**Table 2: Timeline, goals and milestones of the *Getting to the CoRe of the Matter* study**

| DATE | GOALS | MILESTONES |
|---|---|---|
| **Phase 1**<br>November-December 2013<br>Initial contact with school | **The researchers will:**<br>» establish a research partnership with the proposed school and key science education staff<br>» co-develop the research and ethics proposals with the partner school<br>» introduce the project to the school's wider teaching staff | » Preliminary meeting held with the proposed partner school and key science education staff and a research partnership established<br>» Membership of the school's Science Development Group determined<br>» Research and ethics proposals completed and approved by mid-December 2013.<br>» First staff meeting for December 2013 and workshop session for January 2014 co-planned by the SDG and researchers<br>» Staff informed and aware of the intent and nature of the research project for 2014 and beyond via staff meeting in early December 2013. |
| **Phase 1**<br>Mid-Late January 2014<br>Teacher only day | **The teachers with the support of the SDG and researchers will:**<br>» review and share information re the existing school science education programmes with a focus on 21st thinking skills and inquiry learning in science<br>» determine goals for future science education programmes and the professional learning needs of teachers<br>» identify relevant science education resources such as the MoE website, the Science Learning Hub and the Primary Connections programme<br>» explore the 5Es approach to inquiry-based learning in science | » Self review data gathered<br>» An agreed understanding of scientific inquiry and a framework for inquiry learning in science (including key components and/or indicators of inquiry learning in science) that will be used to inform all future phases of the study<br>» Programme goals and teachers' professional learning needs established<br>» Relevant science education resources identified and located<br>» Primary Connections resources reviewed by teaching staff |
| **Phase 2**<br>February 2014<br>Staff meeting workshop session | **The teachers with the support of the SDG and researchers will:**<br>» evaluate the potential use of the 5Es approach to inquiry-based learning in the school's science education programme | » Findings of the Primary Connections reviews shared by teaching staff<br>» Decision re the potential use of the 5Es approach in the school's science education programme made |
| **Phase 3**<br>Late March 2014<br>½ day staff workshop | **The researchers will:**<br>» introduce teachers to Content Representation (CoRe) design as a curriculum planning and professional learning tool<br>» The teachers with the support of the SDG and researchers will:<br>» create a CoRe for inquiry learning in science using an agreed upon context(s) from the Science Learning Hub (SLH) | » CoRe for inquiry learning in science based on a SLH) context(s) are produced |
| **Phase 4**<br>April –June | **The teachers with the support of the SDG and the researchers will:**<br>» plan and teach a science mini-unit using the CoRe an inquiry-learning approach and the SLH resource<br>» engage in reflexive thinking throughout the teaching and keep a reflective journal | » A science mini-unit(s) is planned and taught in classrooms<br>» Reflexive data on practice experiences gathered by teachers |
| **Phase 5**<br>June 2014<br>Focus Group meetings | **The teachers with the support of the SDG and the researchers will:**<br>» evaluate the first trial including the process and outcomes | » Focus group interviews held with teaching teams to evaluate the first trial to date |

**The Science Development Group works over three terms to:**

» Review existing teacher documentation/implementation practices using data collected in Phase 1 to inform future phases of the development.

» Develop a revised school implementation plan proposal for teacher consideration in Phase 5 and the final draft plan for 2015.

» Evaluate the use of CoRe design as an ongoing tool for curriculum design and teachers' professional learning; and resources such as Ministry of Education sites, Building Science Concepts Series, the Primary Connections programme, and the Science Learning Hub.