GEOGRAPHY BULLETIN Spring 2006 – Volume 38 No 4

ANNUAL REPORT Sussan Bliss P3

ENVIRONMENTAL REFUELES: ANOTHER GLOBALVVARMING CRISISP David Hamper p21

AUSTRALIAN VILLEULTUR AND WINEMAKING: AN INDUSTRY IN CRISIS Grant Kleeman p32

Geography and the Environment



B U L L E T I N G E U G B B A Y I Y

Spring 2006 Global Education – Vol. 38, No.4

EDITOR: GRANT KLEEMAN

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Grant Kleeman	. 2
Annual Report, Geography Teachers' Association of New South Wales Susan Bliss	3
GTA Goes to Canberra Susan Bliss	10
2006 National Geographic Channel Competition Kath Berg	12
International Geography Olympiad Brisbane, 2006 Kath Berg	14
'True Blue' Geography Bill Pritchard & Nick Hutchinson	16
Board of Studies responds to GTA's request for a revision of the HSC Examination specifications	10
Eric Bedford obiłuary Don Biddle	20
Environmental refugees: Another global warming crisis? David Hamper	21
Climate change and winter sports: Environmental and economic trends Rolf Burki, Hans Elsasser and Bruno Abegg	26
Australian viticulture and winemaking: An industry in crisis Grant Kleeman	32
Water for all: A new classroom resource for Stage 4 Rod Yule	38
Creating healthy societies through inclusion and equity: Health of Indigenous Australians	ЛА
Susan Bliss	41
Eingnoigl statement	50
	54

editorial policy

Editorial policy attempts to:

- promote material which will assist the study and teaching of geography
- encourage teachers to share their ideas on teaching geography
- provide a means by which teachers can publish articles
- inform readers of developments in geographical education

Articles are sought reflecting research and innovations in teaching practices in schools. From time to time issues of the Bulletin address specific themes.

REFEREEING All suitable manuscripts submitted to the Geography Bulletin are subject to the process of review. The authors and contributors alone are responsible for the opinions expressed in their articles and while reasonable checks are made to ensure the accuracy of all statements, neither the editor nor the geography teachers' association of new south wales, inc accepts responsibility for statements or opinions expressed herein.



©Copyright 2006 Geography Teachers' Association on New South Wales, Inc. Unless otherwise indicated in an article, non-profit organisations such as schools and universities may make up to 30 photocopies of any article in this journal without obtaining further permission. This is the final issue of the Geography Bulletin for 2006. As can be seen from the President's Annual Report, the GTA has had a very big year in terms of its professional development program. A report on one of these initiatives - the Canberra Conference - provides an insight into the nature of these activities and the feedback received from participants. Other inclusions include a response from the Board of Studies addressing the GTA's request for a revision of the HSC Examination specifications; a discussion of global warming and its potential for initiating an environmental refugee crisis by David Hamper; a discussion of climate change and its impact on winter sports by Rolf Burki, Hans Elsasser and Bruno Abegg; a investigation of the crisis facing the Australian winemaking industry by Grant Kleeman; a look at a new classroom resource for Stage 4 Geography - Water for all - by Rod Yule; and an examination of Indigenous health by Susan Bliss.

GEOGRAPHY COMPETITIONS

Reports on the 2006 National Geographic Channel Competition and the International Geography Olympiad by Kath Berg draw attention to the amazing success of these initiatives. The number of students participating in the national competition now exceeds 92,000 students from 836 schools.

DEPUTATION TO SEE JULIE BISHOP, MINISTER OF EDUCATION, SCIENCE AND TRAINING

In recent months, there has been considerable debate about the place of Geography in the school curriculum. Position statements have been prepared and a meeting organised with the federal Minister of Education, Julie Bishop. Those attending the meeting will seek to convince the Minister that Geography should feature prominently in any national curriculum. In this edition of the journal we publish a paper written by Bill Pritchard and Nick Hutchinson. In their article - 'True Blue' Geography - Bill and Nick argue that History and Geography are the warp and woof of the social sciences and that a study of the latter is critical to our capacity to understand the workings of the world's physical and societal systems, and the interactions between them. **PROMOTING GEOGRAPHY POSTERS**



Many GTA members have requested resources promoting Geographical Education. In response, AGTA has developed a series of high quality posters promoting the study of Geography in Australian schools. The posters, which incorporate strong photographic images (provided by the

National Geographic Channel) and quirky cartoons, provide Geography with a fresh, contemporary profile. The posters will capture your students' attention and prove a valuable marketing tool. There are five posters in the set and each is covered in a durable, high quality laminated film. The posters are great value at just \$25.00 a set. An order form is available on the GTA's website.

On behalf of the Council of the Geography Teachers' Association I would like to extend our best wishes for the holiday season and the New Year to all members and readers.

Grant Kleeman, Editor



GRANT KLEEMAN EDITOR

Annual General Meeting Report

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Overview

During 2006 Geography Teachers' Association of NSW held twenty-one professional development activities for teachers and High School Certificate students. Over 1,000 teachers attended a range of inservice activities focusing on Geography skills, leadership, teaching methodologies, external examinations, fieldwork, information and communications technologies, civics and citizenship, the mentoring of new teachers, interpreting cartoons, literacy, numeracy, values education, classroom management, holistic programming and the NSW Institute of Teaching. Topics covered a range of contemporary global issues such as poverty, trade, aid, nongovernment organisations, citizenship, managing World Heritage Sites and global warming.

These professional development activities varied from three hours to two days length and were held both in metropolitan Sydney and regional NSW. The New South Wales Global Education Project supported all these initiatives and three were subsidised by the Australian Government **Quality Teacher Program. Three** were coordinated with the History Teachers' Association, two with the Catholic Education Office (Newcastle, Canberra),

one with the independent schools sector (Kinross Wolaroi Orange) and one with the Economics Business Educators. A New South Wales sustainable water project, in partnership with the Science Teachers' Association, is in the process of being developed. It will be presented at professional development activities in 2007.

A forum was held on the state of Geography in NSW. Teachers from the public, independent and the Catholic sectors attended and addressed issues such as: the declining number of students sitting for the Higher School Certificate; the number of untrained disciplinespecific teachers teaching Geography; the cost of fieldwork; lack of choice in the Higher School Certificate Examination; mandatory Australian Geography component in Stage 5; competition from Business Studies and VET courses; and misunderstanding of 'Geography' by peers, parents and the media. An outcome of the forum was the writing of a letter to the Board of Studies requesting a change to the HSC Geography examination specifications.

The New South Wales Global Education Project contract, funded by the Australian Government (AusAID) has been successfully managed by GTANSW since 2001. As a result of impressive quantitative and gualitative evaluation indicators the contract has been renewed three times in that period. A consortium headed by GTANSW has again successfully tendered for the project (2007–09).

Membership

Approximately 450 members belong to GTANSW. The provision of discounted conference fees for financial GTA members is being used as an incentive to increase membership.

Staff and Council

At present the council consists of a diversity of hard working, enthusiastic Geography Educators. There are, for example, twenty-three teachers from public, independent and Catholic schools - heads of departments, a deputy principal and representatives from Department of Education and Training, Association of Independent Schools, the Geographical Society of NSW, and university-based academics (Macquarie and Sydney); nine country and corresponding council associates; four co-opted councillors and Marilyn Herrod the Office Manager.

Many of the members of the GTANSW Council are about to retire. GTA invites interested, enthusiastic teachers, especially young teachers, to join the council.

Nick Hutchinson, Vice

President of GTA, is also Chairperson of the Australian Geography Teachers' Association (AGTA). Nick, a well-known textbook author, teacher, teacher educator and presenter at Geography conferences for over twenty years, presented a report to the International Research in Geographical and Environmental Education Journal on the State of Geography in Australia.

Dr Grant Kleeman and Dr Susan Bliss are both Directors on AGTA. AGTA executive meets twice a year and has successfully held a national conference in Tasmania in January this year. AGTA has also produced a Geography Skills Book (Macmillan), new Geography posters and is working towards a fieldwork textbook to be distributed nationally.

Other council members play a prominent role in NSW education. Dr Mary Fogarty is, for example, a member of the NSW Board of Studies; Sue Field is HSIE Coordinator for the Department of Education and Training; and David Hamper and Sarah Menassa are Geography coordinators for the Association of Independent Schools.

Professional Development and Annual Conference

GTANSW ventured into new territories by organising conferences and workshops on: the State of Geography in NSW; Geography for New Teachers; the Leadership Conference; Country Conferences in Canberra, Orange and Blackheath; and a country HSC conference at Orange.

GTANSW also held combined conferences with other Professional Teachers' Associations such as the History Teachers' Association of NSW (three School Certificate evenings) and the Economics Business Educators NSW (Leadership Conference). There were also links with the Primary Teachers' Association (Dr. John Buchanan) and Asia Education Teachers' Association (Julie O'Keefe and Jennifer Curtis). There was promotion across sectors such as the Association of Independent Schools via David Hamper and Sarah Menassa and the Catholic Education Offices in Canberra and Newcastle.

From the collation and analysis of participant evaluations it was noted that teachers requested more professional development on the following topics in 2007: Geographic tools; GIS; setting and marking examination questions; ICT; civics and citizenship; managing new teachers; and basic Geography knowledge and skills for new Geography teachers.

Publications

The excellent, informative Geography Bulletin is published four times a year. The 2006 journals were edited by Dr. Grant Kleeman (summer, autumn, spring) and David Hamper (winter).

The journal remains the principal means by which GTA promotes the study of Geography in NSW schools.

The new photographic cover format has proved popular and will continue. The effort made to provide material that supports the work of teachers in classrooms appears to be popular with GTA members.

Over the year the Geography Bulletin included a CD Rom (Poverty-Global Education) and a Geography promotional poster.

The editor is keen for more teachers to write for the Geography Bulletin to ensure a diversity of perspectives and teaching methodologies are showcased. The Journal's Editorial Board will also referee articles submitted as partial fulfilment of the requirements of Masters and Doctoral degrees.

Grant should be congratulated for the production of this high quality resource. Many editions have won national awards over the past five years.

Funding and Grants

GTANSW was fortunate to receive funding from the Global Education Project to support professional development activities. Additional support was received from:

- Australian Government Quality Teacher Program: \$18,160 for the Leadership Conference (with Economics/Business Educators NSW) and two country conferences held in Orange and Canberra
- Metropolitan Water Directorate in the Cabinet Office: \$42,000 to develop and deliver education resources related to the Metropolitan Water Plan covering Sydney, Hunter, Illawarra and Shoalhaven areas
- Heinemann: 600 satchels for GTA conferences
- **Publishers** such as Jacaranda, Heinemann, Cambridge and Macmillan provided book prizes for conferences

Global Education

Global Education has been managed by GTANSW since 2001. At least 40,000 teachers and university students have attended conferences and workshops on Global Education over the six years.

The project has successfully integrated transdisciplinary Global Education within Geography as well as primary HSIE, secondary HSIE (Economics, Business Studies, Commerce, Legal Studies, Studies of Religion, Society and Culture, formerly Asian Studies), English and Science.

TERM 1				
No	Date	Торіс	Location	Details
50	Thursday 16 February Years 11-12	HSC School Certificate Overview of the state of Geography in NSW	SHORE School	 Presenters: Susan Bliss, Sharon McLean Rod Lane, John Lewis, Sharon Humphreys, Peter Steffan Organised: Sharon McLean and Rod Lane Key points: declining participants with decreasing number of students studying HSC Geography (even though there was a 10% increase in 2005) evaluation of night led to the forum meeting
25 One teacher per school	Tuesday 28 March	Forum: State of Geography	El Rancho Hotel Ryde and Dinner	 Presenter: Overview by John Gore (DET): discipline; curriculum; school organisation; student needs; pedagogy; resources Organised: Sue Field Key points: groupwork – responses presented back to participants those who could not attend sent faxes, letters and comments on geogtchonline@yahoogroups.com.ai collation and analysis of responses (Bliss, Field) response – Bliss sent letter to BOS (May) for choice in the three extended responses in HSC 2U Geography. In line with other HSIE subjects. Still no response. future – response after reply from BOS e.g. (structured/unstructured extended response questions; open up syllabus K-12 Geography)
55	Tues March 7 Years 7-10	School Certificate Evening	Catholic Schools Office Newcastle	Joint GTA/History Teachers' Association (combined external two-hour History, Geography and Civics and Citizenship Test) Presenters: Pam Panczyk (Jamison HS), Michelle Montano (Our Lady of Mercy College, Parramatta), Tracey Sullivan (Quakers HII HS), Di Twomey (Wadalba CS), Jan Gillespie (Henry Kendall HS), Pam Greog (Keira HS), Kate Cameron (BOS), Garry Webb (BOS) and
60	Wed March 15 Years 7-10	School Certificate Evening	Catholic Schools Office Newcastle	Carol Taylor (BOS), Susan Bliss (GTA), Sue Field (DET) Organised: Sue Field Key points: • increased popularity - from one conference in 2004 to three in 2005 and 2006 • located N. S and W of Sydney
55	Tues March 21 4-7pm Years 7-10	School Certificate Evening	'Tradies', Manchester Road, Gymea	 Positive evaluation biggest group was from teachers who taught both history/geography. most people found out about workshop through promotional fliers many suggested workshops on exam question design for 2007
30	Mon March 20 4-7pm Years 7-10	Skills Evening	Mingara Rec Club Tumbi Umbi	
30	Tues March 21 4-7pm Years 7-10	Skills Evening	Parramatta	Presenter and Organiser: Dr Grant Kleeman Geographical tools 7-10 for new teachers of Geography Key points: • increased popularity required four workshops to address increasing number of non
30	Mon March 27 4-7pm Years 7-10	Skills Evening	'Tradies', Gymea	Geography teachers teaching Geography • positive evaluation • more required in 2007 with increasing number of non-geographers teaching Geography
30	Tues April 11 4-7pm Years 7-10	Skills Evening	Parramatta	
60	Friday April 7 All Day Years 7-10	Geography for New Teachers Conference LIMIT 60	Cockatoo Island Joint GTA/Sydney Harbour Federation Trust	Teaching activities, cross curricula features, skills, ICT, aid, trade, NGO's (civics and citizenship), holistic programming -inequality, cartoons, fieldwork. Organiser: Susan Bliss, Katrina Jones (SHFT) Key points: • positive evaluation • addressed increasing number of non qualified teachers teaching Geography • more required in 2007 • these topics were addressed in country conferences-Orange and Canberra Speakers: Susan Bliss, Nick Hutchinson, Sue Field, Rod Yule, Ian Sanders, Sarah Menassa, Bruce Foott Positive evaluation

