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The 'Futures Game': A Scenario Game Workshop Package to Engage Futures Thinking

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Abstract: We have developed a simple, paper-based scenario game concept as a means of engaging people 'actively' in futures thinking and in altering their perceptions of the future of a region. The game was designed to present scenarios at a reduced temporal and spatial scale while adding the extra dimensions of participation by groups in decision-making and immediate representation of the implications of decisions. The game consists of printed maps of a hypothetical regional area, and is played in a workshop setting in teams of three to seven people. Participants are faced with a series of game steps in which they make critical decisions about the future of a hypothetical region. They are required to assimilate external events, deal with contentious issues and reconcile decision-making against the triple bottom line. Key features of the region, represented on the maps, change in response to the decisions made. It is played as a fast paced and thought-provoking game. The scenario game has been developed into a stand alone kit, called the 'Futures Game'. Preliminary observations indicate the Futures Game has significant promise as an experiential learning tool to stimulate discussion and learning about regional decision-making. This paper describes the development of the game and its adaptation into a stand-alone kit, and its use as a tool to extend the learning in regional scenario planning efforts.

Keywords: Scenario Game, Futures Game, Scenario Planning, Futuring, Community Engagement

Introduction

SCENARIO PLANNING IS a method that is often used to examine possible futures. This technique, which was originally used by military planners, involves the generation of one or more plausible scenarios by a group of analysts from information–usually relating to socio-political, environmental and economic trends–about elements that are considered to be of importance for the future (Schwarz 1996). One such scenario planning exercise was completed for the Avon River Basin region of Western Australia in 2004 (O'Connor *et al.* 2005). In this project (ARB2050) a group of "50 stakeholders from the basin with expertise and strategic interests across a wide range of economic, social and environmental themes" developed four regional scenarios for the next half-century that described plausible combinations of social, economic and environmental change" (http://www.csiro.au/science/ps23i.html). While the scenarios were useful for exploring policy and regional management, the area covered by the study and the time-span of fifty years in the future made them difficult to apply at the "small picture" scale. A final report and booklet about the scenarios was the only vehicle for informing and utilising the scenarios beyond

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the original participants. These are problems often seen with scenarios and restrict their use beyond the scenario developers and/or the organisation that commissioned them.

This paper describes the development of a scenario game that presents scenarios in a visual manner with active participation by groups of 'players' in decision-making and illustration of how actions taken by individuals and communities today may shape their future. The game was originally developed using the ARB2050 scenarios to enable the outcomes to be visualised at a more conducive spatial and temporal scale. Further development has enabled the game to be used in less specific circumstances as a vehicle for engaging groups, organisations and industries in thinking objectively about their future.

Initial Development of the Scenario Game

The original scenario game was developed based on the scenarios from ARB2050, but scaled-down to 25 years into the future (from 45 years) and an area representing three fictitious shires, or local government areas (from 43 real shires) (O'Connor and Fisher 2005; Fisher et al. in preparation). The game consists of five steps or "decision points", each represented by a different map. At each decision point participants, working in groups, choose from one of two pre-determined options which lead to a revised map. In addition to the options for the decision, the groups are given a 'Big Event Card' which outlines global and national events that are occurring at that time. The groups are given time to debate and to discuss the two choices within the larger context that is laid out for them. Groups record their decision on a 'Decision Sheet' which also asks them to rate how much each of the elements of the triple bottom line (economy, environment and society) factored in their decision. Based on their decision the group is then presented with a revised map representing the next time point in the game. In this manner the game enables participants and the groups as a whole to explore plausible futures for the region in a visual manner and at a manageable scale.

The maps represent a fictitious area of the Western Australian Wheatbelt, roughly 100 km by 70 km, covering three local government areas with three towns approximately 30 km apart. The towns have initial populations of 3 100, 750 and 400; figures typical of this region. The maps indicate key features of the region, including broad-acre agricultural enterprises, landscape features such as bush areas, waterways, rock outcrops and saline areas, and features of the town areas including land use, population and goods and services available. The game format results in fifteen maps each of which represent a node of a directed acyclical graph (Harary and Palmer 1973). From the initial, common map (the 'root node'), the number of maps increases by one at each game step so that the fifth and last step has five possible maps (five nodes). The initial map represents the fictitious area of the region in the year 2005. The decision points take participants forward to the year 2030 in game steps of unequal length (2005, 2006, 2012, 2020, 2030). The maps for the final step were derived from the four ARB2050 scenarios plus a composite of two of the scenarios. The features of the maps in the intervening steps were added as reasonable representations of changes that could occur along each particular path in response to the decision points.

The scenario game was used at workshops run at ten separate locations across the agricultural area of Western Australia between October 2005 and March 2006. At each workshop, the participants 'played' the scenario game in groups of 2 to 7 people (average of 4 per group). Pre- and post-game questionnaires and game statistics were used to assess the parti-

cipants' impressions of the game and the impact of the game on the participants' perceptions of the future of the region (Fisher *et al.* in preparation, Fisher *et al.* 2009).

Refinement of the Game as a Workshop

The workshop built around the scenario game was developed into the 'Futures Game', a workshop kit that enables the scenario game to be used in a variety of settings. The Futures Game utilises the scenario game with some minor changes to the maps and includes an explanatory DVD and facilitator's guide which are designed to explain some of the local Western Australian terms and issues to a novel audience and to act as a 'train the trainer' guide for novel facilitators. The Futures Game has been developed as a workshop process to demonstrate how planning decisions influence a region's future environmental, population, growth, and economic well-being. The workshops are designed as an interactive session in which teams 'compete' to devise regional strategies that will achieve the best 25-year outcome for a region in Western Australian Wheatbelt via the vehicle of the scenario game. This integrates decision-making across the community, economic, and environmental dimensions, while incorporating global, national, and local issues. Participants tackle the challenges of community and economic development in a fun and engaging manner. The Game is played in a small team format, where the teams make a series of critical decisions that shape the future of a region over a 25-year period.

