Australia, states and territories regulate their own education systems, however, national benchmarks representing minimum standards for Numeracy (in the areas of number sense, measurement and data sense, and spatial sense) help inform the individual state curricula. Australia has three school sectors: Government, Independent, and Catholic. As data collection in the Learner's Perspective Study (LPS) was restricted to Government schools, this overview focuses primarily on the types of schools from which the Learner's Perspective Study (LPS) data from Year 8 mathematics lessons was collected: Victorian government secondary schools.

In Victoria, students spend seven years at the Primary level, Prep to Year 6, and six years at the Secondary level, Year 7 to Year 12 (see Figure 1). In some other Australian states, the first year of Secondary School is Year 8. In Victoria, students are distributed across the Government, Catholic and Independent sectors as follows:

Primary: Government, 70%, Catholic, 22%, Independent, 8%;
Secondary: Government, 60%, Catholic, 22%, Independent, 18%.

Independent Schools each have their own governing body but need to comply with government guidelines to gain school registration and be eligible for some government funding. Catholic schools are governed by the Catholic Education Authority and are subject to the same registration constraints as independent schools. Independent and Catholic schools are autonomous in the organisation of the curriculum and to a large extent in its content. Government schools are financed by the state and the curriculum is set through the state curriculum Authority. At the time of the LPS study, schools were expected to follow
initiatives were introduced to increase student connectedness with the school community, including reducing the number of teachers of each class by having the same teacher teach more than one subject to a given class, (for example, a class might have the same teacher for mathematics, science, and information technology).

Victorian School System (Australia)

<table>
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<tr>
<th>age equivalence (generally)</th>
<th>years of schooling</th>
<th>school organisation</th>
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<tbody>
<tr>
<td>12 to 13</td>
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<td>Secondary School</td>
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<td>Child Care Centre</td>
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Figure 1. Victorian School System (Australia).

The three Australian schools were videotaped in 2001 and 2002. At this time the Victorian school curriculum for the compulsory years of schooling (Preparatory to Year Ten) was guided by the *Curriculum and Standards Framework (CSF)*, a document produced by the Victorian Board of Studies. More than 2000 outcomes were expected to be covered across Years 7-10 (Board of Studies, 1994, revised 2000). The CSF framework was structured around eight key learning areas, one of which was Mathematics; the framework assumed that all students would study mathematics throughout their compulsory schooling. The major knowledge and skills within each key learning area were organised into strands. In mathematics, these strands were Space, Number, Algebra, Measurement, Chance and data, and Reasoning and strategies. In addition, for each strand the CSF set six levels for student achievement over 11 years of schooling. For example, a mathematics
student in Year 8 studying Measurement (substrand Using Relationships) was expected to meet the following learning outcome.

Obtaining areas by counting squares in order to develop new rules for the area of regular shapes (Board of Studies, 2000, p.145).

The framework provided indicators to help determine whether the student had achieved a particular learning outcome. For example, the following is an indicator for the aforementioned learning outcome:

The use of counting of squares to relate base, height and area of parallelograms (Board of Studies, 2000, p145).

The CSF specified that mathematics should be taught from a base of concrete experience, because the manipulation of concrete materials in the early years of schooling provided the foundation upon which children built mathematical ideas. In the CSF structure, mathematical study then progressed to focus on the patterns and relationships between numbers.

National policy developed in the late 1980s by the Australian Association of Mathematics Teachers advocated that calculators be used at all grade levels from Prep to Year 12, and curricular developments in Victoria have continued the progressive integration of calculators into instruction and assessment, including the use of graphing calculators in high-stakes Year 12 mathematics assessment.

To increase the accountability of schools, annual state testing in Years 3, 5, and 7 was intended to provide data for the measurement of state performance and for comparison against the national benchmarks. This testing was compulsory in government schools and optional in non-government schools. As students from all three school sectors were assessed by the same Year 12 high-stakes assessments that determined entry to most tertiary courses, there was commonality in the senior secondary curriculum across all three school sectors (Board of Studies, 1999).

Victoria has provided an example of how assessment can drive curricular change (Barnes, Clarke, & Stephens, 2000). The introduction of the Victorian Certificate of Education (VCE) in 1991 emphasised investigations and problem solving activity by making them a major part of Year 12 assessment. The consequences of this innovation could still be seen in the textbooks in use at the time of the LPS data collection.

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