TERM 2					
No	Date	Торіс	Location	Details	
25	Thurs/Fri May 11 & 12 Two Days	Blue Mountains: Tourism and World Heritage Site	Blackheath Redleaf Resort	 Managing a World Heritage site - Blue Mts; actions of local, state and federal governments, civics and citizenship, tourism, ecological sustainable development, fieldwork, programming 7-12. Edge Theatre, National Parks and Wildlife, Scenic World Katoomba, Botanic Gardens, Youth Hostels Australia Dinner speakers; UWS-tourism in World Heritage Sites e.g. Cambodia Organiser: Sue Field and David Hamper Key points: positive response to a fieldwork site close to Sydney that can be studied from years 7-12 positive response to the availability of resources (information and people) to support fieldwork in the Blue Mts should be repeated in 2007 Speakers: Philip Hammon, Aunty Joan, Susan Bliss, Sue Field, Jacqueline Reid, Jessica Lloyd, Antony Tilt, Prof. Robyn Bushell (UWS), Dr. Russell Staiff (UWS), Kerry Fryer, Adrian Murphy, Naomi Goosen. Terry Mc Cann, Mike Roberts, David Hamper 	
	Attended by Chai	National Geogra rperson of Austra	phic Channel Geo lian Geography Te	r graphy Competition Finals – 5th June Taronga Zoo, Mosman eachers' Association (AGTA) Nick Hutchinson and Director of AGTA Susan Bliss	
30	Monday May 22 4-7pm	GIS and the Geography Curriculum - Implementation of working examples in the classroom	The Kings School, Parramatta	Especially useful for beginners of GIS Presenter: John Kinniburgh Organiser: Susan Bliss • Positive response to workshop • Suggestion for 2007: Two workshops: GIS for beginners and GIS for teachers with greater expertise in GIS	
Limit 150 (could have at least 200)	June 2 All Day	Leadership Conference	Novotel Hotel, Homebush Bay	Joint GTA/Economics Business Educators NSW Organised: Susan Bliss and GTA/EBE Committees Twelve presenters: University lecturers, BOS, DET, experienced teachers. Topics: Trends in HSIE in NSW; Syllabus Changes and Implications for HOD; UK Approach to Developing Thinking Skills in Curricula; Research on Subject Based Leadership; Mentoring and Induction of Newly Appointed Teachers; Teachers Accreditation Programmes; Classroom Management; NSW Institute of Teachers; Values Education; Quality Assurance and Compliance; Putting Literacy and Numeracy in HSIE; ICT Skills for Leaders. Links to Leadership blog and mentoring of teachers for remainder of year Summary of the day with copy of presentations distributed at conferences in Canberra and Orange Speakers: Kate Cameron, Dr. Mike Horsley, Carmel Young, Karen Critchley, Glenn McLachlan, Dr. Gordon Lyons, Emeritus Professor Tony Blake, John Gore, Sue Field, Nick Hutchinson, Martin Pluss, Bronwyn Hession Internet and Blog: Martin Plüss Subsidised by Australian Government Quality Teacher Program. Positive evaluation	
97	June 23 All Day	HSC Student Lectures	St Andrews Cathedral School		
20	June 7 All Day	HSC Student Lectures	St Marys Senior High School	Speakers: Dr. Grant Kleeman, Chris Tanner, Terry McCann, Aaron Williams, Lorraine	
62	June 15 All Day	HSC Student Lectures	BWSC Woy Woy	Chaffer, Comments: Financial concern over the number of in-services with declining candidature, such as only 20 at St Marys	
40	June 28 All Day	HSC Student Lectures	Smiths Hill High School, Wollongong	Positive response to speakers especially at Orange	
50	June 20 All Day	HSC Student Lectures	Kinross Wolaroi School, Orange		
50	Wednesday June 21 All Day	Country Conference for New and Experienced Teachers	Kinross Wolaroi School, Orange	Organised: Susan Bliss Gary Bone (Kinross Wolaroi) New teachers: Teaching activities, cross curricula features, skills, ICT, aid, trade, NGO's (civics and citizenship), holistic programming - inequality, cartoons, fieldwork. Experienced teachers: Summary of Leadership Conference. Links to blog: Martin Pluss Speakers: Susan Bliss, Nick Hutchinson, Martin Pluss, Dr. Grant Kleeman, Ian Sanders, Rod Yule, Sue Clarke Subsidised by Australian Government Quality Teacher Program. Positive evaluation	

TERM 2 (Continued)					
No	Date	Торіс	Location	Details	
	Thursday July 20 New and Experienced Teachers	Country Conference	Narrabundah Inservice Centre Canberra	Organised Susan BlissDominic Braydon (CEO)New teachers: Teaching activities, cross curricula features, skills, ICT, aid, trade, NGO's (civics and citizenship), holistic programming - inequality, cartoons, fieldwork.Experienced teachers: Summary of Leadership Conference.Speakers: Susan Bliss, Nick Hutchinson, Martin Pluss, Dr Grant Kleeman, Ian Sanders, Rod Yule, Dr. Gordon Lyons, Sidsel Farrimond.Links to blog: Martin Pluss Subsidised by Australian Government Quality Teacher Program. Positive evaluation	
UN Year of Deserts and Desertification-Global Education Distribution of two posters, Canberra Times and Global Education Activities. Organised: Susan Bliss					
Geography Week: Each member to get a poster free of charge. Organised: Dr. Grant Kleeman					

TERM 3

No	Date	Торіс	Location	Details
	Friday August 18	Annual Conference Theme: Voices of Climatic Change Day 1	Parliament House	Organised: Dr Mary Fogarty Keynote address: Living in the Hothouse Ian Lowe, Australian Conservation Foundation, President Climatic Change Global and Australian Responses: Dr John Kaye The Big Picture: Reading the past to explain the present and plan the future, Mary White - author, Falls Retreat/Coffs Harbour Assoc Professor Michael Box – University of NSW Teaching Climatic Change: Dr Grant Kleeman, Nick Hutchinson and David Hamper Awards: Brock Rowe, Geoff Connolly and Global Education awards
	Saturday August 19	Annual Conference Day 2	Sydney Harbour	Using Sydney Harbour & Environs for Geography Fieldwork Darling Harbour, Pyrmont, Ultimo Morning Tea at Garden Island Explore Foreshore Park and Heritage Sites Lunch at Watsons Bay Afternoon: Visit Fort Denison Organised: Mary Fogarty
	Friday September 22	Closing date GTANSW Geography Fieldwork Competition		

	TERM 4					
No	No Date Topic Location Details					
	Thurs Nov 16	Presentation Evening	Wenona	Awards: Fieldwork and Global Education poster/web competition		

In 2006 the Global Education Project has:

• Designed and developed teaching and learning resources The Global Education Project distributed the following free resources at conferences: Aid and Travel (Lonely Planet); Focus (AID, Autumn 2006); Globalisation Me! Book and CD-Rom (Stage 4–5); Art of Governance; Global Perspectives: A Statement on Global Education for Australian Schools; Focus Magazines (Pacific Islands; Water; Refugees; Sport; HIV/AIDS; Tsunami); posters (Microcredit, UN Year of Deserts and Desertification, Rice); Canberra Times (Tsunami, Deserts and Desertification); CD-ROM (Microcredit (2); and Poverty. All conferences received handouts on Global Education topics and weblinks relevant to Geographical topics in Stages 4-5 and Stage 6. Susan Bliss wrote Global Education articles for the *Geography Bulletin* and two books with CD-ROMs on *Inequality* and *Sustainable Environments*. Both resources focused on responsible, informed active local to global citizenship. These resources won a national award in 2006.

- Professional development of teachers Susan Bliss presented refereed papers at four international conferences on Global and Geographical Education. She presented a paper at the Social Educators' Association of Australia's biennial Conference (Brisbane) on Child Labour and Tourism Industry (published in the Social Educator): and the Asia Education Teachers' Association of Australia Conference (Indonesian Embassy) on Asian Rivers and their Ecological Sustainable Management.
- University courses Susan Bliss lectured at Macquarie University in their Global Leadership Program on *Rights and Responsibilities* of Global Citizens (30 hours to over 550 students). She also lectured on Global and Geographical Education at the University of Sydney Semester 1 and 2 to M.Teach 1/B.Ed 3 (10x2); M. Teach 2/B.Ed 4 (10x2); and Global Education to Secondary HSIE (1x6).

Other GTA councillors (Nick Hutchinson, Rod Lane, Dr Grant Kleeman) and academics (Dr Kerry-Ann O'Sullivan, Jennifer Curtis, Dr. John Buchanan) supported the project by giving Global Education lectures at Macquarie University (Secondary HSIE; Geography, Economics/ Business Studies/ Commerce; Primary; Gender, English), University of Technology Sydney, University of Western Sydney and Australian Catholic University.

Revenue raising activities

The Association's financial position remains strong. The expensive Leadership Conference and country conferences were subsidised by AQPTC and AusAID. The subsidy enabled approximately 120 country teachers to attend these conferences.

Sales of the *Geography Dictionary* and Global Education Resources provided GTA with additional income. The investment in the new Geography posters (\$25 for 5 posters) represents a challenge but GTA aims to turn a profit.

A meeting of councillors, focusing on increasing GTA's finances, suggested the development of new resources such as a book showcasing model assessment tasks, a HSC study guide including sample essays, and a student-centred teaching activity book.

GTA was concerned about the cost of capitation. AGTA has since reduced the capitation with a special concession for student teachers.

Action for Promotion of Geography

The provision of quality professional development addressing teaching standards is an essential goal of GTANSW. The production and distribution of Geography posters was an initiative to promote the study of Geography in schools. The Webpage, effectively managed by Martin Pluss, is constantly updated with the latest conferences, resources and Global Education news; new pictures and links; leadership blog; and papers, audio and PowerPoint presentations from conferences. Martin constantly analyses the usage of the web page to enhance its utility. Martin should be congratulated for moving GTA members into the use of the blog.

Curriculum Development

Concern over the declining HSC candidature was discussed at the HSC evening, three School Certificate evenings and country conferences held at Blackheath, Orange and Canberra. Increasing concern resulted in the conduct of a Forum Meeting of interested teachers, curriculum developers and teacher educators who discussed a range of current concerns. A letter was subsequently sent to the BOS to change the HSC examination specifications to include choice in the three extended responses. The Board's response in published elsewhere in this issue of the Geography Bulletin.

GTA councillors acted as consultants on the new School Certificate Sample Test (2006). Councillors made suggestions aimed at improving the examination. These suggestions included: providing more structure for students in the extended response question. It was also argued that short answer response questions should not focus on rote learning but on the application

	Page Loads	Unique Visitors	First Time Visitors	Returning Visitors
Total	8,310	3,605	2,925	680
Average	4,155	1,803	1,463	340
Year	Page Loads	Unique Visitors	First Time Visitors	Returning Visitors
2006	5,615	2,366	1,822	544
2005	2 695	1 239	1 103	136

Usage statistics for the GTANSW web log, September 2005-29 May 2006

of geographical skills and understanding.

Other activities and developments

In 2006, GTANSW purchased new banner and gifts for speakers/presenters (these included: cups, weather instruments and clock/calculator featuring the Association's logo).

During 2006, GTA Council meetings moved between schools and universities. From the beginning of Term 3 meetings have been held at the PTC rooms at Leichhardt.

Challenges and opportunities in 2007 include:

- addressing new issues such as Institute of Teaching accreditation;
- increasing the membership base especially young teachers;
- increasing the volume, diversity and quality of material submitted for publication in the GTA journal;
- promoting greater use of the GTA web page and ICT skills;
- securing the Association's financial future by the production of resources;
- developing a more

professional approach to the promotion of our activities; and

• encouraging young, informed speakers to talk at conferences.

Special Thanks

In conclusion, GTANSW would not have had such a successful year without the support of all the hard working GTANSW Councillors. Special thanks to:

- Dr Grant Kleeman, Nick Hutchinson, Martin Pluss, Sue Field, David Hamper, Sharon McLean, John Lewis, Dr. Mary Fogarty, Keith Hopkins, Sarah Menassa, Rod Lane and Sidsel Farrimond who have contributed to the professional development of teachers over the last year
- Dr Mary Fogarty who has efficiently organised the excellent Annual Two Day Conference in Term 3
- Office Manager Marilyn Herrod, Minutes Secretary Paul Alger and Treasurer Jenni Ship
- Gary Bone from Kinross Wolaroi for helping organise the conference in Orange and Dominic Braybon the conference in Canberra

- Economics Business Educators NSW (Lyn Kirby, Bronwyn Hession, Sue Sinclair, Wayne Sheridan, Associate Professor Mike Horsley) and the History Teachers' Association of NSW executive
- NSW Department of Education and Training (John Gore, Sue Field); NSW Board of Studies (Lindsay Swan, Kate Cameron, Gary Webb, Carol Taylor) and university lecturers based at the University of Sydney and Macquarie University
- Jennifer Curtis who helped with Global Education Project
- Dr Grant Kleeman, Terry McCann (St Marys Senior High), Chris Tanner (Redfield College), Lorraine Chaffer (Gorokan High) and Aaron Williams (Macquarie College) for speaking at the HSC Lecture Days
- Rod Yule from World Vision and Ian Sanders from Austrade
- Arthur Burch from AusAID/Global Education and the countless Global Education resources to support the teaching of Geography in NSW.

