Examples of hierarchical coding systems

The following are some examples of hierarchical coding systems developed for different projects. (Lower level subcategories have been summarized in some instances.) They illustrate the point that the hierarchy is a taxonomy, or cataloguing system, rather than embracing theoretical associations. The latter are determined by using nodes or node trees in coding queries and/or matrix coding queries.

**Project 1: Theory building – meeting the needs of spinal injured persons**

This study was undertaken Lynn Kemp, during the period 1994 to 1998, and was the first comprehensive investigation of the lives of people with spinal injuries in the state of New South Wales, Australia. Different concepts of need (normative, felt, expressed, prescriptive, comparative, intrinsic, and need as a means to an end) were explored using surveys, interviews and document analysis. Interviews were conducted to determine:

- The relative importance of community services (personal care, paramedical, respite and transport) in the lives of people with spinal injuries;
- What people with spinal injuries wished to achieve in their lives; and
- What role community services played in helping (or preventing) people with spinal injuries to achieve their desired ends.

**General issues**

- accommodation
- access
- employment
- relationships
- health
- discrimination (in the community)
- psychological adjustment
- the future
- compensation
- hospital (historical)
Issues of service provision

organization
eligibility
assessment
reliability
discrimination
quality
timing
availability
cost
knowledge
limits

expectations of service providers
have to be grateful
appropriateness

relationship with provider
relationships with workers
privacy
rudeness
retribution

Services and support

doctor
dentist
nurses
social workers
physiotherapist
counselling
informal care
aids and equipment
occupational therapy
rehabilitation services
home care
home nursing
community nursing
transport
transport allowance
parking scheme
financial support
meals on wheels

**Evaluation of services**

- good
- poor

**Life impacts**

- others
  - some other person
  - the system
  - self at a different time
  - sportsman
- changed life
  - becoming ‘the disabled’
- control
  - no control
  - security
- normal life
- relationships
- adjustment
- dependency
dependent
independent
forced independence
interdependent

Project 2: Concept analysis – Child participation

This schema brings together data from a series of projects exploring the meaning of participation from the perspective of children and young people. The research was conducted by members of the Asia Pacific Regional Network of the Childwatch International Research Network. The common framework was designed to facilitate further analysis and coordinated writing on the concept of child participation.¹

Cultural factors, including:
  gender issues
  generational issues,
    ‘ownership’ of children
    definition of child/young person/adult
  individualism vs collectivism
  attitude to personal development
  community attitudes to the role and ability of children

Situationally defined context, including:
  access to information
    language; internet
  location - home/school/community/world
  political structure
    freedom of expression

¹ This framework was developed at an international meeting held at Bowral, Australia, which was supported by the Social Justice and Social Change Research Centre at the University of Western Sydney.
opportunity for involvement
socioeconomic status
safety – security issues

**Process**, including:

- seeing children as having resources to participate
- reciprocity
- modelling from parents/leaders
- social/ parental/ peer support
- self confidence, skills

**Dimensions of participation**

- public – private
- personal agency – interconnectivity
- individual – social
- local – global
- personal – collective
- self – other (focus)
- immediate – sustained
- being – becoming significance of activity
- obligation – voluntary
- intentional – non intentional
- negative – positive
- passive – active humanity – materialism
- decorative – meaningful

**Implications of participation**, including:

- increase in opportunities
- sustainability
- civic engagement
- non-engagement (from non-participation)

**Issues in participation**, including:
power dynamics
communication styles/ modes/effectiveness

**Project 3: Mapping experience – Symptoms of angina**

This international study examined the experiences of women who were potentially experiencing angina (heart disease), with particular concern that, because they were women, their symptoms were often treated with scepticism. The qualitative data were then matched with diagnostic results from medical testing.

**Description of sensation**
- pain
- burning
- pressure

**Location of sensation**
- points of most intensity
  - e.g. chest; jaw
- radiation
  - e.g. from neck down arms
- pattern
  - e.g. comes in waves

**Intensity of sensation**
- not too bad
- I think I’m going to die

**Duration of sensation**
- each episode
  - short
  - long time
- since it began
  - e.g. two years

**Triggers of sensation**
- walking
lifting
argument

**Meanings for sensation**
- death
- isolation
- I’m getting old

**Actions taken**
- medication
- rest
- work
- seek help

**People or organizations referred to**
- doctor
- nurse
- hospital
- family
- neighbour
- friend
- church

**Access to health care system**
- facilitated
- hindered

**Consequences for daily living**
- can’t work
- can’t do daily tasks,
- became depressed
- became anxious

**Impact on roles**
- as a wife
as a mother
as a caregiver

Other contextual issues
divorce
moving house
loss of job

Narrative
metaphors-idioms
quotes
surprises

Project 4: Theory development – Health behaviour (childhood immunization)

Parents of young children were interviewed or surveyed with respect to their experiences of and concerns about childhood immunization, with a view to understanding what might encourage or discourage on-time compliance with recommended immunization schedules.

