Issues of equity in success and access in mathematics learning

Robyn Jorgensen (Zevenbergen)
Planning for Diversity

- Challenges of teaching mathematics in remote Australia
  - Diversity – culture, language
  - Attendance
  - Mathematics
  - How to plan to cater for and incorporate these factors.
Planning for Learning

- Attendance
- Language/Culture
- Mathematics/Numeracy
### Percentage Attendance

<table>
<thead>
<tr>
<th>Age in years</th>
<th>Indigenous %</th>
<th>Non-Indigenous %</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>73</td>
<td>89</td>
</tr>
<tr>
<td>16</td>
<td>55</td>
<td>81</td>
</tr>
<tr>
<td>17</td>
<td>36</td>
<td>66</td>
</tr>
</tbody>
</table>
## Attendance by Indigenous/location

<table>
<thead>
<tr>
<th>Age</th>
<th>Major city</th>
<th>Inner regional</th>
<th>Outer regional</th>
<th>Remote</th>
<th>Very remote</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>77</td>
<td>77</td>
<td>76</td>
<td>67</td>
<td>53</td>
</tr>
<tr>
<td>16</td>
<td>60</td>
<td>58</td>
<td>60</td>
<td>49</td>
<td>34</td>
</tr>
<tr>
<td>17</td>
<td>44</td>
<td>38</td>
<td>37</td>
<td>29</td>
<td>16</td>
</tr>
</tbody>
</table>
Attendance

• Large gaps in mathematical learning, concepts
• Impact on teacher morale
• Tension between high expectations and attendance.
• Fuzziness in figures – attendance relates to income, attendance may not be for a full day…
Language and Culture

• Orientations to school and learning
• Orientations to mathematical concepts/processes
• Language tensions between home and school – e.g. prepositions
• World views, what constitutes “important knowledge”
Mathematics

• Relevance of mathematics to remote life
  – What are the numeracy demands for non-urban students? Communities?

• Relevance of number to remote life
  – What is the relevance of number to non-numerate societies?
Planning for Learning

• Teacher preparation
• Catering for the diverse needs within a classroom
  – Gaps in learning, low attendance
• Catering for the ‘revolving door’ phenomenon
• Catering for diverse world views – cultural norms, linguistic norms, mathematical norms
Contact Details

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