GTA GOES TO CANBERRA IN JULY

International States

Dr. Susan Bliss – President and Conference Organiser

An informative, one-day conference was held at the Catholic Education Office in Narrabundah, Canberra on 20th July, for both new and experienced Geography Teachers. Dominic Braybon, with the support of his staff, provided the premises, and organised the morning tea and lunch.

The conference had eight speakers lecturing on a diversity of topics. Nick Hutchinson from Macquarie University provided teachers with a wealth of valuable Geography lessons and resources on the WWW and discussed the state of Geography in Australia. Dr Grant Kleeman from Macquarie University focused on the use of cartoons that investigated contemporary geographical issues that promoted critical literacy. Rod Yule from World Vision spoke on nongovernment organisations and Ian Sanders on Australian trade a Stage 5 topic. Susan Bliss illustrated how to holistically program a topic such as Inequality, Human Rights and Citizenship from Stage 4 to Stage 5. The presentation addressed multiple intelligences, different teaching and learning methodologies and cross curricula features such as gender and ICT. Dr Gordon Lyons from Newcastle University gave an entertaining and informative presentation on Challenging Kids, Challenging Classes and Challenging Colleagues. Sidsel Farrimond from Moriah College spoke effectively on student centred teaching activities for Stage 4/5. Martin Pluss from Tara Anglican School addressed the importance of leaders engaging in ICT and provided models to facilitate the use of emerging learning technologies.

About 45 teachers attended the conference and received a copy of the book presented at the Leadership Conference held in Sydney in June. The book covered issues such as mentoring new teachers; rethinking the role of the Head of Department and preparation for the role; the need to identify and nurture potential leaders; developing thinking skills through studying Geography; NSW Institute of Teachers and teaching/leadership standards; advanced teacher program at Riverview, values education; integration of numeracy and literacy; behaviour management; and quality assurance and compliance. Martin Pluss noted that all papers presented at the Leadership Conference, PowerPoint presentations and some audios of the speakers were available on the GTA Leadership blog site.

Presentations and Global Education Resources

All presenters used PowerPoint presentations and copies of their lectures were handed out to all participants. The Global Education Project provided a diversity of relevant teaching resources on: Aid and Travel produced by Global Education in conjunction with the Lonely Planet for Stage 5A4; current Aid pamphlet for Stage 5A4; Globalisation Book with CD Rom for Stages 4/5/6; Civics and Citizenship Focus Magazines on topics such as HIV/AIDS, Pacific Islands, Sport and Gender for Stages 4/5; Poverty CD-Rom covering Inequality and Citizenship in Stages 4/5, Elective Geography Stages 4/5 and Development Geography Stage 6; Microcredit information and its role to reduce poverty; and rice posters for Stage 6 Productive Activity. As 2006 is the United Nation's International Year of Deserts and Desertification participants received class copies of the Canberra Times and posters (Stage 4/5) on the topic.

Funding

The country teachers' conference on the 20th July would not have been possible without a grant from the Australian Government Department of Education, Science and Training as a quality teacher initiative under the Australian Government Quality Teacher Programmes.

Evaluation

As part of the AGQTP funding teachers were required to complete an evaluation form. All responses from the conference were positive and some of the comments are listed below:

- a well planned and informative day
- some excellent teaching resources provided
- good quality, well paced, well delivered
- very positive experience
- an excellent range of topics
- I appreciated copies of PowerPoints and that each speaker provided websites in their talks
- I think if is very important that teachers are made aware or reminded of the changes and mew methods that other teachers are doing
- the effort is worth it
- these sessions keep us motivated
- good work, well worth the drive from Albury
- plenty to share with staff
- most interesting and worthwhile
- good to be in touch with modern techniques and ICT
- wonderful day opportunity to share ideas with NSW colleagues in regional setting
- keep these days going!
- presentations and resources were excellent and very useful
- an enriching and affirming day
- many thanks
- relevant and update ideas, excellent professional networking
- AusAID/Austrade resources extremely useful
- good to be updated
- presenters of high quality
- very inspired by the variety of topics and speakers
- a vast amount of information on a broad range of issues.
- a great variety of contemporary issues and approaches to teaching
- I appreciate the generosity of the speakers in sharing their expertise
- very useful resources provided
- great day for gaining new resources and teaching ideas
- I have come away with some good ideas to use in the classroom
- lots of great ideas/resources/ websites etc
- great day please provide more!
- a lot of very useful and relevant information
- very helpful great ideas on use of ICT in the classroom
- an excellent conference which gave me a variety of knowledge to take back to school
- excellent resources given
- good to be in the company of professional presenters

Suggestions for future conferences:

Specific suggestions included:

- can it be scheduled in Autumn or Spring? It is icy in Canberra in July and travel can be hazardous on mountain roads in the early mornings
- more skills work would be great
- teacher resource sharing, assessments, fieldwork especially for Year 10
- time to use computers would have been an advantage
- presenters talking at the back of the room please refrain – it can be very disturbing to us the 'students'
- would have been good to have some perspectives from the BOS on recent trends in Geography
- some more skills based activities would be useful
- ACT teachers in government schools are not necessarily Geography trained. I would love a skills workshop to be offered – particularly targeting beginning teachers or non Geography teachers
- some presentations a bit rushed a minor issue
- future gathering more of the practical classroom orientated material
- bring markers/examiners for Stage 6
- hold a specific Stage 6 day
- would benefit from fieldwork skills/activities
- SOSE is a subject in our college useful to inter link History/Geography and Civics
- would love more inservices for country teachers please on geographical skills, assessment for learning

Thanks and towards 2007

Thanks to the GTA councillors who gave up their invaluable time lecturing and teaching students to research current topics, present PowerPoint lectures, provide handouts and travel to Canberra such as Grant, Nick, Martin and Sidsel. Also thanks to guest speakers such as Gordon, Ian and Rod and to the organiser, Dominic Braybon and the Catholic Education Office staff in Canberra

GTA aims to apply for AGQTP funding again in 2007 and to tender for the NSW Global Education Project Contract 2007-2009 so it can hopefully provide more professional development and resources to country teachers.

2006 National Geographic Channel Australian Geography Competition

The National Geographic Channel Australian Geography Competition is a joint initiative of the Australian Geography Teachers' Association and the Royal Geographical Society of Queensland, and is proudly sponsored by National Geographic Channel.

Changelaria

34

ATTOZ

A record number of students (92,390) and of schools (836) entered the 2006 Competition. Growth in student numbers was a very healthy 8%, higher than in the previous two years. The table below summarises information about the 2006 Competition.

Alyssa Glass and Edward Riordan were the highest scoring students in New South Wales at the intermediate level. Alyssa scored more points than Edward in the tie-breaker questions so Alyssa represented her state in the Final for under 16s. As usual, New South Wales took out the lion's share of the prizes at the intermediate level:

Alyssa Glass, MLC School Edward Riordan, Scots College Xavier Atkinson, St Ignatius' College Riverview Olivia Maud Crowley, Ascham School Rhys Evans, Monaro High School Michael Johnson, Merewether High School Mitchell Kramer, Gosford High School

State/Territory	Students	Schools	Under 16s Finalist	Finalist's school
NSW	42502	369	Alyssa Glass	MLC School, Sydney
Qld	14851	166	Mathew Beddard	Saint Stephen's College, Coomera
SA	4576	46	Harry Rix	Pembroke School, Adelaide
Tas	761	14	Kirsten Heslop	Launceston Church Grammar School
Territories ¹	2935	21	Liam Baker	Marist College, Canberra
Vic	18479	138	Roman Zethoven	Trinity Grammar School, Melbourne
WA	8286	82	Ray Pritchard	Hale School, Perth
National Runner-up ²			Daphne Premnath	Telopea Park School, Canberra
TOTAL 92390 836				
1 ACT and NT 2 The highest-scoring student after the state and territory winners are decided				

Jeremy Luk, James Ruse Agricultural High School Scott Pengilley, Shore School Tim Smith, Scots School Albury

Miguel Vera-Cruz, Fort Street High School

The junior level is for students 13 years old and younger, but these students can also try for prizes at the intermediate level. Miguel Vera-Cruz came equal first in Australia at the junior level and also performed strongly enough to win a prize at the intermediate level. The following NSW students won prizes at the junior level:

Miguel Vera-Cruz, Fort Street High School

Alexander Harrison, North Sydney Boys' High School Mary Ngo, Trinity Catholic College Regents Park

Tanya Perica, Trinity Catbolic College Regents Park

At the senior level (students 16 and over) three students came equal first in Australia, including Brenton Earl and Ervin Tankiang. These NSW students won prizes:

Brenton Earl, Mudgee High School

Ervin Tankiang, James Ruse Agricultural High School Benjamin Fleming, Merewether High School Molly Ferrier, Presbyterian Ladies College Armidale Adrian Quinn, Merewether

High School

Kaivan Vaidya, Sydney Boys' High School

School prizes were changed in 2006 so that their award was based on the scores of the school's top five students under 16 years old plus their top five students 16 and over. James Ruse Agricultural High School won the school prize for New South Wales, as they did last year.

As part of her prize for topping the state at the intermediate level, Alvssa Glass won a weekend with the other student Finalists. Yes it was in Sydney, but she still enjoyed herself. The other students arrived on Friday evening. Saturday morning the students visited the National Maritime Museum. After touring the submarine HMAS Onslow and the destroyer HMAS Vampire, they took part in a hands-on programme on the restored sailing ship, the James Craig. After lunch at Darling Harbour they caught the ferry round to Circular Quay and walked around to that Sydney icon, the Opera House. Saturday's programme finished with a great dinner in Chinatown and a screening of Mystic India at the Imax Theatre.

The highlight of the weekend was on Sunday morning when they climbed the other Sydney icon, the Harbour Bridge. Kitted out with safety belts and radios and with everything from hats to handkerchiefs attached to their bodies so nothing could fall, the students negotiated the ladders up to the arch. Climbing the arch itself is a piece of cake and there is all that incredible scenery spread out before you. It's quite a different view than from a high-rise building – you are not looking at the harbour, you are above the harbour looking out.

The three Sydney members of Australia's International Geography Olympiad team joined us for lunch on Sunday at Pancakes on the Rocks. After triple-chocolate pancakes (for some), the students wandered through the historic Rocks area, then back to our up-market apartments for some free time.

The Final for under 16s was held at Taronga Zoo's ANZ Conservation Theatre on 6 June. There was a large crowd of students, teachers and other invited guests, including some of the other prize-winning students from Sydney. Julia Freeman and two Canberra Grammar School students accepted the prize for their school which had the highest ranking in Australia.

The questions in the Final covered a large range of topics – cultural groups based on flim clips from National Geographic Channel; the "New Seven Wonders of the World" using photos; questions based on climate graphs; on maps of different Australian rivers; on economic resources; on deserts (for International Year of Deserts and Desertification); etc. The results were:

First	Roman Zethoven
Second	Liam Baker
Third	Mathew Beddard

Roman Zethoven represented Victoria in the 2005 Final as well, when he was 14 years old. He went home determined to study hard for the 2006 Competition and it paid off. As well as a National Geographic Atlas of the World and some money. Roman wins a place on the Australian team which will compete in the 2007 National Geographic World Championship, now expected to be in San Diego. Liam Baker may also make the team if he scores more highly than the 2007 second-placed student in a deciding test.

Next year's National Geographic Channel Australian Geography Competition will be held in schools from 26 to 30 March 2007. For more information, contact Kath Berg, email admin@rgsq.org.au, phone 07 3368 2068, fax 07 3367 1011, website www.rgsq.org.au/agc.htm.

International Geography Olympiad

Brisbane, 2006

The 6th International Geography Olympiad held recently in Brisbane was proclaimed to be the biggest and best ever! (Does this remind you of another Olympics?)

It ran from 28 June to 3 July 2006, followed by optional fieldtrips from 4 to 9 July. The Olympiad was hosted by the Australian Geography Teachers' Association (AGTA) and the Royal Geographical Society of Queensland (RGSQ), with sponsorship from the Queensland Department of Education and the Arts and the Australian Department of Education, Science and Training. It was held under the auspices of the International Geographical Union (IGU), in conjunction with its Regional Conference and its Commission on Geographical Education Symposium.

The National Geographic Channel Australian Geography Competition Committee, with a membership of Kath Berg, Iraphne Childs, Margaret McIvor and Peter Nunan, had oversight of the local organisation of the 2006 Olympiad. The Olympiads are under the overall management of the IGU Olympiad Task Force, of which Kath Berg is a member.

Who was there

A limit of 20 participating countries (with 4 students and 2 educators per country) had originally been set. Following extra demand, RGSQ and AGTA agreed to extend their support so that 23 teams could take part - Australia, Belarus, Belgium, Bulgaria, China - Beijing, China - Taipei, Czech Republic, Estonia, Finland, Germany, Hungary, Latvia, Lithuania, Mexico, Netherlands, New Zealand, Poland, Romania, Russia, Saudi Arabia, Slovakia, Slovenia and United Kingdom. This compares very favourably with the 16 countries, only two of them non-European, that attended the 2004 Olympiad in Gdynia, Poland. It was something of a relief to the organisers that all the teams received their visas in time, and all 23 teams actually arrived - especially since visa

problems had prevented some teams attending the last two National Geographic World Championships for the younger students.

