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IMPROVING THE DESIGN OF AGED CARE ACCREDITATION STANDARDS USING CONTEMPORARY SYSTEMS THINKING CONCEPTS

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Abstract

The object of this interpretive inquiry is the residential aged care Standards structure and the Standards quality accreditation (assessment/auditing) processes. The author’s concern is whether or not the application of contemporary systems thinking principles could improve the current Standards and accreditation processes. Contemporary systems thinking is a variant of systems theory and critical systems thinking which places less emphasis on feedback and more on seeking multiple perspectives. Its application aims to explore the perspectives, underlying assumptions and guiding principles used by stakeholders- in this case to the construction of the quality accreditation Standards and assessment/audit processes. It involves searching for evidence of purposeful whole systems that exhibit interconnectivity, clear boundaries, completeness, harmony, a teleological approach, structure, function, process, the input of multiple perspectives and an ‘outside in’ focus.

The author is a long-standing, credentialed participant in the residential aged care accreditation industry so is in an ethnographic position to attempt to apply this emerging systems thinking approach to this important accreditation process. The study is in its early stages, the driving theory and first impressions are reported in this paper.

Keywords: Systems thinking, aged-care, accreditation standards, non-financial auditing

The Problem

The purpose of this paper is to explore the proposition that the Australian Commonwealth Government Aged Care Accreditation Standards and assessment/audit processes used to measure compliance with these standards are not founded on a clear ‘theory,’ perspective or consistent view of the world. Contemporary Systems thinking may provide an appropriate ‘theory’.

This inquiry explores the design of Australian Commonwealth Department of Health and Aged Care Accreditation Standards and the non-financial assessment/audit processes that accompany them. The inquiry focuses on the Australian Aged Care Accreditation Standards (1998) derived from the Aged Care Act (1997) and supporting Principles. It is a Commonwealth Government legislative requirement that for registration and funding purposes, aged care facilities must have their performance evaluated during and at the end of their registration period (generally around three years) through an assessment/audit of their compliance with the prescribed Aged Care Accreditation Standards (Attorney General’s Department, (1997, Reprint 3, 2001, Accreditation Grant Principles, pp.26-55).

The Argument

This inquiry will explore the argument that many people, particularly those working and resident in Aged Care facilities and in Standards accreditation/assessment agencies consider that the elements of the Aged Care Accreditation Standards and assessment/audit processes do not have a clear purpose, are not designed, or assessed/audited as a “whole”. This includes exploring whether the participants in the research consider that the Standards structure and audit/assessment processes would be improved if
contemporary systems thinking concepts were applied. A contemporary systems thinking concepts - based theory will be contrasted with the current Standards and accreditation assessment/audit structures that appear to lack an explicit theoretical basis that would give clear purpose and connectedness to their elements or parts. The author is using is combination of methods, including a document review and a series of semi-structured expert participant interviews, to explore participant perspectives on the application of the systems thinking concepts shown in table 1 (below) to the structure of the Aged Care Standards and accreditation assessment/audit processes.

**Defining Contemporary Systems Thinking**

The author primarily adopts the systems concepts offered by Ackoff (1972, 1981, 1999, 2000), supported by the work of Dewey (1910), Churchman (1979), Ulrich (1983, 2002) and Gharajedaghai (1999) [see table 1 below]. Features including purpose, wholeness, interconnectivity, clear boundaries, the input of multiple perspectives, completeness, harmony, a teleological approach and an ‘outside in’ focus are used to appreciate the problem of Aged Care Standards and assessment/audit system process design from a systems thinking perspective. A ‘system’ in this inquiry is defined as a way of seeing things as part of a wider process, interconnected and interdependent, bounded for the observer’s purposes, part of “a whole that cannot be divided into independent parts” (Ackoff, 2000). ‘Contemporary systems thinking’ is defined as thinking about this whole system, characterised by the concepts shown below in Table 1.

