reSolve Champions – Overview

Introduction

reSolve: Mathematics by Inquiry is a bold new national program to promote innovative and engaging approaches to the teaching and learning of mathematics in Australian schools. It is managed by the Australian Academy of Science in collaboration with the Australian Association of Mathematics Teachers, and funded by the Australian Government Department of Education and Training. The project is a key component in the National STEM School Education Strategy 2016–2026, endorsed by Australian Education Ministers in December 2015. It furthers the goals of ensuring that all students finish school with strong knowledge in mathematics, and ensuring that students are inspired and equipped to take on more challenging STEM subjects, including intermediate and advanced mathematics in the senior school.

Given the relatively short duration of reSolve, the project is designed to produce a legacy that can be taken up and built on by teachers, schools and others once the project has concluded. The teaching and professional resources produced by reSolve will be one part of this its legacy. Classrooms using reSolve resources and approaches to inquiry will foster mathematics learning through engaging activities that are meaningful to the students, and that support the development of both the content and all four of the Proficiencies in the Australian Curriculum: Mathematics (fluency, reasoning, understanding and problem solving). They will be learning environments in which students are challenged and supported to build their knowledge by taking risks, and exploring and discussing their ideas.

The other component of the legacy of reSolve will be a human one – people who engage with the project in various ways during its lifetime (to mid-2018) and who carry forward an understanding of, and commitment to, its aims for the teaching and learning of mathematics in Australian schools.

The *reSolve Champions* are a major component of the 'human legacy' of the project with the potential to play a significant role in school mathematics into the future.

This paper deals with the identification, selection and preparation of teacher Champions. See the paper "Overview of the process and program for reSolve Champions who are not classroom-based" (www.aamt.edu.au/resolve/Downloads) for an outline of the process and program for reSolve Champions who are not currently teachers.

The following diagram illustrates how the Champions fit into the overall design of reSolve.
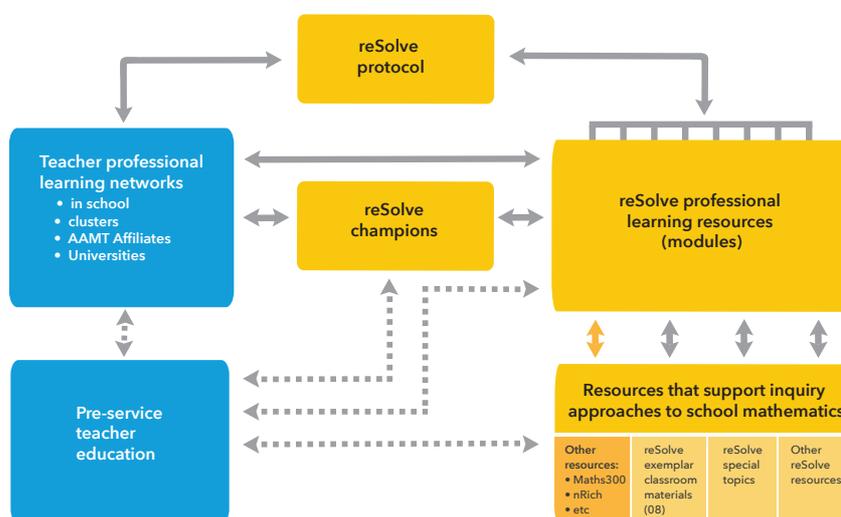
About the Champions

At the end of the project there will be a minimum of 240 reSolve Champions across the country. They will be drawn from a wide range of locations and school contexts, and from all year levels (Foundation to Year 10). reSolve Champions will predominantly be teachers and others based in schools, but there will also be Champions who are officers of education authorities, principals and teacher educators.

The group of teachers who are Champions will be diverse – working in different school locations, sectors and contexts some experienced and others in the early stage of their career; teachers with strong backgrounds in mathematics and expertise in its teaching and those without strong formal qualifications for teaching mathematics (e.g. primary 'generalists', 'out of field' secondary). All will have a commitment to better mathematics outcomes for their students, and to working with colleagues in and beyond their school in mathematics. Their diversity will bring different perspectives and strengths to the group of Champions able to reflect and connect with the population of teachers of mathematics in Australia's schools.

The notional distribution of reSolve Champions to the jurisdictions is shown below. Numbers reflect population and will be spread across the sectors of schooling. The target of at least ten reSolve Champions in smaller jurisdictions will provide a 'critical mass' for local networking and collegial support.

NSW	Vic.	Qld	WA	SA	Tas.	ACT	NT
55	45	40	35	30	15	10	10

Increases above these figures may be negotiated with education authorities as part of their plans for uptake of reSolve approaches and resources by their schools.