Issues re vaccines
reactions
potential for long term damage
short term - physical
short term - crying

trusting
trusting experts
give protection
belief in immunization

questioning
how effective?
weighing up

knowledge

Issues re diseases
dangers
experience of disease
  vicarious
  benign
  negative

Issues re process
  advice
  needles, pain

Strategies
  preparation
  support

Feelings
  fear-anxiety-worry
  empathy
  accepting

Actors
  father
  other relatives
  friends
  doctor
  media

Other health issues
  alternative medicine
  baby’s health

Sorting out a mess

The example that follows is for those who have already created coding structure before they found Chapter 5 in *Qualitative Data Analysis with NVivo* (because, of course, those who had read the chapter first would never end up with a mess of this sort)!

The column on the left is an example of a potentially viral coding system relating to the delivery and implementation of a training program for youth workers. Compare with the column on the
right, where the coding system has been reorganised. Many less nodes are needed to cover the same topics; it provides for easy access to everything known about any particular factor or issue so it can be reviewed as a whole; it allows a range of other questions to be asked about any aspect of the program (such as whether it was seen as a strength or weakness, or when it occurred); and it allows for creation of more specific subcategories if needed, without creating more repetitive sub-trees.

Converting the first system to the second requires steps that need to be completed in the following order:

- Copy nodes at the lowest level in each subtree and merge with their immediate parent node (these can be done in groups) so that, for example, everything that was under *Immersion workshops* is now also at the *Immersion workshops* node (as well as remaining in nodes below it); everything under *Learning issues/Before* is now also coded at *Learning issues/Before*.

- Highlight and copy each node that means the same thing and merge into a new *child* node in a new tree for that kind of thing. For example, all the *before* nodes are merged into a single *before* node in the *Time* tree; all the *Strengths* nodes from wherever are merged into a node for that in the *Evaluation* tree; the two 3rd level *level of understanding* nodes are combined into a new 2nd level *Level of understanding* node under *Learning issues* (along with *Level of interest, Resources available, Relationships in group* and any other issues that might be found).

When you are sure you have it all covered in the new structure, you can safely delete the original (but check first!). What all the copying and merging will have done, effectively, is code the same text at multiple nodes. You will find *matrix coding queries* very useful for considering patterns of relationships between nodes in these trees, e.g., to see how learning issues change over time, or how the content and delivery of the training programmes received by or implemented by the trainees were evaluated. A matrix coding query will also allow you to compare the views of trainers with those of trainees (assuming both were interviewed and this has been created as an attribute of the cases).

<p>| Repetitive version! | Suggestion for a revised version |</p>
<table>
<thead>
<tr>
<th>Training in new programme (group leaders)</th>
<th>Training component (for group leaders)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immersion workshops</td>
<td>Immersion workshops</td>
</tr>
<tr>
<td>strengths</td>
<td>Follow-up training</td>
</tr>
<tr>
<td>weaknesses</td>
<td>On-going mentoring</td>
</tr>
<tr>
<td>suggestions</td>
<td></td>
</tr>
<tr>
<td>Follow-up training</td>
<td></td>
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<td>weaknesses</td>
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<tr>
<td>suggestions</td>
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</tr>
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<td>strengths</td>
<td></td>
</tr>
<tr>
<td>weaknesses</td>
<td></td>
</tr>
<tr>
<td>suggestions</td>
<td></td>
</tr>
<tr>
<td>Programmes implemented by trainees</td>
<td></td>
</tr>
<tr>
<td>Content</td>
<td>[specific subnodes covering particular aspects of content here if wanted]</td>
</tr>
<tr>
<td>before</td>
<td></td>
</tr>
<tr>
<td>after</td>
<td></td>
</tr>
<tr>
<td>Delivery</td>
<td>[specific subnodes covering particular aspects of delivery here if wanted]</td>
</tr>
<tr>
<td>before</td>
<td></td>
</tr>
<tr>
<td>after</td>
<td></td>
</tr>
<tr>
<td>Learning issues (in target group)</td>
<td>Learning issues (in target group)</td>
</tr>
<tr>
<td>Level of understanding</td>
<td>Level of understanding</td>
</tr>
<tr>
<td>Level of interest</td>
<td>Level of interest</td>
</tr>
<tr>
<td>Resources available</td>
<td>Resources available</td>
</tr>
<tr>
<td>Relationships in group</td>
<td>Relationships in group</td>
</tr>
<tr>
<td>Evaluation</td>
<td>Evaluation</td>
</tr>
<tr>
<td>Strength (no subnodes needed!)</td>
<td>Strength (no subnodes needed!)</td>
</tr>
<tr>
<td>Weakness (no subnodes needed!)</td>
<td>Weakness (no subnodes needed!)</td>
</tr>
<tr>
<td>Suggestions (no subnodes needed!)</td>
<td>Suggestions (no subnodes needed!)</td>
</tr>
<tr>
<td>Time referred to</td>
<td>Time referred to</td>
</tr>
<tr>
<td>Before training and implementation</td>
<td>Before training and implementation</td>
</tr>
<tr>
<td>After immersion training</td>
<td>After immersion training</td>
</tr>
<tr>
<td>level of interest</td>
<td>resources available</td>
</tr>
<tr>
<td>---------------------------</td>
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</tbody>
</table>