### Table 1. Contemporary Systems Thinking Concepts

<table>
<thead>
<tr>
<th>Author</th>
<th>Key Concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ackoff</td>
<td>goal seeking, function, completeness, harmony, wholeness, adaptation, teleological approach, three levels of purpose</td>
</tr>
<tr>
<td>Churchman</td>
<td>multiple perspectives, boundaries, interconnectivity, process transformation</td>
</tr>
<tr>
<td>Dewey</td>
<td>wholeness, synthesis (vs. analysis)</td>
</tr>
<tr>
<td>Ulrich</td>
<td>purposefulness</td>
</tr>
<tr>
<td>Gharajedaghai</td>
<td>structure, function, process</td>
</tr>
<tr>
<td>Argyris and Schon</td>
<td>learning loops</td>
</tr>
</tbody>
</table>

See Table 2 for an expansion of this table and linkage of systems thinking concepts with interview discussion issues.

In this paper Systems Thinking does not mean either ‘hard’ systems engineering type thinking or ‘soft’ systems thinking. Checkland (2000, S18) highlights the difference between “hard” and “soft” systems thinking thus: Observer 1 (Hard) “I spy systems which I can engineer”. Observer 2 (Soft) “I spy complexity and confusion; but I can organise exploration of it as a learning system”. The approach that will be used in this paper is “I spy things as systems made up of interdependent, connected, purposeful parts making up my whole”. Defining the relationship of each part explains the system and its design. No one part has an independent effect on the system as the parts form an interconnected set. When the system is taken apart there is no system.

**Motivation**

The author is interested in this topic because professionalism and standards compliance of some type is an important feature of most businesses today, and the quality and effectiveness of those standards matters if they are to be taken seriously. Singer (1994:1), is concerned that though there has been an exponential growth in the number of standards developed across most of industry and in response to legislation, there have also been ‘wide scale quality problems in industries, professions and institutions, accompanied by arguments over causes of decline and confusion over systems of standards assessment.

**Evidence from the Literature**

### Standards

Researchers who have explored standards from a hard (engineering) systems perspective include Robinson (1995), interested in economic evaluations of quality assurance programmes, Karapetrovic (2000) who conducted research into conducting audits using

Seddon (2000), who takes a more contemporary systems thinking approach, argues strongly against the appropriateness of ISO 9000:2000 Quality Assurance Standards for service organisations, and supports the acceptance of a re-designed set of these standards using systems thinking principles, should organisations wish to pursue certification. Vanguard Education (2000) has produced an alternative set of ISO 9000:2000 standards, though the group has not used all system thinking parameters selected for this inquiry. Seddon’s view is shared by Vanderbij, Vollmar and Weggeman (1998), who argue that a more situational approach is also required to the development of healthcare standards, moving away from the industrial focus of the ISO quality assurance group of standards.

Contemporary Systems Thinking

There are many perspectives on systems thinking, ranging from a hard systems engineering perspective, (Shewart, 1931, 1986, Deming, 1986), which avoids human values issues through to perspectives that purposefully address values issues and attempt to find answers to human activity problems. The latter group includes Ulrich’s purposefulness perspective (1983) and Churchman’s five modes of inquiry (1979). Dewey (1910) contributes to systems thinking literature through the introduction of his work on analysis versus synthesis and Ackoff (1972, 1981, 1999, 2000) contributes by focusing on the use of synthesis in problem solving, introducing systems thinking as a world-view, and expanding on the notion of purposefulness. For Ulrich also, (1983) systems thinking is characterised by a social (rather than a machine) focus and is concerned primarily with purpose.

Ulrich (1983) was interested in purposefulness in attempts to find answers to problems, as he believed that human beings create problems when their purposefulness is frustrated. Objects in and of themselves cannot create problems as they have no purpose. Ulrich promotes a synthesis of thinking and a focus on considering the different purpose of each stakeholder when attempting to solve a problem. When a problem arises he also promotes thinking about analogous situations where the problem did not arise in an endeavour to find out how the circumstances differ.

