Subject Support

**NZQA**

* **Best Practice Workshops:** Provide good info on what is required for internal assessments. Only a few are now scheduled but you can request one hosted by your school.
* **Marking External Exams**: Very good PLD – you really learn what students need to know and do to pass these exams. NZQA call for marking panels around June each year. Keep an eye out at <http://www.nzqa.govt.nz/about-us/working-at-nzqa/contract-vacancies/>
* **NZQA facebook pages**: One way that NZQA notifies us of changes in the documents is on their FB pages. Note, these are not the same as the FB pages set up by teachers. To find the NZQA versions, go to your subject page from <http://www.nzqa.govt.nz/ncea/subjects/> , click on the subject you want, then scroll down the page and hit the Facebook button. That will open up Facebook. If you then like the page you should receive notification of new posts.
* **NZQA newsletters**: NZQA notifies us using these too especially the Assessment Matters Circular. Sign up at <http://www.nzqa.govt.nz/about-us/publications/newsletters-and-circulars/>

**NZASE**

* **Membership:** The NZ Association of Science Educators is the subject association for all science teachers**.** Annual membership. <http://nzase.org.nz/membership/>
	+ NZASE **newsletters** provide articles & information for science teachers. Sign up here <https://nzase.org.nz/>. Some articles are publicly available, some for members only
	+ In 2023 a program of PLD is planned for primary and secondary teachers. More info here <https://nzase.org.nz/nzase-network-expertise/>
	+ There are local branches that also provide PLD for their region
* **Conferences**: NZASE runs SciCon conferences, next due in Hamilton in 2023

**Online teaching and learning resources**

* **The Science Teaching and Learning Guide**: A comprehensive elaboration of the NZC’s science learning area statement and achievement objectives. It shows what good science pedagogy looks like, provides guidance for program planning and gives examples of programs that include Nature of Science (NoS). <http://seniorsecondary.tki.org.nz/Science>
* New NCEA assessments come in for use in 2024. **Teaching Learning & Assessments guides** are online <https://ncea.education.govt.nz/science/science?view=learning>
* **The Science Learning Hub**: Connects us to the work of NZ scientists with resources for use in the classroom. <https://www.sciencelearn.org.nz/>
* **ARBS**: The Assessment Resource Bank, developed by NZCER, is a collection of items to use for formative or summative assessment. A variety of question types are classified by NoS strand, content strand and by level. Very useful if you need to assess/report by level. Register with your own username and password. [arbs.nzcer.org.nz](http://arbs.nzcer.org.nz/).
* NZ online resources that include science:
	+ [No Brain Too Small](https://www.nobraintoosmall.co.nz/): open site: resources for various L1/2/3 subjects
	+ [Pathwayz.org](https://www.pathwayz.org/) open site: resources for various L1/2/3 subjects
	+ [Learncoach](https://learncoach.co.nz/ncea/): many subjects at L1/2/3
	+ [StudyTime](https://studytime.co.nz/guides/): online guides and exams for many subjects
* Most science subject areas have a **Facebook Page** set up by teachers, e.g.: <https://www.facebook.com/groups/346737702172016/> Science
* **Secondary Literacy Online**: Good resources with plenty of science examples of literacy. <http://literacyonline.tki.org.nz/Literacy-Online/Secondary-Literacy>
* I send out **Mike’s News,** a weekly newsletter of events, resources & information of interest to science teachers. Sign up at <https://www.mikesnews.co.nz/>

**Subject support**

Many subject associations have received Network of Expertise (NeX) funding for PLD.

**Agricultural and Horticultural Science**

* HATA is the subject association for teachers of Agricultural and Horticultural Science <http://hatanz.com/>
	+ HATA FaceBook Page <https://www.facebook.com/groups/463920740450543/>
	+ Secretary, Kerry Allen will respond to email queries k.allen@stpauls.school.nz
	+ Advisor & PLD contact Suzie Newman s.newman@stpauls.school.nz, phone 027 275 6620
	+ Next HATA conference is planned for 2023 in Hawkes Bay
* As well as HATA resources
	+ NZAg/Hort Teachers FB page <https://www.facebook.com/groups/1006794696048143/>
	+ Richard Fullerton will respond to email queries: richardlfullerton21@gmail.com