Australia's team was chosen from a group of high-scoring students in the senior division of the 2005 and 2006 National Geographic Channel Australian Geography Competitions. After further filtering using existing school assessment, the four students selected were:

Michael Bishop	Northern Beaches Secondary	
	College Manly Campus, Sydney	
Jennifer Broadbent	St Catherine's School, Sydney	
Samuel May	Pittwater House Grammar	
	School, Sydney	
David Smith	Marist College, Canberra	

What were the tests like

The Olympiad is a contest for senior secondary students emphasising fieldwork and analytical skills. It has three parts: a written test, a multimedia quiz and a substantial fieldwork exercise. The first two tests were written by small international committees. The fieldwork test was drafted by Russell Smerdon, a member of the Geography Teachers' Association of Queensland (GTAQ), and refined in conjunction with the Competition Committee after feedback from an international panel. The fieldwork focussed on sustainable urban communities, using Kelvin Grove Urban Village as a case study. The staff from Kelvin Grove Urban Village were very helpful and generous in their support. Several GTAQ members, and AGTA President Nick Hutchinson, acted as group leaders for the fieldwork.

The Olympiad's official language is English and all students sat their tests in English. Non-native English speakers were allowed extra time for the tests, could use a language dictionary, and were given a list of terms from the questions translated into their own language. Teams were told a couple of weeks in advance what the fieldwork would focus on and referred to several websites as background – which gave students a chance to become familiar with the vocabulary. Even so, the performance of these students in what was for most at best a second language was very impressive. Using English for the tests is the only practical solution. The Lithuanian, Hungarian or whatever students cannot be marked by their own teachers and the Olympiad cannot afford to hire an independent marker for each language, even supposing they knew anything about geography.

How did we do

As at other student Olympiads, gold, silver and bronze medals are awarded in bands of performance level. The student with the highest score overall was Jacek Próchniak from Poland. Eight gold medals were awarded – three to Poland, two to Romania, two to Estonia and one to Netherlands. From Australia, Jennifer Broadbent, Samuel May and Michael Bishop received silver medals and David Smith a bronze. All the Australian students came in the top third of the results which was an excellent achievement and led to Australia coming fifth in the unofficial team rankings - after Poland, Estonia, Romania and Netherlands. Medal-winning students also received prizes, and these had been donated by Hema Maps, Steve Parish, Geoscience Australia, Darren Jew, World Wide Maps, Macmillan Publishers Australia, Fremantle Arts Centre Press and Peter Lik.

The gold medals were awarded during the Opening Ceremony of the IGU Regional Conference so that these upcoming young geographers could be acknowledged before all. The Olympiad's own Closing Ceremony was held in the suitably august surrounds of the Legislative Council Chamber of the Queensland Parliament, giving an appropriate sense of occasion. The Opening Ceremony had been graced with the presence of the Romanian Ambassador and various consuls, cultural attachés and community representatives of our participating countries.

Was it all serious testing

As well as the tests, the Olympiad programme included formal opportunities for the students to exchange information on their home countries – a cultural evening and presentations on a geographical aspect of their country. The cultural evening was particularly good for encouraging mixing, with some teams taking a participative approach, such as teaching others to dance the polka. (The audience loudly clapped Australia's performance of I Come from a Land Downunder – but it may have been to stop them singing another verse! Their presentation on the Great Barrier Reef, however, was much praised.) The programme also included excursions to give the participants a feel for South East Queensland. These were very successful. One of the rangers who led the rainforest walk at Mount Glorious commented on the students' respect for the environment. A talk from a ranger on the indigenous heritage of the region around David Fleay Wildlife Park was much appreciated and there was great excitement about being up close to koalas and emus. Many of the students got right into the spirit of supporting the Lions at the AFL game, and streamed on to the ground after the match, commenting that they would be arrested for this in their home countries.

Following requests at the last Olympiad, for the first time participants had the opportunity to join optional fieldtrips after the Olympiad. A 6-day trip was organised to southwest Oueensland, taking in a visit to Cubbie Station (cotton) near Dirranbandi, Myendetta Station (sheep) near Charleville, the bilby captive breeding programme, a meteorological station, artesian baths, talks on land management issues, Miles Historical Village, etc. This trip was booked out and rejected applications then amounted to another coachload so a second fieldtrip, this time to the north, was organised so as not to disappoint so many teams (and despite the organisers' existing workload). The northern trip included a guided walk in Mary Cairncross Reserve, sampling the produce at a macadamia nut and sugarcane farm, visits to the port of Gladstone and the alumina refinery, a full day walking in Cania Gorge National Park, etc. Around 90 students and teachers (of the 140 or so at the Olympiad) went on one of the fieldtrips. The students were cooperative, interested, uncomplaining of camping in freezing overnight temperatures – an all-round positive experience for everyone concerned, as was the whole of the Olympiad.

Just a little story to finish. On the northern trip we had taken along a John Williamson CD which included Waltzing Matilda. As we reached Brisbane on the last day, a Belgian student came to the front of the bus and asked us to play Waltzing Matilda again, so we finished our trip with a multicultural busload all singing Australia's unofficial national anthem.

You can give your students a chance to be part of the 2008 Olympiad, probably in Tunisia, by entering them into the senior level of the National Geographic Channel Australian Geography Competition next year.

<u>Enquiries to Katbryn Berg, email</u> admin@rgsq.org.au, pbone 07 3368 2066.

'True Blue Geography'

An Op-Ed article from Bill Pritchard and Nick Hutchinson

warp and woot of the social sciences. Our personal, community, national and global lives are the outcome of interconnections between time and space. To understand why and who we are, we need to understand both where we have come from (our history) and what places we're in (our geography).

The 'history wars' of recent years and the Prime Minister's History Summit have put the former into the spotlight. Now is the time for a comparable debate on the latter.

This needs to happen for reasons of national interest. The great irony of our times is that the conquest of geography, thus making the world smaller and more accessible, actually makes the study of geography more pressing. In the colonial times of Phinneas Fogg, when it took 80 days to go around the world, knowledge of geography could be a luxury of the rich. Nowadays, when the world rushes in on us, geographical literacy is critical both to aspirations of national and global citizenry, and to the challenge of competing in a global economy.

When we talk of geographical literacy in these terms, we do not mean the recitation of capital city names. Geography is more than just a category in

reterring to is a capacity to understand the workings of the world's physical and societal systems, and the interactions between them. It is concerned with human – environment interactions in the context of specific places and locations There is a geographical story behind every telemarketing call from Bangalore; every hike in the petrol price, and the fact that global stock indices moved not a basis point when the Indian Ocean tsunami killed over one quarter-of-a-million people. Geography's task is to write the Earth.

The problem is that the discipline needs re-energizing. It has been bruised by competing claims in crowded high school and university curricula. In New South Wales, the number of students taking HSC geography is less than one third of its level of 15 years ago. This reduced catchment has impacted on entry-level university geography programs. Aggravating this problem has been the loss of geography as an academic masthead in its own right, following decisions by university administrators to merge Departments of Geography into multi-disciplinary 'Schools' with various non-specific names. There are no longer any standalone Departments of Geography in the country.

In this challenging climate,

amplitions and scope are often seen as its weakness. A graduate with Honours in Geography may not, on the surface at least, sound as well-credentialed as one with Honours in, say, Econometrics. In our experiences however, tapping the disparate intellectual reservoirs required within geography obliges a more taxing pursuit of knowledge than is often the case for a student lounging in the comfort of a narrow academic specialism. Geographers are inveterately promiscuous in the ways they borrow and synthesize ideas, frameworks and knowledge from elsewhere. Far from being a weakness of the discipline, it seems to us that this should be a model for how we research and teach in the complex world of the twenty-first century.

So what should be done? University-based geographers should not be complacent, but it occurs to us that the chief problem exists at the high school level. If HSC geography numbers begin to fire up again, then university geographers will feel the warmth. As with the comparable debate regarding the teaching of Australian history, the focus of attention should be on the year 9-10 curriculum. These are the years in which high school geography teachers have a captive audience. Successes in years 9 and 10 will flow through into

vears 11 and 12. There is no reason not to think that with a bit of imagination in the curriculum, years 9-10 geography could be (re)presented as a field of study which is central to national and global environmental and social futures. 'Where do you want to go today?' was used as the centre-piece of Microsoft's marketing campaign in the early Internet years. 'Do geography to understand and change the world', should be the credo of a revitalized geography curriculum.

But what would such a curriculum contain? A framework is provided by the recently revised International Charter for Geographic Education, which specified five organizing principles for the teaching of geography. If we apply these principles to the problem of 'how should students learn about Australia' (although a full geographical education should also include examination of Asia-Pacific and global contexts), we are provided with a number of fruitful pathways:

 locations and places, in order to set national and international events within a geographical framework and to understand basic spatial relationships

A revitalized geography curriculum should encompass the examination of locations and places that have special resonance to Australian national life and its place in the world. It could and should examine how places such as Lake Mungo. Myall Creek, the 'Dig Tree', Kakadu, the iron ore deposits of the Hammersley Ranges, Port Arthur, and the Sydney Olympic Games site inform national cultures, economics and politics. Examination of these places provides launch-pads for asking questions about the spatial interactions that create

economic wealth, cultural meanings and political influence in specific places, for specific groups of people, in specific ways.

• major bio-physical systems of the Earth (landforms, soils, water bodies, climate, vegetation) in order to understand the interaction within and between ecosystems

Our Gondwanan heritage is a fascinating story involving the marooning of monotremes and marsupials, eucalypts and wattles in a continent that still drifts northwards at a rate of eight centimetres a year. An appreciation of the interactions operating within the Great Barrier Reef ecosystem is mind boggling in its extent. Tides pulse, waves crash, predators lurk on the coralline ridges, tiny sea creatures exchange gas to produce rain-inducing aerosols in the atmosphere, tropical cyclones carve out chunks of coral and produce new channels and the rich soup of plants and animals leave the water crystal clear stripped of its nutrients. This sense of uniqueness can be enhanced by well-targeted comparisons with the environments of our near neighbours.

• major socio-economic systems of the Earth (agriculture, settlement, transport, industry, trade, energy, population and others) in order to achieve a sense of place;

In rural and urban Australia, socio-economic change is constant and this reshapes the life chances of people and communities. Towns and cities are being incorporated into regional, national and global economies and communities in evermore complex ways, involving global lattices of movement of goods, information and services. In turn, these are bringing to the fore new environmental and energy-use challenges. The question of how large Australia's population should be is everpresent in these contexts.

 different ways of creating environments according to differing cultural values, religious beliefs, technical, economic and political systems. This helps facilitate understanding of the diversity of peoples and societies on Earth and the cultural richness of humanity

Aboriginal people were divided into some 600 different language groups when European set foot in Australia. Cultural values and spiritual beliefs about the land extended beyond any European sense of ownership. With the premise of 'land as mother' Aboriginal people have duties and obligations focused on the conservation and protection of their country. Debating whether Aboriginal occupance was benign or whether 'firestick' farming existed; or whether strange megafauna were hunted to extinction and the use of fire evolved after the extinction of virtually all the large herbivores or whether the island continent has always been fashioned by fires are interesting conversations to be had. Australian geography should include the palimpsest of European technical, economic and political systems laid on enduring Aboriginal and Torres Strait Islander systems. It should also consider the significance of our more recent diversity of heritage and ways in which the built environment, at least, reflects different cultural imprints. Observing, documenting and discussing these processes provide an entry-point into questions relating to the changing senses of place within Australia; how different people, in different places, understand their

surrounds.

• the structure and processes of the home region and country as daily action space; and the challenges of, and opportunities for, global interdependence.

Australian geography has much to contribute on the interaction of the lived lives of its inhabitants and the constructs and constraints of scale. Individual lives in the Latrobe or Tallebudgera valleys express their identities in relation to rural Victoria or the Gold Coast, but are also citizens and consumers of Eastern Australia, take their vacations in the Asia Pacific and obtain their motor vehicles from the entire globe. They are knit together by the perplexing links of the Web: the richness that it brings to their daily lives and the threats that appear on the horizon. In this paradox of the geography of nowhere, place resurfaces as an important concept: the local becomes even more important in the context of an interlinked global village. Within this home

space no longer can Australians remain in ignorance of conflict, war and terrorism but they can take advantage of interconnectedness to trade, obtain enlightenment and to discover the universality of common values.

In all of this, the study and teaching of geography should be inflected with a spirit of exploration and inquisitiveness. Geography should not be about the passive learning about places in the world. Its fundamental premise should revolve around explanation: of why things are where they are; how human society is structured in space; and how physical environmental systems and human activity interact. The kinds of topics that resonate through geography and extend and interest students include: Australia's role in global politics, environmental degradation, genetic modification, resource management – particularly water, legal and illegal migration, conflicts at local and national scales, global warming and climate change, extreme

natural events, the processes and impacts of tourism, access to technology and gender inequalities.

For a future in which Australians are well-equipped to understand and adapt to the rapidly changing world, educational bureaucracies cannot afford to neglect geography. Not surprisingly in light of the fact that we inhabit an island-continent unlike no other place on earth, the teaching and research of geography in Australia traditionally has had a rich intellectual edge. Re-energizing this edge, starting with the review of relevant high school curricula, should be a national educational priority.

Dr Bill Pritchard is Senior Lecturer in Economic Geography, School of Geosciences, University of Sydney.

Nick Hutchinson is AGTA Chair and Lecturer in Education at Macquarie University–Sydney.

Board responds to GTA's HSC Examination Specifications request

Dear Dr Bliss

I am writing in response to your letter regarding the decline in the number of students choosing Geography for the Higher School Certificate in which you request a review of the structure of the Higher School Certificate Geography examination.

