

The New Zealand Herald

Wednesday April 23, 2003

Students' universe of study expanding

16.04.2003 - By SIMON COLLINS science reporter

Senior high school students will be able to take astronomy as a separate subject from next year, thanks to an initiative from Wellington's Carter Observatory.

The observatory plans to submit draft unit standards for the new subject to the Qualifications Authority next month.

Once approved, the subject will be available as a full 20-credit subject or in smaller units in a school's Years 11 to 13.

A member of the observatory's board, Porirua city councillor Robert Shaw, said units would include space, the solar system, practical astronomy, Maori and Pacific astronomy, and cosmology, the study of the origins and development of the universe.

"A lot of these unit standards will involve doing work on the internet with data streaming from telescopes around the world," he said.

"We see astronomy as a method to get youngsters involved with technology and involved with science more broadly."

Qualifications Authority spokesman Bill Lennox said the authority was close to recognising the new subject.

"We have to be sure that the group advising us is nationally representative of the experts in the field," he said.

"Because of its statutory role the Carter Observatory clearly is, and it has been consulting other astronomy organisations."

Auckland University Associate Professor Phil Yock, who chairs the observatory's expert panel on the new subject, said astronomy was always popular.

"You go to a cocktail party and say you are a physicist and no one knows what to say.

"But if you say you're an astronomer it's quite different. Everyone likes astronomy," he said.

"It really is a way of getting young people into physics in a painless way. People like Einstein, Newton, Galileo - that's how they got into physics, through astronomy."

Auckland College of Education physics lecturer Denis Burchill said many students doing general science were now getting achievement standards in specific sciences such as physics and biology.

"Having astronomy will give schools greater flexibility and an opportunity to choose things that would suit their students," he said.

The president of the Association of Science Educators, Jenni Edwards, said

rural schools such as Okaihau College near Kaikohe, where she teaches, would welcome the new subject.

"We are particularly excited about the provision of distance learning modules, which will be provided by the Carter Observatory," she said.

"These will be of particular value to schools, particularly in isolated rural areas, where there is nobody on the staff with astronomy expertise."

Ministry of Education senior analyst Steve Benson said science was still much more popular in schools than economics or accounting.

The numbers taking general science in Year 11 dropped slightly from 77.8 per cent in 1997 to 74.6 per cent in 2001, but this reflected a general "diversification" of school subjects.

Astronomy accounts for two of the 24 assessment credits in each year of the general science curriculum.

But an analyst with the Ministry of Research, Science and Technology, Richard Meylan, said too many good students dropped science at university and took business and law instead.

"We are trying to address that culture where people go into science or business, when New Zealand is going to need those skill sets combined together," he said.

The Careers Service is running a trial project in Waikato high schools this year to encourage Year 13 students, who plan to do business or law next year, to keep up maths and sciences as well.

©Copyright 2003, NZ Herald