The aim of the workshop is to explore choice and future. As scenario planning is at the heart of the game, it necessarily takes a multifaceted and integrated view of the future, and allows participants to explore a range of plausible outcomes and to assess their implications and consequences. The effectiveness of this approach is largely based on the strong experiential learning orientation. Much of the game's value comes from the discussion that the teams engage in during the playing of the game. During each critical decision point, the teams have to debate and to decide on an important decision. As part of the decision-making process they are asked to assimilate important external events (represented in the 'Big Event Cards'), consider the dimensions of the triple bottom line (incorporated into the 'Decision Sheets'), and to consider the implications of their decision on a hypothetical area of Western Australia (represented on the maps). In the workshop format, teams are generally given ten minutes at each decision point, so it requires a high level of participant engagement to assimilate the information, debate the choices, and make their team decision.

This game format appears to create a potent experiential learning environment, and the repeated observation from numerous workshops in both Australia and the United States is that teams engage in rich and meaningful discussion about the various situations and decisions that they face. From the testing work done with the 'Futures Game' format, some 98% of participants reported it as a 'valuable way to explore future consequences of decisions' (Fisher *et al.* 2009). Observation of workshop discussions also suggests that because participants are playing a 'game' and that it is a 'hypothetical' situation, it allows them to more freely engage in meaningful discussion and debate around issues that are often contentious and in fact have a strong parallel to real world situations that they are facing in their own region.

The workshop process incorporates a de-brief session at the end of the game. During this session, the participants review the results obtained by each group. This critical part of the workshop creates an opportunity for participants to move beyond the game *per se* to consider

the implications for their own town, community or region. Parallels between the game and their community or region can be explored, and insights that occurred during the game can be applied to local challenges that they are facing. It has been found that the Futures Game is an ideal introductory exercise in workshop settings where people are exploring the future of their own particular region and community.

The game format ensures that the workshop is enjoyable while still being challenging and thought-provoking. From the initial testing work, 98% of game participants reported that it was a 'challenging and enjoyable exercise' (Fisher *et al.* 2009).

Current and Future Developments

During the initial testing work with the Western Australian Futures Game in various settings in the USA, some 95% of participants said that 'a local version of this game would be useful for developing 'Futures Thinking' in their community / region' (Fisher *et al.* 2009). In response to this interest, local versions of the Futures Game are being developed for the Pacific Northwest and Midwest regions in the USA.

The creation of these new Futures Game versions is following a similar developmental pathway as the Western Australian version. For example, the Pacific Northwest version started with a major regional scenario planning workshop based around the northern Idaho region. In June 2008, eighty stakeholders from across northern Idaho and parts of Washington and Montana States gathered for a two-day scenario planning workshop hosted by the University of Idaho. A subsequent workshop report 'Taking the Long View in Northern Idaho' (Beurle and Salant 2009) defined a range of plausible scenarios for the region looking out to 2030. This provided the basis to develop a unique Futures Game based on a hypothetical area of the Pacific Northwest region. This game encapsulates contemporary regional issues and challenges in the Decision Sheets and other game material such as maps and Big Event Cards. Observations during preliminary testing suggest that it is highly effective at stimulating discussion and debate about important contemporary and future issues, and local challenges. It stimulates meaningful dialogue about how to embrace future shaping choices confronting the region, and appears to offer an effective framework for exploration and discussion about the potential consequences of various decision pathways. This game kit is in production, and local facilitators will be trained in using this tool in early 2009.

Discussion

The scenario game process, as used in the Futures Game, offers regional leaders an opportunity to explore the future in a comprehensive and collaborative manner. It helps core leadership teams to assimilate a wide array of drivers and variables, and to assess their potential impact on the region's economy, workforce and capacity for future innovation.

Visualisation of future options is another important aspect of the Futures Games. Visualisation techniques have been used to present future options (although not necessarily derived from scenarios) in other circumstances (e.g. Dockerty *et al.* 2006, Mayer *et al.* 2004, Stock *et al.* 2007). Similarly, gaming as a formal learning tool is a technique that has its origins in the Nineteenth Century "Kriegspiel" which was used to train Prussian generals and popularised in H.G. Wells' *Little Wars*. Since then it has been used in various military and civilian contexts (e.g. Aloysius 2002, Kleindorfer *et al*. 2001, Ang *et al.* 2006). The power of games

as a learning tool is recognised in education, particularly with the advent of interactive video formats (Barab and Dede 2007, Gee 2007). The discussion and debate that occurs during each step of the game is a key part of Futures Game as a learning and planning tool. The strength and novelty of our approach is that it combines visualisation of a multifaceted and integrated view of the future with a simple, paper-based game process, thus allowing participants to explore a range of plausible futures and to assess their implications and consequences.

The coupling together of regional scenario planning and the development of a local derivative version of the Futures Game appears to offer great potential for regional planning and community engagement efforts. It provides the depth and rigour of the scenario planning process, together with the ease and portability of the Futures Game approach, allowing broad community engagement and participation in discussions about the future of a particular region. This "futures simulation" approach adds extra depth and strength to regional planning efforts and can help hone regional leadership and decision-making skills.

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