Churchman (1979) is noted for his work on taking a synthesis approach to inquiry, advocating taking a number of perspectives, rather than taking just one perspective, on a problem (best described in his five modes of inquiry model). Churchman stresses the importance of appreciating a problem from many stances (taking a multi-perspective approach) to gain new knowledge in different ways.

Dewey’s foundational work (1910) gave a new meaning to the words ‘analyse’ and ‘synthesize’. Dewey took a reductionist view of analysis, seeing it as a process of looking inwards at a problem and dissecting it bit by bit, when what was needed was a process of looking outwards, looking at the problem as a whole and from the outside.

Ackoff (1972, 1981, 1999, 2000) sees a system as “a whole that cannot be divided into independent parts”. He defines synthetic thinking (as opposed to analytical thinking, which separates parts from each other and the whole) as: identifying the whole that contains the part(s) to be looked at, explaining the behaviour of the containing whole and disaggregating the larger whole into the identification of the function of the part(s). Ackoff’s view parallels Dewey’s concept of synthetic thinking which suggests that one must zoom out and see each element in the context of each other element, the whole and the environment surrounding the whole, before zooming in to any particular part, and must think of analogies to the problem being considered. The inquiry fits into the systems thinking literature as shown in Figure 1.

Ideally, the Australian Commonwealth Government Aged Care Accreditation Standards should be able to be thought of as a purposeful system, or a connected set of parts that are defined by their role in the whole (Ackoff, 1981). Similarly, the assessments or audits that are conducted to check compliance with the standards should be able to be thought of as a purposeful subset of the Standards themselves. Aged Care assessors are required to conduct assessments or audits ‘systematically’ (Aged Care Accreditation Standards and Accreditation Agency Ltd; 2002), and it is reasonable to expect that the Standards they assess are designed as a system, since these Standards are central to the training assessors/auditors receive. I suspect however, that the notion of ‘systematic’ assessments used by the Aged Care Accreditation Standards and Accreditation Agency (2002) means ‘using a method or rational approach’ rather than having a ‘systemic’ meaning that would require assessors to ‘interpret from a holistic viewpoint’ (Angell, 1990).
Method(ology)

This inquiry is constructed within an interpretive framework and the author will adopt an argumentation philosophy as proposed by Rehg, (1998). A range of respondents justified perspectives will be sought using a systems thinking lens, to gain important insights into the problem. This is in line with Rescher (1979) who makes the point that “the achievement of adequacy in understanding is a matter of combining points of view and synthesising them into a unified whole” (p. 24). The final product of the inquiry will comprise a discussion of the insights gained from participants and a discussion on the use of the lens (Walsham, 1995a) - in this instance, a systems thinking lens.

The author has selected people from all parts of the Australian aged care system to participate in the inquiry, so that the methods used to collect data and information themselves reflect core systems thinking principles. The groups of people being interviewed include:

- Two designers/writers of the Aged Care Quality of Care and Accreditation Principles and Accreditation Standards
- Accredited aged care Service corporate and site Board members, CEOs, general managers, residential care managers, quality representatives, general staff, volunteers, key suppliers (from three selected sites)
- Accredited aged care Service residents, families, representatives and visiting doctors from three Aged Care Services
- Public policy makers (One State government health department representative, two local government representatives)
- Two Aged Care Standards Agency State office general managers or accreditation co-ordinators
- Three registered Aged Care Standards assessors
- Two preferred providers of nationally accredited aged care assessor training courses

A selection of the trial questions being asked in the face-to-face interviews with Standards designers is shown below, though people are asked slightly different questions according to their roles and the purpose(s) for their participation in the inquiry. Interviewees will be given some background material on the systems thinking concepts well before their interview.

Preliminary Findings – First Impressions

Though the inquiry is in its infancy, the author has gained some first impressions.