**Biology**

* BEANZ is the subject association for biology teachers. <https://beanz.org.nz/>
	+ The secure website has resources, including QAAM’d tasks.
	+ Resources available from past regional workshops <https://drive.google.com/drive/folders/1HVwl8xZd2wEG3G4-kazE43eOxBFuv4hk>
	+ BEANZ will answer queries at info@beanz.org.nz
	+ BEANZ provides PLD through regional workshops run by their regional reps
	+ BEANZ sends out a regular newsletter to members, aiming for 1 per term
	+ A combined BioLive/ChemEd conference will be in Auckland in Nov 2022
* Facebook: NZ Biology teachers <https://www.facebook.com/groups/577352309058780/>
* From term 3 the StudyIt website has some good discussionfor L1, 2 & 3 students<https://studyit.govt.nz/subjects>
* LENScience website has some useful resources, especially for scholarship <http://lens.auckland.ac.nz/index.php/LENScience_Senior_Biology_Seminar_Series_Home_Page>
* Bio Olympiad helps scholarship students develop critical thinking skills http://[www.nzibo.org](http://www.nzibo.org)
* Facebook for Scholarship Biology <https://www.facebook.com/groups/1434168673514234/>
* Alison Campbell’s blog has useful insights for NCEA & schol bio <http://sci.waikato.ac.nz/bioblog/>

**Chemistry**

* SCENZ is the national organisation representing secondary Chemistry Educators <https://nzic.org.nz/scenz/>
	+ It’s a branch of NZIC which is the body representing professional chemists.
	+ Membership gives you access to resources and exams
	+ SCENZ has NEX funding to deliver PLD. To find mentoring and advice from experienced teachers contact a regional rep, details on the website.
	+ A ChemEd conference will next be held in 2024.
* To access
	+ resources and PLD for NCEA changes, email  scenz@gmail.com
	+ regular newsletters with info, resources & NZQA/MoE news, contact Ian with your school email address ian.torrie@gmail.com. Available to any chem teacher.
* Facebook: NZ chemistry teachers <https://www.facebook.com/groups/NZChemistryteachers/>
* Lisa Janek looks after a google drive with resources to share: <http://tinyurl.com/chemshare>
* Sarah Gaze at Cambridge High School shares pdfs of resources <http://gzscienceclassonline.weebly.com/> . To access editable copies of these ppts, workbooks, resources, including OneNotes contact sarahgaze6@gmail.com
* From term 3 the StudyIt website has some good discussionfor L1, 2 & 3 students<https://studyit.govt.nz/subjects>

**EfS (Education for Sustainability)**

* NZAEE is the subject association for environmental education. <http://nzaee.org.nz/> . It provides access to a national network of educators, local branch activities, PLD via conferences, workshops and seminars, up-to-date news about environmental education and sustainability initiatives around the country, and a voice to Government about your issues.
* Facebook: <https://www.facebook.com/NZAssociationforEnvironmentalEducation>

 Kiwi Conservation Club - KCC Northern <https://www.facebook.com/kccnorthern/>

 Tread Lightly Caravan <https://www.facebook.com/treadlightlycaravan/>

* Bridget Glasgow works in this area as a secondary facilitator & is happy to answer questions bridget.glasgow31@gmail.com
* Enviroschool resources are worth checking out too <http://www.enviroschools.org.nz/>

**ESS (Earth & Space Science)**

* ESSE is the NZASE subject association for ESS teachers. <https://www.earthspacescience.org.nz/>
	+ ESSE provides PLD and help at <https://www.earthspacescience.org.nz/esse-help>
	+ Regional Reps support teachers e.g. answer questions, help with moderation, help run PLD workshops. Access here <https://www.earthspacescience.org.nz/contact>
	+ To access shared resources contact Jenny at admin@earthspacescience.org.nz
	+ Scholarship resources <https://www.earthspacescience.org.nz/resources/scholarship>
	+ ESSE Facebook Page <https://www.facebook.com/groups/872599616153949/>
	+ ESSE will be running a Geology day in 2023 (wth GNS)
	+ Enquiries about NCEA review to Mairi at president@earthspacescience.org.nz
* FaceBook page for NZ **astronomy** educators <https://www.facebook.com/groups/astredu/>
* From term 3 the StudyIt website has some good discussionfor L1, 2 & 3 students<https://studyit.govt.nz/subjects>