The reSolve: Mathematics by Inquiry project will conduct a year-long professional learning program (*Leading reSolve*) to provide the Champions with the capacity to support colleagues to use and benefit from the reSolve resources. Successfully completing the Leading reSolve program is the only pathway to become a reSolve Champion.

There will be no cost for participating in the Leading reSolve program. Financial support from the reSolve project will be limited to providing some travel and accommodation funding for participants from non-metropolitan locations. It is anticipated that Champions will be supported to some degree by their school and local mathematics teacher association (AAMT Affiliates); ideally their involvement will also be acknowledged and supported by the relevant education sector (government or non-government).

The work of reSolve Champions beyond mid-2018 (the conclusion of the reSolve project) will be determined locally, according to the forward plans for uptake of reSolve materials and processes in schools, groups of schools, AAMT Affiliates and education sectors. From its inception, the project has engaged with education sectors and others to encourage planning that capitalises on the legacy of the project, in particular, the reSolve Champions. The identification, selection and preparation of reSolve Champions will be a particular focus for this engagement from early 2017.

Attributes of the reSolve Champions

reSolve Champions will have backgrounds and personal qualities suited to the role.

Background:

- Knowledge relevant to the reSolve Champions' role.
- Experience as an educator and in seeking and providing professional support to others.

Personal qualities:

- Positive disposition to mathematics and its learning, and to working with colleagues.
- Skills in networking with others in person or at distance using technologies.
- Self-reflective and able to learn as they go.

Principals will provide a statement about the prospective Champion in relation to these qualities.

See the reSolve Champions Expression of Interest package (www.aamt.edu.au/resolve/Downloads) for more details about what is required.

Identifying and selecting the reSolve Champions

Teachers across the country are invited to consider undertaking the Leading reSolve program and become a reSolve Champion. This is an open call for expressions of interest. In addition, reSolve staff have identified teachers who have shown interest in the project during its initial development phase, and these people will be directly encouraged to submit an expression of interest.

The expression of interest to join the Leading reSolve program requires the potential Champion to submit an expression of interest that consists of a personal statement that addresses the attributes (as outlined above), along with a statement of support and commitment from their principal. Prospective Champions will also be asked to share their vision for student learning of mathematics and 'how they can make a difference' in supporting colleagues to extend their teaching practices.

Selections will be based on these expressions of interest. Every effort will be made to achieve a balance across sectors and jurisdictions. However, the overriding criteria will be the match with the attributes, a commitment to complete the full Leading reSolve program and a willingness to help colleagues capitalise on the legacy of reSolve in their professional learning and ultimately in the classroom.

The Information and Expression of Interest Package is available at www.aamt.edu.au/resolve/Downloads.

The timeline for selecting the reSolve Champions is:

- Call for expressions of interest 10 February 2017
- Expressions of interest due 30 April 2017
- Selections finalised 26 May 2017

The Leading reSolve program

The Leading reSolve program will equip reSolve Champions with the knowledge, experience and skills to use reSolve resources and processes – the reSolve legacy – in their own classroom and in collective efforts to improve Australian students' experiences and achievement in mathematics. The program will commence in July 2017 and conclude at the end of June 2018. The Leading reSolve program will be linked to the AITSL Professional Standards for Teachers (with an emphasis on the Lead level). It will be formally accredited in NSW, ACT and other jurisdictions as appropriate.

Leading reSolve will be a specially designed professional learning program developed and facilitated by the reSolve team working with other Australian and international experts. In line with the principles that underpin all reSolve professional learning the program will expect and support participants to use reSolve resources in their own classrooms and in their work with colleagues in professional learning programs.

Leading reSolve will be a blended program involving both face-to-face and online modes. It is expected that participants will:

- commit to two face-to-face workshops in October 2017 (one day) and April 2018 (two or three days)
- complete at least four of the eight reSolve professional learning modules as online, facilitated 'courses'
- participate in other purpose-designed professional learning (webinars etc.)
- trial and provide feedback on at least five of the reSolve Classroom Resources
- trial and provide feedback on at least one of the reSolve Special Topics
- lead at least two reSolve Professional Learning modules with colleagues.

Overall there will be around 40 hours of professional learning spread through the year, plus the trialling and feedback on reSolve resources.

There will be an emphasis on networking with other reSolve Champions and, toward the end of the program, planning for the period after the project concludes.

reSolve staff and consultants will work with national and international leaders in mathematics education to ensure the program is a significant contribution to the reSolve Champions' professional lives. The program will be led by Mr Matt Skoss, Manager of Communication and Engagement, based at AAMT.

Outcomes

At the end of the Leading reSolve program, each of the reSolve Champions will have:

- extensive knowledge of the suite of reSolve resources
- experience using a range of the classroom resources in classrooms

- experience facilitating reSolve professional learning modules with groups of teachers
- capacity to effectively lead a range of professional learning programs based on reSolve resources and processes
- a plan for action beyond mid-2018.