

Review of Mathematics and Statistics

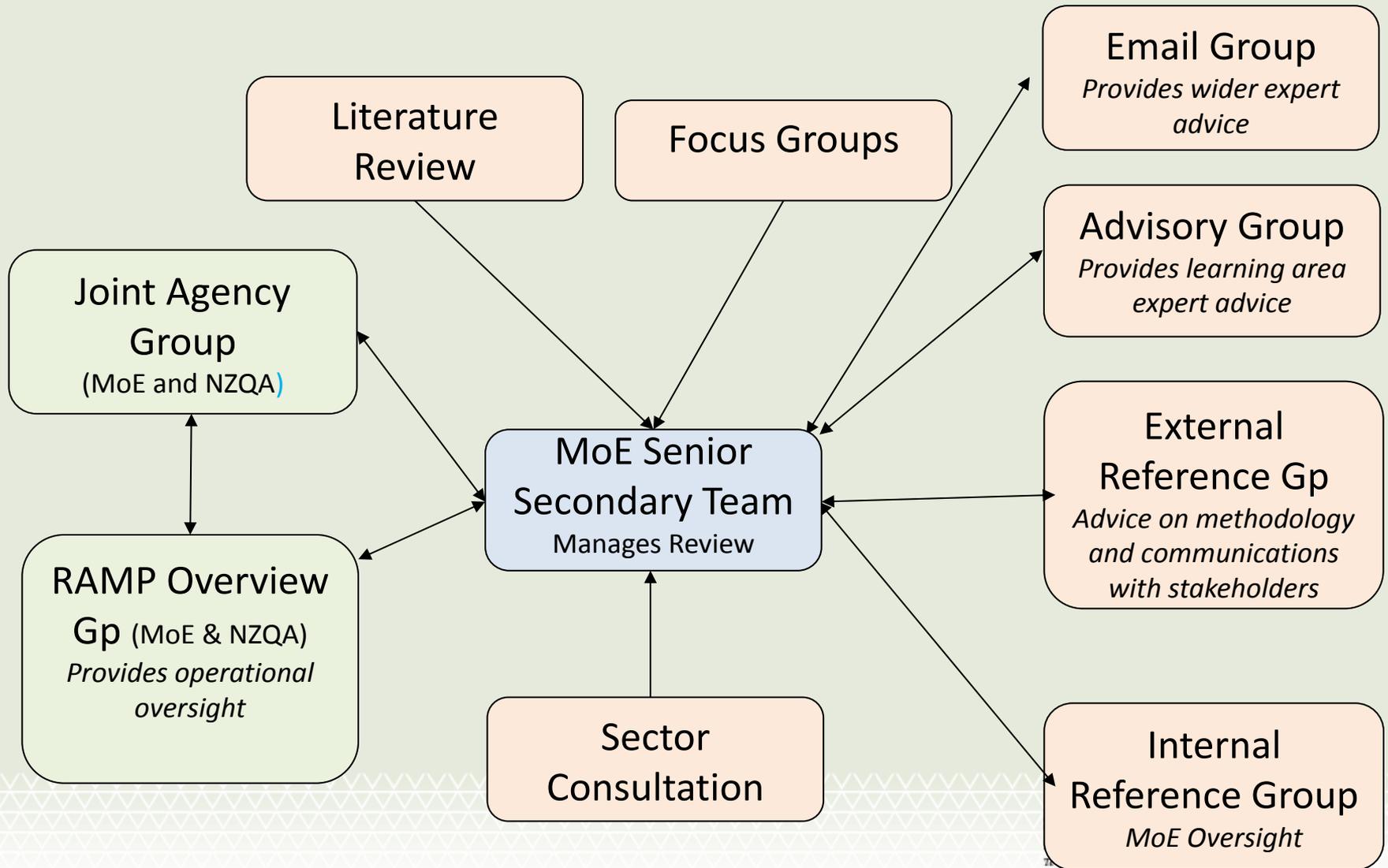
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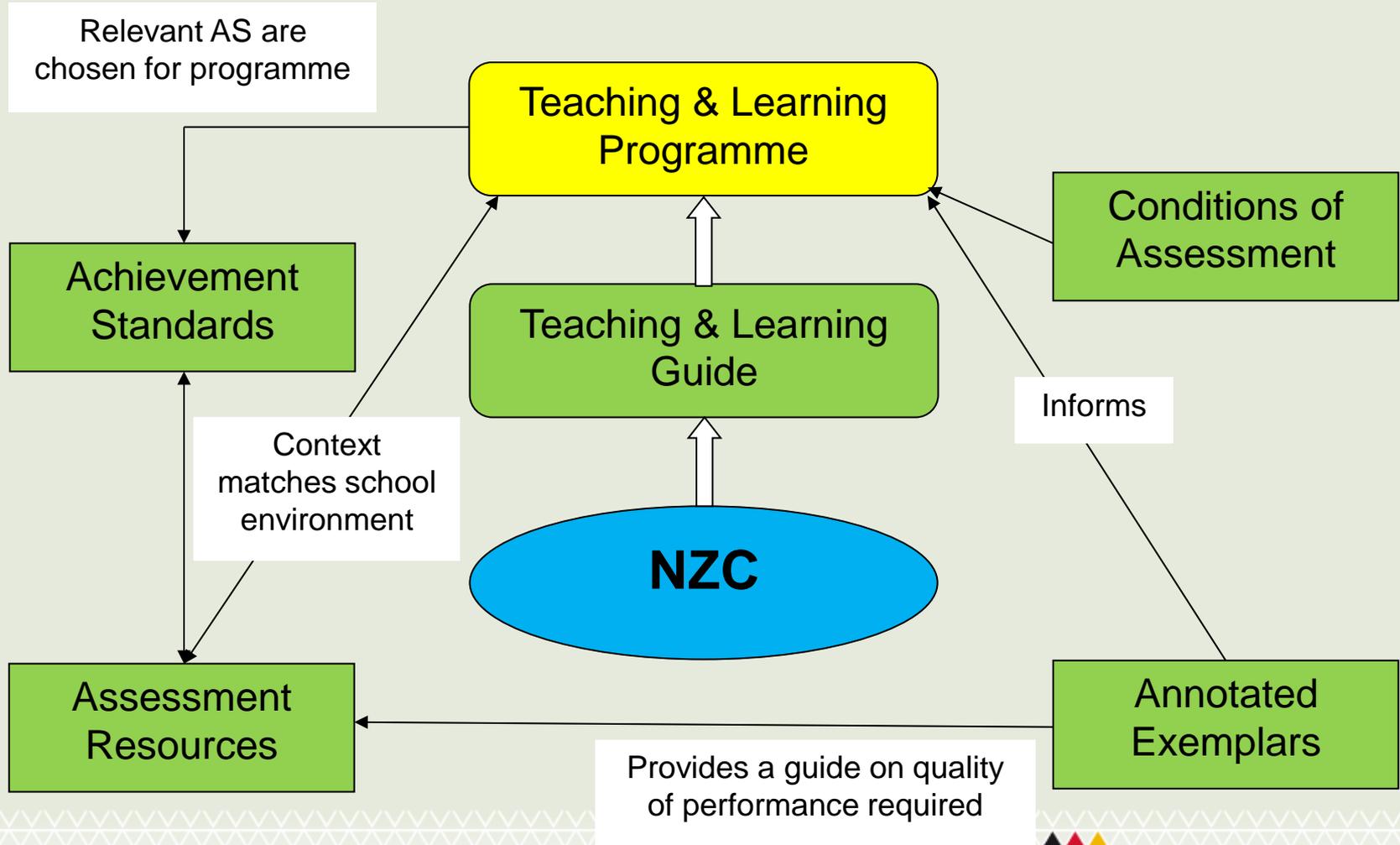
Review and Maintenance Programme (RAMP)