As you acknowledge, the decline in the popularity of Geography is attributable to multiple factors. It is part of a long term and international trend, with similar declines in the subject being reported in the United Kingdom, the USA and Canada. However, it is pleasing to note that the number of NSW students taking Geography for the Higher School Certificate appears to have stabilised recently. I understand that your association is planning to carry out some 'market research' among senior secondary students in NSW on the reasons for choosing or not choosing to study Geography in Stage 6. I hope that you may wish to share with me any insights that you glean from this activity.

The examination specifications in the Geography syllabus prescribe that in Section III of the examination there will be three extended response questions, and that students will attempt all questions. You express a view that providing students with internal choice within each of these questions will reduce the workload for students studying the course, which will result in less stress, and may perhaps lead to more students choosing this subject as part of their study pattern.

When examination specifications are developed for any subject, the Board of Studies requires that choice of questions on a topic or area of content will be offered only when the nature of the subject is such that a single question on the topic may be restrictive for students. Choice of questions typically occurs in subjects where a topic covers a broad range of content. or where different emphases in the way the course is taught may mean that students find single questions on the topic difficult to respond to. In all courses, the Board expects that students will be able to answer questions drawn from all parts of the svllabus.

You express concern that the lack of choice means that students in Geography are subjected to an unfair workload in studying the syllabus, compared to those studying other HSIE courses. Mr Lindsay Swan, the Board Inspector responsible for Geography and other HSIE subjects, advises me that the amount of time required to cover the course content in Geography is comparable with other HSIE courses. I emphasise that choice of questions within topics in an examination is not provided for the purpose of allowing students to select areas of the syllabus to which they may wish to devote greater time or effort.

The Board is currently carrying out a process of evaluating the Stage 6 syllabuses and reports on the implementation of all the syllabuses are being prepared by the Office of the Board of Studies. The recommendations in your letter were taken into account in the preparation of the report on the Geography syllabus, which was considered by the Board at its most recent meeting.

When all the reports have been considered, the Board will determine any future curriculum development priorities across all the Key Learning Areas, including any possible revisions or amendments to syllabuses in HSIE. Any issues raised in relation to the HSC examination specifications in Geography will be considered together with other concerns about the syllabus, within the context of this wider evaluation. I assure you that the Geography Teachers' Association will be included in the Board's consultative process for any review of the Geography syllabus. However, given the Board's policy of providing adequate notice to teachers for changes to syllabuses, it would not be possible to introduce any modifications for the 2007 HSC course.

The Board is committed to ensuring that the curriculum for the Higher School Certificate remains relevant to all students. I appreciate your association's concern regarding this issue and the wider issue of the Geography candidature.

> Yours sincerely (Professor) Gordon Stanley President 14/08/2006

OBITUARY

ERIC BEDFORD (1928-2006)

is parents were strong supporters of the Labor Party, with Jack Lang and later Gough Whitlam being particular favourites. Consequently, it was no surprise that he joined the Labor Party in his teens, and was encouraged by his mother to become involved in political campaigns.

Eric was educated at Fort Street

Boys High School and Sydney Teachers College. He began teaching in 1947 and taught for eleven years in country schools. During this period he completed a BA, through external studies at the University of New England, majoring in Geography and Economics. He began teaching Geography and Economics at Liverpool Boys High School in 1958 and became the Commerce Master at Bankstown Girls High School in 1963. This was a period when there were revolutionary changes in the objectives, content and methodology of Geography courses as a result of the implementation of the Wyndham Plan for secondary schools.

Eric was one of the Heads of Departments, who worked with the Professors of Geography and geographical educators, in the in-service courses, organised by the Geographical Society of New South Wales and the Geography Teachers' Association of New South Wales, to upgrade the knowledge and skills in Modern Geography introduced in the new syllabuses, particularly at the senior level where the high school courses were increased from five to six years.

Eric was an outstanding teacher with innovative approaches to programme planning of Geography syllabuses and teaching procedures for topics in both the junior and senior levels. In the late 1960's he was a member of a group of Geography teachers, working with the Geography Teachers' Association, who organised meetings to assist teachers with the interpretation of the Geography courses, through the planning of programmes to

Eric Lance Bedford, who died from pancreatitis on Saturday, 8 July 2006, was born in Concord to Roy Oswald Bedford, an electrician, and his wife Clara (nee Bounds). identify the number of hours required for each topic to achieve the objectives of the syllabuses. At the request of teachers, particularly those in the country, who were unable to attend these meetings, the Association sponsored the publication, in 1969, of Programme Planning in Geography: Principles and Practice in New South Wales Schools. Eric made a significant

contribution to these meetings and provided a chapter on a programme for planning Regional Geography. When the book was published Eric Bedford had been elected the MLA for Fairfield.

Eric continued his interest in the Geography Teachers' Association and the Geographical Society throughout his career as a politician, and particularly during his time as the Minister for Education.

When some bureaucrat decided that Science House in Gloucester Street should be used to accommodate government offices, on the grounds that scientific societies could be accommodated in universities, Eric used his influence to provide vacant rooms in primary schools as offices for the Society and the Association. This practice continued for a short time after he retired. He, also, accepted invitations to many of our functions. The last time I talked to him was at a Map Exhibition, organised by Brock Rowe, at the Commonwealth Bank in Martin Place.

Eric retired to his hobby farm, Zanzibar, on the Mid-North Coast. The sympathy of the members of the Geography Teachers' Association and the Geographical Society, and all other Geography teachers, who knew him, has been extended to his wife Muriel (better known as Jo), his daughter Judy, and his grandchildren.

— Don Biddle.

A more detailed obituary, by Malcolm Brown, was published in the *Sydney Morning Herald* on July 10, 2006.

Environmental Refugees: Another global warming crisis?

David Hamper – Wenona School

Introduction

The decade from 2005 to 2014 bas been declared Decade of Education for Sustainable Development by the United Nations. The goal of this programme is to enhance the understanding of the world's vouth about how to work towards a more sustainable future. It is timely that the United Nations consider the next ten years as being one that should be focussed on sustainable futures. The threat of global warming is now so great that it threatens the future of whole communities. As Fien (2005, p. 8) states, the problems the world faces stem from a "...nexus of social, economic and ecological problems...." While global warming is viewed as an environmental problem it is rapidly becoming a social, and economic problem as well.

Is there is a link between global warming and refugees?

In 2005 the Australian media began to report on a new immigration issue in Australia – that of environmental refugees. The governments of Tuvalu and Kiribati, amongst the smallest nations on Earth, were requesting the assurance of the Australian government that they would be assisted in the advent that their nations sank below the waves of the Pacific. This seemed almost apocalyptic – a whole nation sinking? The reality is that if the majority of the world's scientists are right then the sea levels could rise to such an extent that low lying nations, like Tuvalu and Kiribati, could indeed disappear in the not too distant future.

Much of the science surrounding global warming remains imprecise and shrouded in some degree of uncertainty. However, the vast majority of the world's scientific community agree that global warming does exist and that its consequences could be dire. In terms of sea level the following range has now been widely accepted:

- 1. At the lower estimate a 2oC change in global temperature would result in a 30cm rise in sea level;
- 2. At the upper estimate a 4 oC change in temperatures would result in a rise of 1 metre in sea level (Middleton, 2003, p. 191).

Flannery (2006, p. 22) argues that the longitudinal atmospheric research conducted by pioneering global warming scientists, such as Keeling, suggest there is potential for up to a 6 oC increase in global temperature. Such changes in global temperatures would have cataphoric consequences for low lying nations around the world.

The International Panel on

Climate Change (the IPCC) was established in 1988 by the United Nations to bring together experts on climatology, mathematical modelling and many other associated fields to investigate the potential threat of climate change. The IPCC Working Group 1, made up of more than 1000 scientists predicted that sea levels will rise somewhere between 9 and 88 centimetres by 2100. In 2001 the United States President George W. Bush, who has been a vocal critic of the concept of global warming, commissioned the US based National Academy of Science to review the work of the IPCC Working Group 1. The Academy found that the group's report was "scientifically credible" and that if the research had been done by US scientists alone, similar findings would have been made (Agnew, 2001, p.1091).

The Hadley Centre, part of the Meteorological Office of the United Kingdom, used a supercomputer to help predict potential changes in global climatic conditions if no action is taken to address global warming the Centre found that by 2080:

- Approximately 3 billion people could suffer from increased water stress;
- Approximately 80 million more people would suffer from the consequences from increased flooding events

every year, with South East Asian, South Asia and Pacific and Indian island states most at risk;

- Approximately 290 million more people would become susceptible to malaria and other tropical diseases; and
- Cereal crop yields would likely decrease, increasing the risk of famine and hunger, especially in Africa (cited in Yencken & Wilkionson, 2001, pp. 23–24).

Clearly if the predictions of all these scientists are correct, and the bulk of evidence suggests that they are, the potential for not just environmental but indeed social consequences could be dire.

The Office of the United Nations High Commissioner for Refugees (UNHCR) estimated that in 2005 there were 9.2 million refugees worldwide and that there were more than 19 million "people of concern" (UNHCR, 2005). As Table 1 demonstrates, the top five countries of origins for refuges in 2005 were all war torn nations. Each country in the list and, indeed, four out of the next five ranked countries were all in a state of war or unrest in 2005.

However, these figures provide information on people

who meet the legal definition of a refugee as defined by the 1951 Refugee Convention as:

"A person who is outside bis/ber country of nationality or babitual residence; bas a well-founded fear of persecution because of bis/ber race, religion, nationality, membership in a particular social group or political opinion; and is unable or unwilling to avail bimself/berself of the protection of that country, or to return there for fear of persecution." (1951 Refugee Convention)

As is clear, this definition does not make reference to those people who find themselves without a place to live because of environmental reasons. Consequently such people do not meet the definition of a refugee under international law and are therefore not included in the statistics but they are in all other senses refugees and they are rapidly becoming a major group.

Research by Professor Norman Myers of Oxford University found that in 1995 (the most recent date, he argues, where reliable statistics are available) there were 27 million people who were displaced due to "traditional' reasons, such as war, civil unrest etc and at the

Origins of Major Refugee PopulationsCountry of OriginTotal Number of
RefugeesAfghanistan2 084 900Sudan730 600Burundi485 800Democratic Republic of Congo462 200Somalia389 300

Table 1: Top 5 Countries of Origins for Refugees (by all causes), 2005

(Source: Adapted from UNHCR, 2005)

same time there were 25 million people displaced for environmental reasons (Myers, 2005). Given that these figures date from more than a decade ago and that environmental degradation has increased since then, it seems fair to predict that the number of environmental refugees has increased to an even larger number.

The majority of the world's environmental refugees are found in Africa, particularly Sub-Saharan Africa. Here it is not rising sea levels that threaten people, instead it is drought and subsequent famine. In China Myers estimates that up to 6 million people were internally displaced due to environmental reasons and around 1 million environmental refugees lived in Mexico in 2000 alone.

Janos Bogardi of the Institute for Environment and Human Security of the United Nations University in Bonn, Germany, believes that by 2010 more than 50 million will have become displaced due to environmental reasons, such as rising sea levels, desertification and drought (cited in Adam, 2005).

The work of Myers and others has been criticised as significantly over estimating the number of environmental refugees and as confusing displacement caused by natural disasters, such as earthquakes, as being the result of human induced environmental displacement. Richard Black (2001, p. 3), of the University of Sussex, makes the point that a fundamental problem with determining numbers of environmental refugees is the lack of an adequate definition. That said, there is little doubt that people are already being forced from their homelands due to climate change and despite debate over the exact number many more people will be forced out in the future.

In 2002 the people of Shishmaref, a tiny Inuit village in Alaska became the first people to be displaced due to factors directly attributable to climate change. Their village has long been protected from violent sea storms by vast ice sheets around the village. By 2002 the village had been damaged so much by the sea after the ice sheets retreated that the villages voted to leave their ancestral home and relocate to another village 12 miles away The cost of the relocation - more than US\$180 million. At least the people of Shismaref had somewhere to relocate to (Drapkin, 2006).

By contrast, the people of the low-lying Pacific islands may have nowhere to go as the sea gradually inundates their homes. Already Papua New Guinea has been forced to relocate islanders from the Carteret Islands to Bougainville due to sea level rise.

Being the major power in the region Australia is seen as the only hope for many of these nations. The spectre of potentially large numbers of environmental refugees has created concern in northern Australia. The Member of Parliament for Mundingburra, based around Townsville noted at the Asia Pacific Partnership on **Clean Development and Climate** in January 2006, that "...Townsville could hardly be expected to withstand a large influx [of environmental refugees]..." (cited in Bateman, 2006). Many have argued that at the very least Australia has a moral obligation to assist neighbouring nations and with the continued refusal of the Howard Government to sign the Kyoto Protocol there seems there is an ethical duty as well.

"All in all, the issue of environmental refugees promises to rank as one of the foremost buman crises of our times. To date, bowever, it bas been viewed as a peripheral concern ... While it derives primarily from environmental problems, it generates myriad problems of political, social and economic sorts." (Myers, 2005)

Why does global warming create refugees?

The number of environmental refugees is likely to rise with increasing global temperatures. Why? Global warming affects climatic conditions and climate in turn impacts on a while range of issues ranging from food production, health, natural hazards, and so on.

In a very detailed analysis of environmental data, highly regarded environmental scientist Professor Frank Oldfield (2005) of the University of Liverpool concluded that several changes in the global environment are likely in the future. These include:

- Changes to the water cycle as a result of glacial retreat and a shift from snowfall to rainfall in some regions, such as Europe and the United States – this could increase water stress in some places due to changes in run off patterns.
- Changes in the biosphere as some species become extinct due to rising temperatures and others invade and colonise – this has the potential to introduce new diseases and other pathogens into areas that have been otherwise immune.
- Food production rates would change as the climate warms.
- Coastal areas will become more susceptible to storm attack, such as storm surges.
- Marine environments could suffer, resulting in reduced fish catches and impacts on coral reefs due to bleaching.

