

# Study condemns ramshackle schools

AUSTRALIAN public schools have been allocated far less to upgrade buildings and classrooms than schools in the United States and Britain, renewing concerns that too many students are studying in dilapidated conditions.

As schools prepare to reopen, research has found Australian governments are spending about \$1000 less for every student on school infrastructure than the US and Britain, a funding gap of \$11.2 billion since 2002.

A report by **Adam Rorris**, an education economist who has worked for the United Nations, says investment in public school buildings is about one-third of

the amount spent by private schools.

"I think policymakers and education ministers around this country need to get their heads around this gap in a serious way," Mr Rorris said.

Principals said the figures confirmed that too many students were studying in unsuitable conditions and urged a government rethink.

**"We need additional funding to modernise our school buildings and ensure they are fit for 21st century learning," the president of the Australian Education Union, Angelo Gavrielatos (photo), said.**

The figures show that in 2002 US schools received \$1892 per student, British schools received \$1013 a student, and Australian public schools received \$453. In 2006 British schools received \$1791 a student. The figure for US schools was \$1525 and for Australia it was \$659.



"The two countries that are absolutely loved by Australian policymakers are the US and the UK ... yet Australian public schools have been about \$1000 behind for the last five years for which we've had ... consistent data," Mr Rorris said.



## Gaza: Dramatic Experience for Humanitarian Missions

FREE GAZA representatives gave a Press Conference during which they criticized the Israelis' stance on the attacks against Gaza and the obstacles they raise to humanitarian missions. Egypt was also criticized for the obstacles it raises to humanitarian missions, while the Greek government was accused of not exerting enough pressure to allow vessel "Arion", carrying humanitarian aid to reach the Gaza Strip. Member of the Network for the Political and Social Rights Vaggelis Pissias spoke of a highly aggressive stance that aims at making it clear that the threat of the attack to the humanitarian missions is intense and clear; for this reason they should stop. Moreover he said that more determined people should participate in such actions, because this is what the Palestinians need.

Moreover, at a Press Conference held in the Correspondents of the Foreign Press, "The Doctors of Peace" presented on the occasion of echelons' visit to Gaza shrapnel from Israel's bombing in Gaza Strip hospitals. "We are neither heroes nor brave men, but humans", they stated, describing the tragic conditions prevailing in Gaza "a modern Aswitch."

# Science probes 'memory' in human cells

*That chocolate bar you've consumed won't only affect the way you fit your jeans, new Australian research shows it also has a lasting effect on your genes.*

Researchers in Melbourne are investigating the way human cells are known to have a "memory" and they discovered that a cell, when given a one-off sugar hit, will carry a related chemical marker for weeks.

"We now know that chocolate bar you had this morning can have very acute effects, and those effects continue for up to two weeks later," says Associate Professor Sam El-Osta, of the Baker IDI Heart and Diabetes Institute. "These changes continue beyond the meal itself, and have the ability to alter natural metabolic responses to diet." The studies were conducted in human aortic tissue, and in mice, with the same results.

Dr El-Osta said it showed how cells could remember and replicate the effects on the body of a poor diet.

It also provided fresh insights into why obesity and diseases such as diabetes can run in families over generations - because the "epigenomes" in which cell memories were stored may be hereditary.

Dr El-Osta said the problem may not be the genes a parent passes on to their child but the epigenomes, which



could come preloaded with the effects of a poor diet.

"Humans have only one genome and once the DNA sequence is written it doesn't really change, nor can we really control it," he said.

"Epigenetics is what makes our genome alive ... and makes it function normally, or in this case with a high sugar diet, abnormally.

"Potentially, this can be transmitted from one generation to the next." Dr El-Osta said the work had re-emphasised the need for a healthy nutritious diet to "nurture our epigenomes for the future".

# Endangered list grows as slow and steady lose the race

**Deborah Smith**  
Science Editor

AFTER surviving for more than 100 million years, the world's largest sea turtle has been placed on the national threatened species.

Leatherback turtles, which are found in waters off NSW as well as south Queensland and Western Australia, can grow up to 1.6 metres in length and 700 kilograms.

The Environment Minister, Peter Garrett, said yesterday that the turtles, which had previously been classified as vulnerable, were now considered an endangered species.

"The uplisting is mainly due to the ongoing threat the turtle faces from unsustainable harvesting of egg and meat, and

pressures from commercial fishing outside Australian waters," he said.

The move meant that any projects or activities that could have an effect on the reptiles would need to be assessed and

approved by the Federal Government before they could go ahead.

It is estimated that only about 2800 adult female turtles remain in the western Pacific region, and their numbers are expected

to decline due to other risks, including boat strikes and choking on plastic bags and other marine debris.

A NSW orchid and a Bankstown shrub, as well as alpine bogs, grasslands and woodlands across the state, were also among the 19 species and five ecological communities that the Department of Environment listed as critically endangered or endangered.

The critically endangered kangaroo sun orchid, which has dark blue flowers, is found in only three locations near Robertson in the Southern Highlands, and fewer than 50 mature plants of the critically endangered Hibbertia shrub remain near Bankstown Airport.

The survival of five species of snail on Norfolk Island and four

on Lord Howe Island is also threatened by factors including the invasion of weeds into their habitats and predation by introduced rats, birds and ants.

Mr Garrett said alpine peat moss bogs, which occurred along streams and wet valley edges and floors in NSW, the ACT and Tasmania, also needed to be protected. "This ecological community provides essential habitat for several species of nationally threatened plants and animals, in particular the southern corroboree frog and the baw baw frog, which breed in Sphagnum moss." The bogs were also an important water source for rivers including the Murray and Murrumbidgee, but would be put under more pressure as temperatures climbed due to climate change.

