings – collaboration

- “But we’re building our capacity and have you, and building our whenua based on the information that we’ve gathered with a person that we trust, and we know is going to be there for the long term, and has our interests at heart ...”
- “And one thing that came up in our discussions ... was around the importance of some sort of navigator kind of role or person who can really help to make sure that anything that’s happening in that sort of higher-level ... is actually really interacting directly with communities and making sure that it’s meeting their needs.”

Conclusion

- Potential uses
 - To put yourself/your organisation in a different frame of mind before you begin a planning or strategy framework.
 - To reflect on your process or key issues when something's not working like you thought it would.
 - To safely engage within your own planning circle as well as with other stakeholders.
- A tool that can be used with others to set the basis or foundation for holistic, supported, and context-sensitive policy, development and decision-making.
- Better understanding by decision-makers and other stakeholders of the possible implications of particular policy/development decisions.

For more information ...

- See our adaptive governance toolkit (beta version) at <http://www.scionresearch.com/adaptivegovernance>
- Includes a high-level overview of the game, step-by-step instructions, a player instruction workbook, and 54 sample character profiles.
- Contact: sandra.velarde@scionresearch.com



→ Tool 3: Catchment 2030 – Games to tackle complex problems

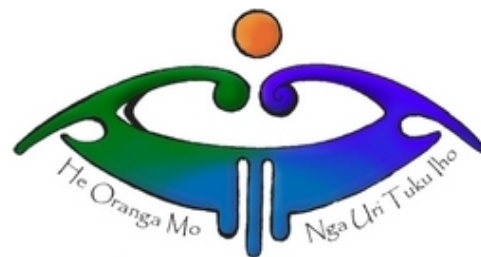
This tool prompts participants to think about their approach to problems from a different perspective and increase their understanding of each other's outlook.

- Download [Toolkit 3: Catchment 2030 - Description](#) [176Mb pps]
- Download [Toolkit 3: Catchment 2030 - Sample character profiles](#) [2.4Mb zip]
- Download [Toolkit 3: Catchment 2030 - Sample player instruction booklet](#) [word]

These resources are freely available to use while in the beta stage. We ask that you credit Scion and He Oranga mo Nga Uri Tuku Iho Trust, and provide feedback as we work to further develop, simplify and adapt these tools to other complex problems in New Zealand.

Acknowledgements

- **Research team:** Tim Barnard, Jeff Coutts, Andrew Dunningham, Peter Edwards, Mary-Anne Gloyne, Duncan Harrison, Vicky Hodder, Lania Holt, Barbara King, Soltice Morrison, Lisa Sharma-Wallace, Sandra J. Velarde (Scion), and Tui Warmenhoven and Pia Pohatu (He Oranga mo Nga Uri Tuku Iho Trust, Ngati Porou, Ruatoria).
- **Research participants:** Ruatoria, Gisborne, Wellington, Christchurch, and Invercargill workshop participants.
- **Advisory group:** Brigid Carroll, Vicki Compton, Debbie Martin, Dave Moore, Tina Porou, John Reid, and Tracy Williams.
- **Funding:** Weaving the Korowai programme - MBIE (Contract C04X1502) and Scion.



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