Even if only some of these consequences occur the impact of global warming on human activity will be considerable. Apart from dramatic instances, like that of Tuvalu where whole countries could disappear as a result of climate change, one of the most significant consequences of global warming will be health related.

Obviously health issues related to malnutrition will rise if water scarcity increases and droughts affect crop production. Other issues will include a widening of the range of some insect-borne diseases, such as malaria and dengue fever. Other diseases are already increasing their range Schistosomiasis, also known as bilharzia, is a parasitic disease that leads to chronic ill health in parts of Africa and Asia. The disease is spread by freshwater snails which are becoming more prevalent as temperatures warm (UNEP, 2004).

The World Health Organisation also predicts increases in heat related deaths (although cold related deaths may in fact fall), increased air pollution in urbanized areas leading to respiratory illness, more extreme weather events leading to more accidental killings and injuries, increases in toxic algal blooms in the oceans leading to contamination of seafood, and the possibility of newly emerging diseases. Such health impacts are likely to cause mass movements of people as some areas become disease prone and unable to support crop production.

Why is there so much inaction?

A report by the IPCC notes that a nation's ability to adapt to climate change is dependent on such factors as technological development, information skills, access to resources and education (cited in Agnew, 2001). In other words, developed countries stand a better chance of dealing with climate change. The primary cause of climate change is the burning of fossil fuels and that these fuels form the foundation of the modern global economy and that the fossil fuel industry is a powerful political force in many nations, perhaps nowhere more so than in the US and Australia (Howes, 2005; Legget, 2000).

Therefore there is strong political and economic pressure on governments to continue to support fossil fuel industries and to downplay the eventual consequences of global warming. This is evidenced by the reluctance of Australia and the United States to ratify the Kyoto Protocol. Yet the great irony is that if Australia's near neighbours begin to "sink" into the Pacific then the cost of moving even a small number of people is huge as the case of Alaska's village of Shishmaref demonstrates.

Studying Environmental Refugees in Geography

The New South Wales Geography syllabus provides ample opportunity for our students to study the issue of environmental refugees. The following table provides some indication of possible areas to include a study of environmental refugees and some possible activities.

Stage 4 Geography Syllabus Area	Possible Activities	Outcomes
4G4 - Global Issues and the Role of Citizenship		
Geographical issues (global warming)	Students develop a mind-map of the causes and consequences of global warming.	4.2, 4.3
Different perspectives on the issue	Group work task. Students break into groups - each group assigned a different perspective (coal company, government of Australia, UNHCR, environmentalists, government of Tuvalu).	4.7, 4.9
Implications for social justice and equity	Think, Pair, Share activity. Students asked to rewrite 1951 Refugee Convention definition of a refugee and then share with a partner - partners must develop a joint definition and then share with the class, class selects best definition and emails the definitions to Local Federal MP.	4.10

Stage 5 Geography Syllabus Area	Possible Activities	Outcomes
5A4 - Australia In Its Regional and Global Context		
Australia's regional and global links (Aid, & Migration)	Students investigate a near neighbour that is under threat from sea level rise and report on the issues and develop a plan that the Australian government could implement to assist the nation.	5.2, 5.3, 5.9, 5.10

Elective Geography Syllabus Area	Possible Activities	Outcomes
E4 - Development Geography		
One contemporary development issue (refugees)	Students research a contemporary example of environmental refugees and examine the role of individuals, groups and governments in creating / assisting in the refugee problem.	E5.1, E5.2, E5.7

Stage 6 Geography Syllabus Area	Possible Activities	Outcomes
Global Challenges - Population Geography		
Refugee migration	Students undertake a research task looking at a case study of environmental refugees (eg Tuvalu etc). Prepare a report on the extent and cause of the problems and the potential impact on surrounding communities.	P4, P5, P8, P12
Global Challenges - Development Geography		
Equity issues relating to ecologically sustainable development	Students write an argument extended response on the role of the international community in assisting nations deal with environmental refugees and ensuring that global warming is reduced.	P1, P5, P12

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Climate Change and Winter Sports: Environmental and Economic Threats

By Rolf Bürki, Hans Elsasser & Bruno Abegg

Introduction

For many alpine areas winter sports are the most important source of income, and snow-reliability is one of the key elements of the touristic offers. Skiing and snowboarding, but also snow related sports such as cross-country skiing or snow hiking depend on enough snow.

Mountain areas are sensitive to climate change. Implications of climate change can be seen, for example, in less snow, receding glaciers, melting permafrost and more extreme

events like landslides. Furthermore, climate change will shift mountain flora and fauna. Second order impacts will occur in mountain agriculture, mountain hydropower and, of course. mountain tourism. However, climate change is a severe threat to snow related sports such as skiing, snowboarding and crosscountry skiing. Lower earnings in winter tourism will reinforce economic

disparities between urban areas and the less developed alpine regions. Additionally, the ski tourism industry will "climb" up the mountains to reach snow reliable areas at high altitude. This process will lead to a concentration of winter sport activities, and will put further pressure on the sensitive environment of high mountains.

Clearly, it should be emphasised that climate is only one of many factors influencing snow tourism. However, less snow threatens the winter tourism industry in mountain areas. Good snow conditions are a necessity, although that is not the only prerequisite for a financially viable mountain cableway company. Without enough snow, however, profitable ski tourism will scarcely be Presented at: 5th World Conference on Sport and Environment, Turin 2-3 December 2003 (IOC/UNEP) (Reproduced with permission)

possible. Mountains without snow are like summer without a sea. Apart from having sufficient snow at the right time ? and particularly during the Christmas/New Year holidays ? a key role is also played by the weather conditions (predominantly at the weekends). Since weekend and day guests are planning their trips at evershorter notice, it is not just the actual weather conditions that are a growing factor of influence, but the weather forecasts too.

Climate impact research on the winter tourism industry has been undertaken in various countries such as Canada, the U.S.A., Australia, New Zealand, Austria, Switzerland, France and the U.K. (see Koenig 1998 or Buerki 2000 for an overview). All these studies show severe implications for the winter tourism industry if climate change were to occur. While some regions may be able to maintain their winter tourism with suitable, but expensive adaptation strategies (e.g. artificial snowmaking), others would lose their winter tourism industry due to a diminishing snow pack.

Global mean temperature has increased by about 0.6 - 1°C over the last 100 years (IPCC 2001). The years at the end of the nineties were the warmest over the last centuries. Global temperature will increase in the future. Of course, there are a lot of uncertainties and the range of scenarios of the future warming is quite big. However, IPCC estimates a temperature increase of 1.4 to 5.8° until 2100. Global warming will be stronger on land surface, the northern hemisphere and in winter: that is the location and the season of mountain winter tourism.

Climate change and potential impacts on winter tourism

Snow

The financial viability of the winter tourism industry depends on sufficient snow conditions. It was the winters with little snow at the end of the Eighties (1987/88 – 1989/90) that caused a stir in the Alps. The big difference to the situations at earlier periods with little snow is that

the capital intensity of ski tourism had considerably increased. However, the most important link between climate change and mountain tourism is less snow and, as a consequence, less earnings in ski tourism.

Glaciers

There is a measured increase in the retreat of glaciers all over the world. Since 1850, Swiss Glaciers have lost more than a quarter of their surface. In 2030, 20 to 70% of Swiss glaciers will have disappeared. This is not only a severe lost of mountain aesthetic, but also a problem for ski slopes on glaciers in winter and summer skiing.

Permafrost

Global warming increases melting of permafrost and makes many mountain areas vulnerable to landslides. Mountain cableway stations, lift masts and other buildings in permafrost soil become instable. To brace and to anchor such buildings in melting permafrost-soils causes high costs. However, warming in mountain areas also makes hiking and climbing more dangerous due to increasing rockfall.

Changing weather conditions

On the one hand, the future climate will be warmer, on the other hand, the future climate will change its pattern. More precipitation or a higher fog level will lead to new conditions for mountain summer tourism such as hiking, trekking or biking. More and stronger extreme events are another threat for tourism activities and tourism infrastructure. Besides, with warmer winter temperatures ice fishing would be

increasingly impossible.

Climate change and snow-deficient winters

Results from the Alps

The economy in alpine regions is highly dependent on tourism. If the assumptions of the impacts of climate change hold true, snow cover in the Alps will diminish which will, in turn, jeopardise the tourism industry. The crucial factor for the

long-term survival of mountain cableway companies is the frequency and regularity of winters with good snow conditions, or, put the other way round, the number of snowdeficient winters that can be withstood. It is not possible to give a definitive answer here, since the economic situation of the companies varies too much. The experience acquired by various ski resorts, however, shows that a ski resort can be considered snow-reliable if, in 7 out of 10 winters, a sufficient snow covering of at least 30 to 50 cm is available for ski sport on at least 100 days between December 1 and April 15.

Today, 85% of Switzerland's 230 ski resorts can be considered to be snow-reliable (table 1). However, even today a lot of ski resorts in the

Region	Number of ski resorts	1200 No.	masl %	Snow-reliabi No.	ility 1500 masl %	1800 No.	masl %
Jura	15	4	27	1	7	0	0
Alps (Vaud + Frib.)	19	16	84	7	37	4	21
Valais	54	54	100	52	96	40	74
Bern (ex. Jura)	35	30	86	20	57	12	34
Central Switzerland	35	26	74	13	37	7	20
Ticino	8	8	100	3	38	2	25
Eastern Switzerland	18	11	61	6	33	3	17
Grisons	46	46	100	42	91	33	72
Switzerland Total	230	195	85	144	63	101	44

Table 1: Snow-reliability of Swiss ski resorts (Buerki 2000)

Prealps are not snow-reliable. If the line of snowreliability were to rise to 1'500 m as a result of climate change (year 2030 - 2050), the number of snow-reliable ski resorts would drop to 63%. The Jura, Eastern and Central Switzerland, Ticino, and the Alps in the cantons of Vaud and Fribourg will be particularly jeopardised by global warming. The ski regions of Valais and the Grisons will experience virtually no major problems, since the mean altitude of the cableway terminals in these regions is higher than 2500 m above sea level. If the line of snow-reliability were to rise to 1800 m. which is a possible scenario, there would be a further serious deterioration in conditions: only 44% of skiing regions could be designated as snow-reliable. Even in the cantons of Grisons and Valais, approximately a quarter of the ski resorts would no longer be snow-reliable.

A survey among tourists shows, that skiers will respond flexibly to changing snow conditions. During a period of snow-poor seasons, as expected more often under a changing climate, 49% of the skiers would change to a ski resort that is more snow-reliable. 32 % of the skiers would ski less often. Although only 4% of the respondents would give up skiing, it can be concluded that climate change would have serious impacts on the number of skier days. The most vulnerable ski resorts in the lower regions of the Alps have to deal with a significant decrease of younger guests, day tourists and novice skiers, which is exactly the target group of these resorts (Buerki 2000).

The potential annual costs of climate change in Switzerland can be estimated at CHF 2.3 to 3.2 billion (US \$ 1.5 to 2.1 billion) by the year 2050, which is 0.6 to 0.8% of the Swiss gross national product for 1995. CHF 1.8 to 2.3 billion (US \$ 1.2 to 1.6 billion) would be accounted for by tourism. Even if there are many reservations that can be voiced regarding this calculation, it nevertheless shows that tourism is the economic sector that would be most affected by climate change in Switzerland and that this influence is of an order of magnitude that cannot be neglected.

Climate change will lead to a new pattern of favoured and disadvantaged ski tourism regions. If all other influencing factors remain the same, snow related sports would concentrate in the high-altitude areas that are snow-reliable in the future too. Ski resorts at lower altitudes will withdraw from the market sooner or later because of the lack of snow. The only areas with good prospects will be those with transport facilities that provide access to altitudes higher than 2000 m. The regions at higher altitudes may experience greater demand, prompting a further expansion in quantitative terms. The pressure on ecologically sensitive high-mountain regions will increase.

The call for ski resorts with snow-reliability is the main argument for the current boom in concept studies to open up high mountain regions, or, in other words, climate change is the reason for opening up high mountain regions to tourism. In Switzerland more than 100 projects exist to extend ski sport infrastructure, a lot of them sponsored by subsidies. In the Alps as a whole, there are at least 300 projects, including, for example, new lifts, snow machines (including water reservoirs) and flattened slopes.

The impacts of climate change on winter tourism may be even more severe in countries such as

Ski resort	'Best case' 2030 ?T = +0.3°C ?P = 0%	'Best case' 2070 ?T = +0.6°C ?P = 0%	'Worst case' 2030 ?T = +1.3°C ?P = -8%	'Worst case' 2070 ?T = +3.4°C ?P = -20%
Charlotte Pass	+	+	+	-
Thredbo	+	+	?/+	-
Perisher-Blue	+	+	?/+	-
Falls Creek	+	+	?/+	-
Hotham	+	+	?/+	-
Mt Buller	+	?/+	?	-
Mt Buffalo	+	?/+	-	-
Selwyn	+	?	-	-
Mt Baw Baw	-	-	-	-

Table 2: Snow-reliability of Australian ski resorts (Koenig 1998)

(+) indicates that the prerequisite in terms of natural snow-cover duration for a financially viable ski operation (60 days rule) are accomplished.

(?) indicates that the prerequisite in terms of natural snow-cover duration for a financially viable ski operation are questionable.

(-) indicates that the prerequisite in terms of natural snow-cover duration for a financially viable ski operation are not accomplished.