**Physics**

* The NZ Institute of Physics is for professional physicists, including college teachers. <http://nzip.org.nz/>. Join up [here](https://nzip.org.nz/join-nzip/nzip-membership-information/), get added to the database [here](http://pldsupport@nzip.org.nz)
	+ NZIP has NeX funding to provide PLD and support, sign up for this [here](https://nzip.org.nz/education/professional-development-support-for-teachers/)
	+ They offer a [resource bank](http://www.physics.school.nz/) including QAAMd resources & resources for Scholarship, as well as shared google drives [one](https://sites.google.com/view/uoaptd2017/google-drive-info) and [two](https://sites.google.com/view/physicsrealm/global-list).
	+ NZIP is on <https://www.facebook.com/groups/719514905248361> andTwitter <https://twitter.com/nzphysics> and YouTube <https://www.youtube.com/channel/UCoAem0AV__zZE3iFR5jH7MA>
	+ A course on Te Reo Māori for physics teachers <https://www.youtube.com/watch?v=ffoKNEZQslE>
	+ Physikos conference will next be in Auckland in July 2023
* From term 3 the StudyIt website has some good discussionfor L1, 2 & 3 students<https://studyit.govt.nz/subjects>
* FB:NZ Physics Teachers <https://www.facebook.com/groups/NewZealandPhysicsTeachers>
* As well as NZIP, Dave Corner is an experienced Physics teacher happy to answer email queries crr@pakuranga.school.nz .

**Primary**

* NZAPSE is the NZASE association that supports primary science teachers. https://nzapse.nzase.org.nz/
* Facebook: NZ Primary Science Teachers <https://www.facebook.com/groups/144591922894729/>
* Sandy Jackson sends out a newsletter for NZAPSE. Contact her to be added to the list nzapse.nzase@gmail.com
* Primary Science week is held week 3 of term 2 each year & NZAPSE offers resources, activities and webinars  <https://nzapse.nzase.org.nz/primary-science-week-2022/>

**Pūtaiao**

* Pauline Waiti manages Pūtaiao wahanga ako for Kahui Pūtoi (online network) for teachers & kaiako of Science & Pūtaiao. pauline.waiti@gmail.com
* Facebook: Ako Panuku <https://www.facebook.com/pg/akopanuku/posts/?ref=page_internal>

Pūtaiao <https://www.facebook.com/groups/389168031181767/>

* Resources for new Pūtaiao standards can be found on Kauwhata Reo website, although it seems to be a mission.

**Science**

* NZASE is the subject association for all science teachers <https://nzase.org.nz/> (info on p.1)
* Facebook: NZ Science teachers. <https://www.facebook.com/groups/346737702172016/>
* Ang Whitlam’s Google Folder for sharing resources <https://drive.google.com/drive/folders/16bnkea1OzIalrvj02qhVypfUC5yKz9Fl>

**Nature of Science (NoS)**

* **Science Online**: A community on tki that provides great support for Nature of Science (NoS) with many classroom-ready activities. <http://scienceonline.tki.org.nz/>
* **Science Capabilities:** These break NoS into five key skills. The website explains each of these and shows how to incorporate them into our teaching. Their focussing questions are particularly helpful. <http://scienceonline.tki.org.nz/Science-Capabilities-for-citizenship>
* **Science Exemplar Matrices:**  These break down NoS into discrete skills in 4 different areas. Originally written for the 1994 curriculum these are still very useful for the 2007 curriculum. [www.tki.org.nz/r/assessment/exemplars/sci/matrices/index\_e.html](http://www.tki.org.nz/r/assessment/exemplars/sci/matrices/index_e.html)
* **Webcasts** on the 5 science capabilities. Contact Mike (see footnote) to access these.
* **Upd8**: <http://www.upd8.org.uk/> This UK website has many interesting & varied activities for NoS - & is free to join. It changed to Engage in 2012, <http://www.engagingscience.eu/>
* **Understanding science:** <https://undsci.berkeley.edu/teaching/1316_activities.php>
* **Connected** – this journal is a source of NZ science stories. From 2013-2017 focussed on science capabilities. <https://instructionalseries.tki.org.nz/Instructional-Series/Connected>

**Technicians**

* NZ technician’s FB Page <https://www.facebook.com/groups/842023323557957>
* **STANZ** is the association for science technicians <https://stanz.nzase.org.nz>
	+ Members can access SciTechTalk a free email discussion to get answers to Qs
	+ They have health & safety advice
	+ They offer conferences every 2 years, next in 2023
	+ They send out a newsletter each term