- Standards are presently hierarchical in nature and contain an unjustified assumption that Standards requirements “will have a beneficial impact on performance”(Seddon, 2000: p.35).
- There is not a well-defined, documented purpose for the Standards.
- There is no overview of the national Standards’ system as a whole, its parts or how the parts are meant to interrelate. There is no mention of any wider environment into which they fit.
Table 2. Selection of Interview Discussion Issues Related to System Thinking Concepts

<table>
<thead>
<tr>
<th>Discussion Issues</th>
<th>System Thinking Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were the Aged Care Standards designed as a system? What are the purposes of the Standards and their related elements and environment?</td>
<td>Three levels of purpose</td>
</tr>
<tr>
<td>What beliefs and values were considered in the Standards’ design? Is there evidence of a teleological approach?</td>
<td>Purposeful systems</td>
</tr>
<tr>
<td>Whose perspectives were sought prior to and during the design of the Standards, and how are they reflected in the completed design?</td>
<td>Outcome orientation</td>
</tr>
<tr>
<td>How many iterations of the Standards were there? What was modified and what factors influenced each modification?</td>
<td>Perspective of sub-systems</td>
</tr>
<tr>
<td>Explain the structure, goals, objectives and function(s) of the Standards. How were the Standards put together? What are the parts and what are the relationships between each of the parts and between the parts and the whole?</td>
<td>Interaction of parts</td>
</tr>
<tr>
<td>How has harmony been built into the Standards and between the Standards, Quality of Care and other relevant Principles? How are the effects of the parts on each other, on the whole and on the containing system measured?</td>
<td>Learning loops</td>
</tr>
<tr>
<td>Are the Standards complete in your view? Describe what is lacking (if anything)</td>
<td>Learning from doing</td>
</tr>
<tr>
<td>How has the effectiveness of the performance of the Standards been evaluated? What does the data show?</td>
<td>Adaptation</td>
</tr>
<tr>
<td>Describe the nature of any feedback you have received about the Aged Care Act, Quality of Care Principle or Accreditation Standards. In particular, what feedback has been requested/received regarding the interrelationships between the parts, the effects of each element on each other part and the effects of the behaviour of the elements on the whole and wider environment?</td>
<td>System as set of interrelated, not aggregated elements</td>
</tr>
<tr>
<td>What are your reporting requirements in relation to the Aged Care Act, Quality of Care Principle and Accreditation Standards? From who and for whom is data and information collected?</td>
<td>Synthesis</td>
</tr>
<tr>
<td>To what degree can you influence policy relating to the Aged Care Act, Principles and Accreditation Standards. Are you consulted about changes? Have your suggestions resulted in any changes in Standards design or amendments to the legislation?</td>
<td>Goal-seeking</td>
</tr>
<tr>
<td>What was the planned relationship between the Quality of Care Principle, Aged Care Standards and assessment/auditing processes?</td>
<td>Connectivity of sub systems</td>
</tr>
<tr>
<td>How could Standards design and design process be improved?</td>
<td>Harmony</td>
</tr>
</tbody>
</table>

- Standards designers suggest that the Aged Care Accreditation Standards were put together in response to a political decision to control aged care within a regulatory environment.
- Standards designers suggest that the Standards are not complete and omit important leadership and human resource elements.
- Standards are unaccompanied by definitional and implementation ‘how-to’ guidelines, resulting in a myriad of interpretations that may or may not coincide with those of the compliance assessors.
Standards are divorced from and unrelated to Aged Care Services’ existing business systems, often resulting in inefficiencies and a misallocation of resources away from direct resident care.

**Implications/Outcomes**

This inquiry should result in clearer understandings about the reasons for the recommendations for improving the design of Accreditation Standards and the processes that are used to assess compliance with them by encouraging designers to question the underlying assumptions of their designs (Argyris and Schon, 1978), and to appreciate the interrelationships between the elements of the Accreditation Standards and assessment/audit framework.

**References**


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Dewey, J, (1910), *How We Think*, DC Heath, Lexington Massachusetts