?T = change of temperature; *?P* = change of precipitation

Germany (for example resorts in the Black Forest area or in Allgaeu) and Austria, due to the lower altitudes of their ski resorts. The famous tourist town of Kitzbuehel, for example, lies at the low altitude of 760 m. In Austria, the present snow line will rise 200 to 300 metres higher with climatic change in the next 30 to 50 years. Many mountain villages, above all in the central and eastern parts of Austria, will lose their winter tourist industry because of climate change (Breiling & Charamza 1999). In Italy, half of the winter sport villages are below 1,300 metres. Some of these are already facing major problems with snow cover. In future, there will only be a few winters with a winter atmosphere – that means with snow - in these ski resorts. If the altitude for snow reliability rises to 1,500m because of climatic change, winter sports would only be possible in the higher zones of the ski areas and many resorts would have no economic viability in the future.

However, the winter of 1998/99, in particular, February 1999, showed that the possibility of winters with a great deal of snow can not be excluded in the future. In a study of the 'avalanche winter' of 1999, the direct losses incurred by mountain cable-ways as a result of avalanches and the large quantities of snow were estimated at CHF 15 million (US \$ 10 million). In total, 36 facilities were damaged, including 20 ski lifts, 11 chairlifts, 4 cable railways and 1 funicular. The mountain railway companies had to spend an extra 77% on snow clearing, compared with previous years. Roughly 25% more than in normal winters was spent on securing the ski slopes. All in all, the avalanche winter of 1999 probably caused losses in excess of CHF 200 million (US \$ 130 million), the major portion of these having been indirect losses (SLF 2000).

Results from Australia

In order to find out how climate change may influence the snow-reliability of Australia's ski fields, impacts of different regional climate scenarios on the number of days with snow-cover were examined (Koenig 1998, tab. 2). Assuming the best-case scenario, all but one resort match the '60 days rule' in 2030. Assuming the worst-case scenario for 2030, a financially viable ski operation would only be possible in Charlotte Pass, but it would not be possible in three resorts at lower altitudes. At all other resorts, ski operation would concentrate on the highest areas of today's ski fields, while top to bottom skiing would not be possible in most resorts. With the worst case scenario in 2070 none of today's ski resorts would be operating a profitable ski industry.

However, a concentration of the ski industry to the highest ski fields is expected due to climate change. Assuming today's snowmaking technology, the lower resorts would have to close down. In higher ski fields, where skiing would concentrate, expensive snowmaking might be intensified and environmental problems (waste water, rubbish) are likely to increase. This would undoubtedly result in conflicts with both conservation groups and the Australian Alpine National Parks.

Results from Canada

The impacts of climate change in Australia, Canada and the U.S.A. may be not as severe as in Europe because of the high level of artificial snowmaking. Recognising that snowmaking is an integral component of the ski industry the results indicate that ski areas could remain operational in a warmer climate, particularly within existing business planning and investment time horizons (into the 2020s) (Scott et al. 2003). The economic impact of additional snowmaking requirements remains an important uncertainty. Under climate change scenarios and current snowmaking technology, the average ski season at the case study ski area in Canada (Lakelands tourism region) was projected to reduce by 0-16% in the 2020s, 7-32% in the 2050s and 11-50% in the 2080s. Without snowmaking the season would decline substantially by 37 – 57% in the 2050s.

Concurrent with the projected ski season losses, the estimated amount of snowmaking required increased by 36-144% in the scenarios for the 2020s. Required snowmaking amounts increased by 48-187% in the scenarios for the 2050s. The ability of individual ski areas to absorb additional snowmaking costs may be the crucial factor in remaining economically viable.

Adaptations of tourism representatives

The tourism representatives at a political, entrepreneurial, operational and organisational level are not sitting back idly contemplating the consequences of a climate change. They are adapting right now in the expectation of climate change. The experiences with snow-deficient winters have shown them that the climate does not determine their economic activities, but, instead, constitutes a key resource and framework condition. The results of a focus group study among tourism representatives in Switzerland can be summed up as follows.

Climate change has been recognised as a problem for winter tourism. Those responsible for tourism know that what they can offer is highly dependent on snow and that they are at risk from snow-deficient winters. They are familiar with the potential consequences of climate change for winter tourism. While achieving snow-reliability constitutes a central topic, potential climatic change is seen as being only of relatively minor importance.

Climate change is not regarded as a catastrophe for winter tourism. The tourism representatives think that climatic change is presented in a highly exaggerated form by the media ? and also in science and politics. Although climate change could intensify the problems that already exist in ski areas at lower altitudes and speed up structural changes in the sector, the majority of ski resorts at medium and high altitudes, however, would scarcely be affected.

Climate change is already affecting the strategies and plans of the winter sport resorts today. The discussions held in the focus groups clearly revealed an ambivalent relationship to climate change. On the one hand, the representatives strongly distrust the information disseminated about climate change and play down its potential consequences, but on the other hand, they use climate change to legitimate forward strategies. Climate change and global warming, together with international competition, have been used as the key arguments for constructing artificial snowmaking facilities, as well as for extending existing ski runs and opening new ones in highalpine regions (at above 3000 m).

The tourism representatives all agree that winter

sports can only survive in the Alps if snowreliability is guaranteed. Precisely, the smaller ski fields at lower altitudes either have their hands bound or can scarcely finance the necessary investments (e.g. snow cannons, levelling out ski slopes, opening higher-altitude chambers in skiing areas). On the one hand, they do not have financial resources of their own, and on the other hand, banks are (now) only prepared to grant very restrictive loans to ski resorts at altitudes below 1500 m, which are not particularly profitable. Nevertheless, the representatives believe that smaller ski fields in the Alpine foothills play a key role in promoting the importance of skiing. Opinions frequently differ a great deal, however, on whether non-profitable ski regions of this type should be retained and how their financing can be guaranteed. While a number of people are in favour of dismantling non-profitable cable-way and ski-lift operations and regard a certain 'healthy shrinkage' of the sector as necessary, others believe that there is an obligation to retain these ski fields for regional economic reasons. This is





also increasing pressure for cableway companies to receive subsidies.

Strategies

Climate change represents a new challenge for tourism, and particularly for winter tourism in mountain areas. It is not, however, the case that tourism's initial position will undergo a sudden. radical change. Instead, climate change has to be viewed as a catalyst that will reinforce and accelerate the pace of structural change in the tourist industry and more clearly highlight the risks and opportunities inherent in tourist developments even now. The emergence of a 2tier society in the winter tourism sector - a few resorts and cableway-companies at a high profit and most resorts and companies unprofitable will not be due to climate change alone, but to the general change in a competitive market as well. On the one hand, we have the top resorts with their already varied and attractive offers and high snow-reliability and, on the other hand, we have the smaller locations with their less-extensive developments, less-refined offers and restricted opportunities for further development.

Since climate change is a relatively long-term development in comparison to other trends in tourism, tourism managers and tourists will have every opportunity to adjust to the different constraints and adopt the corresponding strategies and measures (fig. 1). One of the most familiar measures in the struggle against snow-deficient winters is the construction of high cost artificial snowmaking facilities.

Adopting a fatalistic attitude towards climate change and its impacts should not be considered as a true strategy in this respect. Such attitudes are manifested by the fact that neither suppliers nor consumers alter their behaviour. This could also be described by using the term 'business as usual'. Another approach that can be classified under the heading of 'fatalism' is when tourist transport facilities that were used for winter sports are closed down and dismantled without any attempt at promoting and reinforcing other types of tourism - in other words, when withdrawal from ski tourism is not actively planned. A fatalistic attitude of this type is most readily evident amongst the operators of small, isolated ski lifts at lower altitudes who experienced severe financial difficulties as a result of the snow-deficient winters.

Conclusions

Global warming is a challenge for the tourism industry in mountain areas. But warmer temperatures and a longer summer season are of minor importance. Over all, climate change is a threat for mountain tourism due to less snow, less glaciers, but more extreme events (e.g. landslides).

Winter tourism depends on good snow conditions and is highly sensitive to snow-deficient

winters. Climate research findings show that there will be an increase in the number of winters with little snow on account of climate change. The tourism representatives will not just sit back idly in the face of climate change. They are reacting to the deteriorating snow conditions and the changes in demand. Technical measures, especially artificial snowmaking, to maintain ski tourism rank at the forefront. Tourists demand good snow conditions, and hence, this is what has to be offered by the ski resorts. In any case, the impacts of climate change will involve significant costs for tourism. One of the most important questions will be, how young people would start skiing/snowboarding, if there is only little snow in the big towns and if the little and cheap ski lifts for families at small distances to these towns will be dismantled due to climate change. Although indoor skiing is a growing industry in European towns, it is uncertain that indoor ski domes can replace the role of little ski resorts for beginners in the foothills.

As a sector of the economy that is severely affected by climate change, however, tourism needs to focus more on mitigation strategies in its own best interests. This holds particularly true for the traffic generated by national and international tourism and, above all, for air traffic. Tourist development and tourist projects not only need to be verified and evaluated in terms of their social and environmental compatibility but must also be assessed from the climate-compatibility angle.

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The Australian wine industry: From boom to gloom?

By Dr Grant Kleeman, Macquarie University – Sydney

Australia's wine industry is one of the country's great export success stories. In 2005, Australia's wine industry generated revenues of \$5.2 billion, \$2.8 billion of which came from exports. This is well up on the export income of \$121 million generated back in 1990. Over the same period

(1990–2005) wine production increased from 383 million litres to 1,420 million litres (a four-fold increase) and wine exports grew from 38 million litres to 702 million litres (an 18-fold increase).

Despite this apparent success, the industry is

beset by problems with up to 40 per cent of producers operating at a loss. At the heart of the crisis is the collapse in the prices growers receive for their fruit – a consequence of supply exceeding demand. In 2005, 200,000 tonnes of wine grapes were left to rot on the vines and the price growers received for their fruit plunged to as little as \$250 a tonne – well below the breakeven price of \$300–\$350 a tonne and the \$1,200 per tonne received in the late 1990s.

The cause of this crisis lies in a slowing of the annual rate of growth in domestic wine consumption (down from approximately 7% in 2003 to 3% in 2005); a decline in the annual rate of export growth (down from 24% in 2004 to 9% in 2005); a drop in the export prices (a 33% decline between 2002 and 2006); and the generous Federal Government depreciation (tax) incentives in wine – enough to fill 300 Olympic swimming pools or pour 7.5 billion standard drinks. Forecasts of when demand will catch up with supply vary from 2–10 years. The overproduction of fruit is the biggest challenge currently facing the Australian wine industry.

To try and clear stock



the mid-1990s which led to a rapid expansion of the area of land devoted to viticulture (see Box: At what cost a tax incentive!). For example, in the 10 years since 1996, the area planted with grapes doubled to 154,000 ha and production increased to almost 2 million tonnes of grapes a year, up from 883,000 tonnes in 1996. In 1998 alone, some 16,200 ha of land was planted with grapes, increasing the national cropping area by 22 per cent in just one year.

By 2006, Australia had a surplus of 900 million litres of

slashed the price consumers pay for wine in liquor outlets. Woolworth's Dan Murphy's and BWS liquor outlets have, for example, offered unlabelled or 'cleanskin' wines for less than \$2.00 a bottle. Such discounting is undermining

producers and

retailers have

the financial viability of an increasing number of producers.

Short-term strategies to deal with the current state of overproduction include leaving the fruit to rot on the vines, allowing livestock to graze on the fruit and vines, 'mothballing' vines (the pruning of vines so severely that they are effectively taken out of production for twothree years), and, in extreme cases ripping the vines out of the ground. Over the medium term, structural programs may be needed to assist producers to leave the industry.

Characteristics of the Australian viticulture and winemaking industry

The Australian wine market is now considered a 'mature' market with per capita annual consumption steady at approximately 21.6 litres. With little scope for significant growth in the domestic market the industry's development has largely been driven by the growth in the export of Australian wines. In the mid-1990s only 16 per cent of Australian wine was exported. Since then, exports have risen by 400 per cent to over 700 million litres - or ten times faster than the growth in domestic sales (see Table 4). Wine is now Australia's third largest agricultural export. behind beef and wheat but bigger than wool and dairy products.

Australian wines are proving popular in the traditional wine markets of Europe and North America and in the emerging market of Asia where 'New World' wines from Australia, Chile and South America, are admired for their quality and consistency. Australia is now the world's fourth largest wine exporter and the largest outside the European Union. Australian produced wines now outsell French wines in the United Kingdom and an Australian brand (Casella Wines' Yellow Tail) is the largest selling imported wine in the United States of America. Figures 3a and b show the trend in two of Australia's major export markets - The United Kingdom and the United States of America. The growth in volume has been accompanied by a reduction in the return per unit (i.e. a case of wine).

The potential for further growth in Australian wine exports is dependent on a range of macroeconomic factors. These include: consumer tastes and preferences, economic growth rates and the price competitiveness of Australian wines in destination markets. For example, relatively high rates of economic growth in major wine markets helps drive an increase in the consumption of wine. In 2005, the global economy grew by 4.6 per cent and, despite concerns about the likely impact of higher world oil prices on consumer spending, global wine consumption grew by about 1 per cent. The value

At what cost a tax incentive!

Government attempts to intervene in the market often have unintended consequences. The Australian wine industry offers no better example.

The origins of 'crisis' affecting Australian viticulture and winemaking can be traced back to 1993, when winemakers lobbied the Federal Government to boost the supply of grapes so that winemakers could take advantage of the surging global demand for Australian wine. The Government responded by rewriting the industry's depreciation rules. This meant that growers could now write off the cost of buying and planting vines over just four years, rather than over the lifetime of the vines. In addition, the growers could now take the deductions from the moment the vines were planted, instead of waiting until the first grapes were sold. This provided existing and potential growers with a lucrative tax shelter which they could use to minimize their tax liability on other sources of income.

