BY THE END OF YEAR 8

ILLUSTRATING THE READING STANDARD

"One Small Step" *School Journal*, Part 4 Number 3, 2009 *Noun frequency level: 11–13*

By the end of year 8, students are required to use a range of fiction and non-fiction texts to locate, evaluate, and synthesise information and ideas in order to meet the reading demands of the curriculum, drawing on the knowledge, skills, and attitudes described for the end of year 8 in the Literacy Learning Progressions. The curriculum tasks will also involve the students in generating their own questions as well as answering questions from the teacher.

A year 7 and 8 class is conducting an inquiry into exploration and related challenges and opportunities. This involves the students developing an understanding, within the social studies curriculum, of how exploration and innovation create opportunities and challenges for people, places, and environments. As part of the inquiry, the students are exploring the challenges faced by the Apollo Program – challenges involved in landing a person on the surface of the Moon. They reflect on why people might face and accept such a challenge.

"One Small Step" is a mixed text type: it is a scientific report containing features of narrative texts (including dialogue) and of explanation texts. These features require students to transfer their understanding of one part of the text to other parts as they evaluate and synthesise information. The text includes some challenging topic-specific vocabulary, sentences of varying complexity, and a range of illustrations and photographs, many with labels or captions.

The teacher chose "One Small Step" to develop the students' understanding of the nature of human endeavour (in particular, of why people take on challenges). The students need to locate information within the text, evaluate whether it is relevant, and then synthesise the information to develop their understanding of why people take on challenges.

The following example illustrates aspects of the task and text and demonstrates how a student engages with both task and text to meet the reading demands of the curriculum. A number of such examples would be used to inform the overall teacher judgment for this student.

In 1961, eight years before …

By the mid-1960s, the Apollo Program to land a man on the lunar surface was well under way.

Then on 27 January 1967, an electrical spark inside the command module started a fire that burned with terrible heat in the oxygen-filled interior.

The descent got scary. Eagle's primitive computers became overloaded, and alarms shrilled inside the lunar module. The autopilot was steering them towards a rock-strewn crater …

The student prepares for reading by revisiting his prior knowledge of the first lunar expedition. He identifies two main questions to help him find out why the people in this programme chose to face the challenges involved: What were the challenges of the programme? What were the expected benefits or opportunities that made people want to face the challenges? The student identifies some of the programme's challenges, including the development of new technology and the dangers arising from this, which resulted in loss of life. He reflects on the magnitude of the *Apollo 1* tragedy and asks why the programme continued despite this. For example, did it continue because a former president had promised that it would happen or because particular benefits were still expected? The student also identifies challenges that the astronauts faced during their descent to the lunar surface. He notices that the computer problem provided an opportunity for Armstrong to use his skills and for the team on Earth to express support.

And the programme may also help to save the human race.

Apollo 11 may have been one of the first steps in getting us there.

The student asks questions such as "What kinds of discoveries were made during the Apollo Program?" in order to identify possible benefits of the lunar landing (which could have motivated people to face the challenges). He distinguishes between factual information in the text and hypothetical scenarios by identifying the repeated word "may", which signals that the author is no longer reporting on facts but is suggesting possibilities.

… our moon formed in a "big splash" billions of years ago when Earth was sideswiped by something the size of Mars.

As it grows, it [the Sun] will scorch the surfaces of Mercury, Venus, and Earth.

The student connects the ideas of the "big splash" and "sideswiped" to infer that the Moon originally came from Earth. He uses his prior knowledge of "scorch" to imagine the effect that the predicted swelling of the Sun could have on planet Earth. He then asks questions about the global challenges this would present if people are still around in two billion years.

The Apollo Program brought discoveries in medicine, engineering, and astronomy.

The student finds the general statement that the Apollo Program brought discoveries in medicine, engineering, and astronomy, and he makes plans to seek more precise information about the nature of these discoveries. He synthesises information from within the text and across other texts on space exploration to conclude that the discoveries might lead to finding ways for humans to live on other planets. He reviews his purpose for reading and decides that he will need to seek more information to find out to what extent it was actually the expected benefits to humanity that made people willing to face the challenges of being involved in the Apollo Program.