- The purpose of RAMP is to maintain the significant investment of the last decade in developing support for teaching and learning programmes derived from the NZC and for that learning counting towards the NCEA.
- The critical connection between curriculum, learning and NCEA achievement will be explored through a cycle of ongoing review and maintenance of the materials associated with each learning area that support NCEA.

Structure Diagram for RAMP



Materials Reviewed



Key Questions

- How effectively do the materials support the incorporation of the vision, values, principles and key competences of the NZC into teaching and learning programmes?
- How effectively do the materials meet the needs, aspirations, world views and cultural contexts of the diverse range of students?
- How well do the materials support effective pedagogy as described in the NZC, especially in relation to Teaching as Inquiry?

Key Questions (ctd)

- How effectively are the materials used in learning programmes?
- How have the materials influenced the design of teaching and learning programmes? What impact have the materials had on what happens in the classroom?
- How well do the materials align with the level 6-8 achievement objectives from the learning area and/or subject in the New Zealand Curriculum?
- How valid and reliable are the assessment resources that are used to gather evidence against the achievement standards?

Progress to Date

- NZCER is carrying out a review of research relevant to secondary mathematics and statistics
- An advisory group has met twice and considered the key questions
- A draft summary of findings from both the above will be compiled
- Consultation on this review is planned for March (?) 2015
- Focus groups (teachers and students) are planned for March 2015
- A final report will be informed by the results from all phases of the review

Emerging Points

- The importance of skills and methods/procedures and their application in problem solving
- Understanding of difference between the demonstration of skills and the use of skills in problem solving
- Style/nature of assessment for internally assessed standards
- Need for support on designing assessments that gather evidence for more than one achievement standard

Emerging Points (ctd)

- Maximise the opportunities for flexibility in ways of gathering evidence – it does not need to be the same for every student
- A need to overtly build in reference to key aspects of the NZC into T&L programmes. The principles and key competencies need to be visible in the programmes.
- Need to provide a “TLG” for curriculum levels 4 and 5.
- How future focussed are the materials – how are we planning to incorporate digital technologies?