It took some time for the incentives to take effect but by the late 1990s new and expanded vineyards were spreading across the Australian landscape. Unfortunately, many of the new growers were more skilled in minimizing tax than growing grapes. In just three years (1997–99) an additional 40,600 additional hectares of vines were planted – a 40% increase over the 100,000 hectares already in production. It had taken 30 years to plant the previous 100,000 acres.

Other factors contributing to the surge in plantings included:

- The growing popularity of New World and, in particular Australian wines, in traditional and emerging wine markets; and
- A decline in the value of Australian dollar from 80 U.S. Cents in 1996 to just 50 Cents in 2001. This increased the international competitiveness of Australian wines (i.e. they became cheaper relative to other, competing, wines)

Other factors contributing to the current oversupply of grapes and overproduction of wine include:

- Competition in the UK and USA markets from wines made in Chile, Argentina and South Africa; and
- The appreciation of the Australian dollar. As the currency tracked back to 75 US Cents, Australia lost its competitive price advantage over other wine producers.

Australia finally scrapped the industry's tax breaks in 2004.

Confronted by mounting financial losses, grape growers have called on the Federal Government for help. The industry asked for \$45 million bailout that would pay growers not to pick some 300,000 tons of grapes in 2007 and 2008. But the Government has rejected the request. Instead of propping up failing vineyards, it decided to let market forces determine which producers would survive.

The Australian viticulture and winemakng industry: Statistical profile

Table 1: Statistical snapshot of the Australian wineindustry, 2005

Wineries	2,008
Vineyard area (ha)	166,665
Tonnes crushed	1,923,861
Beverage wine production (ML)	1,420.3
Domestic sales (ML)	430.1
Exports (ML)	701.8
Exports (value A\$ million)	2,793.5
Imports (ML)	22.1
Imports (A\$ million)	188.2

Figure 1: Australian wine grape production, 1960–61 to 2004–05



Table 2: Crop area devoted to the production of wine grapes, 1995 and to 2000-06

Year	Area devoted to wine grape production (ha)
1995	77,682
2000	110,623
2001	130,599
2002	158,594
2004	157,492
2005	164,181
2006	166,665

Table 3: Australian wine grape prices (A\$/t), 1999-01 to 2004-05

Year	White wine grapes (A\$/t)	Red wine grapes (A\$/t)
1999-00	868.0	661.0
2000-01	753.0	701.0
2001-02	599.4	701.2
2002-03	655.4	562.1
2003-04	668.6	501.4
2004-05	628.6	438.6

Source: ABARE

Table 4: Domestic sales of Australian wine and Australian wine exports by volume, 1996–97 to 2005–06

Year	Domestic sales of Australian wine (ML)	Australian wine exports (ML)
1996-97	332.8	NA
1997-98	338.8	193.6
1998-99	348.3	216.1
1999-00	369.3	286.5
2000-01	384.8	338.9
2001-02	385.3	416.0
2002-03	402.5	508.0
2003-04	417.4	580.0
2004-05	430.6	661.2
2005-06	NA	732.0
2006-07	NA	859.0

Source: ABARE

Table 5: Export wine sales by value, 1997–98 to 2006–07

Year	Australian wine exports (A\$m)
1997-98	813
1998-99	991
1999-00	1,347
2000-01	1,614
2001-02	1,970
2002-03	2,386
2003-04	2,545
2004-05	2,750
2005-06	2,791
2006-07	3,236

Source: ABARE

Figure 2: Wine exports by destination, 1990-91 and 2004-05



Table 6: Australia's largest wine producers, 2005

Rank#	Corporation	Winegrape intake (tonnes)
1	Foster's Wine Estates*	410,327
2	Constellation's Hardy Wines Company	363,550
3	McGuigan-Simeon Wines	250,000
4	Pernod Ricard's Orlando-Wyndham Wine Group	156,216
5	Casella Wines	126,209
6	De Bortoli Wines	95,200
7	Evans & Tate	50,537
8	McWilliams Wines	42,000
9	Kingston Estates	34,000
10	The Yalumba Wine Company	34,000

Tonnes of grapes crushed 2005: 1,923,861

* Includes the former Southcorp Wines group and Beringer Blass Wine Estates.

Ranked by the total grape tonnage processed or contract crushed for company-owned branded and bottled products. Source: Winebiz [www.winebiz.com.au] Figure 3a: Trend in Australian wine exports to the United Kingdom



Figure 3a: Trends in Australian wine exports to the USA



of the Australian Dollar also impacts on the ability of Australian producers to compete in foreign markets. An appreciating Australian dollar, for example, makes Australian wines more expensive relative to wines sourced from other 'New World' producers. In recent years, the high global demand for Australian mineral exports has helped drive up the relative value of the Australian Dollar. This has resulted in more modest export growth rates and a decline in the per unit return from exports. In 2006, the values of Australian wine exports grew by just 1 per cent. This is well down on the 15 per cent in 2004 and the 28 per cent growth rate recorded in 2002.

Ownership and control in the Australian wine industry is highly concentrated. The three largest producers (Fosters' Wine Estates, Hardy Wines and McGuigan–Simeon Wines) account for 53 per cent of total wine grape intake, with the next four accounting for an additional 22 per cent (see Table 6). Table 7 shows that the industry has a large number of small, often family-owned wineries crushing less than 100 tones per year. At the other end of the scale, the 40 largest operators process more than 10,000 tonnes per year.

The Australian industry is

highly globalised. There is, for example. significant international investment by French, American and Italian wine companies. Two of the world's largest wine companies – the French-based Pernod Richard group and the **US-based** Constellation

group – have invested substantial capital in the Australian industry principally through a series of takeovers and mergers. This process of globalisation in the industry is a relatively recent phenomenon. Over the last 4–5 years the Australian wine industry has undergone rapid change as major domestic producers have been swallowed up by global wine players.

The 'Big 4' Australia wine companies.

1. Fosters – the Australianbased TNC – is now one of the world's leading beverage companies producing a range of beers, wines and spirits. The corporation's wine company – Foster's Wine Estates – was created through a series of corporate takeovers – Mildara Blass Wine Estates (1995), Beringer USA (2000) and Southcorp Wines (2005). Foster's Wine Estates now controls a worldwide wine including Rosemont, Lindemans, Leo Buring, Kaiser Stuhl, Jamiesons Run, Minchinbury, Penfolds, Queen Adelaide, Matthew Lang, Seaview, Seppelt, Wolf Blass, Yarra Ridge, and Yellow Glen.

Fosters now dominates the Australian wine market. Four out of every 10 bottles of wine sold is a Foster's owned brand, and the company's wines

> occupy 85 per cent of retail shelf space.



with a broad geographic spread of vineyards and winery facilities across Australia's major wine regions. The group has a comprehensive portfolio of brands covering a diverse range of styles and price points. These brands are distributed to more than 80 countries through a global network of sales and marketing offices. Global sales exceed 100 million bottles annually.

Some of the major brands within this portfolio include Hardys (including Hardy's Nottage Hill), Berri, Omni, Stanley, Yarra Burn, Banrock Station, Leasingham, Houghton, Stonehaven and Barossa Valley Estate. This range covers all price points, and makes Hardy Wines one of the largest suppliers of quality wines in Australia with around 25% of the domestic market.

*Constellation Wines – a division of the New York-based Constellation Brands – is the world's largest wine business. Within Constellation Wines



supply chain – viticulture, winemaking, production facilities, sales and marketing operations – in the Americas, Europe, Middle East & Africa, Asia, New Zealand and Australia.

The company owns more than 15,000 hectares of vineyards in the wine growing regions of Australia, California, New Zealand, Italy and France and operates more than 20 wineries across the world. Foster's international wine portfolio includes more than 50 individual brands. Its 62 Australian brands include some of Australia's best-known labels

Table 7: Australian wine companies by size, 2005

Grapes crushed (tonnes)	Number
<100	1,325
100-499	340
500-1,000	76
1,000-5,000	88
5,000-10,000	29
>10,000	40

Source: Winetitles 2005

there are six companies, five are brand owners (one of which is the Hardy Wine Company) producing, marketing and selling their own brands in their home countries and one is a wine-focused sales and marketing trading company that sells the products beyond the home country borders.

3. McGuigan Simeon Wines Limited (MGW) - a diversified, publicly listed company formed through the merger of the McGuigan Wines and Simeon Wines in 2002. The group's activities include grape growing, wine making and liquor wholesaling, vinevard management and development. The McGuigan-Simeon labels include the McGuigan Black Label, Bin Range, Earth's Portrait, Genus 4 and Pinot Grigio brands. Simeon labelled wines include Buronga Hill, Loton and Yaldara.

4. Pernod Pacific Group (formerly Orlando-Wyndham) acquired in 1989 by Pernod Ricard^{*}, the giant French wine and spirit producer - is Australia's third largest wine producer. The company's principal Australian brands are the Wyndham Estate wines and Jacob's Creek. More than seven million cases of Jacob's Creek are sold each year throughout the world. This one brand accounts for almost one-third of Pernod Ricard's global wine sales.

*Pernod Ricard is the world's second largest wine and spirits supplier. It maintains distribution networks on all continents and more than 80 per cent of the Group sales are realised outside France: 33 per cent in Europe, 28 per cent in Asia/rest of the world, 28 per cent in Americas, and 11 per cent in France.

Wine retailing in Australia

The plight of the wine industry is further complicated by the increasingly concentrated nature of the Australian wine retailing sector. The battle between the two giants of Australian retailing – Coles and Woolworths – is driving down prices. Consumers win but grape growers and winemakers have their profit margins slashed.

Modern retailing is big business. In recent years the trend is away from the small independent retailer towards the large-scale, multi-outlet, branded/franchised operator. For the latter, continuity of supply and economies of scale are very important. To survive in this new retail landscape retailers need to be big, highly visible, and have lots of outlets.

In Australia, the small, independent wine retailer is finding it increasingly difficult to complete with the two retail giants – Woolworths and Coles. Woolworths owned wine outlets include the in-house Mac's Liquor, BWS (Beer, Wine & Spirits) and Dan Murphy's. Coles controlled liquor retailers include its in-house Liquorland stores, the budget Theo's chain and upmarket Quaffers and Vintage Cellars outlets.

Woolworths now operates more than 950 liquor outlets nationally, while Coles operates about 625 outlets. Given the number of geographical spread of these outlets, it is not surprising that Woolworths now controls 26% of the national wine retailing market and Coles about 19%. This gives the two retail giants a combined market share of about 45%. The majority of this market dominance has been built since 2000.

The big retailers don't like dealing with multiple suppliers but are still quite attracted to the notion of product diversity. Typically, they will stock hundreds of different wine labels sourced from a small number of large wine producers - usually the 'Big 4'. This gives the shopper the 'illusion of choice'. Such an arrangement favours the makers of 'brand' wines. The large retailers like the consistency of the 'industrially' produced wines those made in volume and to a formula. There is, therefore, considerable commercial pressure promoting the production of branded wines crafted to suit the tastes of the average consumer. There is, as a consequence, little room left in the market for innovative wines made by small, often family owned producers.

Because of their market dominance, Woolworths and Coles are able to extract very favourable deals from major wine companies who are willing to cut their profit margin in return for shelf space and increased sales volume. This helps explain the widespread discounting that is now a feature of the sector.

Producers of 'estate' wines have found increasingly difficult to gain shelf space and market exposure through the big retail chains. They are now largely restricted to the specialist wine retailers and the smaller, independent, retail chains. These retailers are now in the process of repositioning themselves in the market. They are targeting those wine consumers who are willing to pay a higher price for more interesting and innovative wines.

WATER FOR ALL: A new classroom resource for Stage 4

Rod Yule – Education Officer, World Vision Australia

A child dies every fifteen seconds from water-related diseases. Nearly 6,000 die daily – the equivalent of 20 jumbo jets crashing every day. This could be headline news every day. Without access to safe fresh water, the health, education, and economic development of a community suffers. Water is an issue of social justice and equity.

According to the United Nations, 'reasonable access to safe water' means an individual has at least 20 litres of water per day, from a safe source that is within one kilometre of their home. This is not the case for 1.2 billion people on the planet or one person in five. At the same time, the average Australian uses 200-300 litres per day from multiple outlets within their own home. Table 1 shows the distribution of access to safe water around the world.

Yet while access to fresh water in developing countries fails to make our news headlines, water is still big news in the Australian media. There is no shortage of contemporary Australian stories to draw on in the classroom. At the same time, there is a need for up-to-date case studies from

Table 1: Global Access to Safe Wa	iter
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	% of population using improved drinking water sources with reasonable access to safe water	GNI per capita (US\$)
Central and Eastern Europe, Commonwealth of Independent States	91	2,036
East Asia and Pacific	78	1,426
Latin America and Caribbean	89	3,311
Middle East and North Africa	87	1,465
South Asia	84	511
Sub-Saharan Africa	57	496
Industrialised countries (incl. Australia)	100	28,337

Source: UNICEF (2004) The State of the World's Children 2005.

developing nations and especially our Asia-Pacific neighbours. Water is one of the recurring themes of the Stage 4 Geography syllabus and this is where World Vision can support you in the classroom.

In 2007, World Vision Australia is launching a new Global Education magazine called 'Get Connected' and the first issue looks at this issue of Water For All. The 24-page magazine is free and includes a 22 minute DVD looking at a case study in Niger (sub Saharan Africa). The magazine will also include comparative case studies looking at Australia, Laos and Papua New Guinea. Here are some examples of the sort of material you will find:

[Take in cover sent separately]

CASE STUDY – PAPUA NEW GUINEA

Like many women on Buka Island, Bougainville, Francisca has walked up mountains, scaled down steep hills, and travelled long, winding footpaths in search of clean water.

Francisca has six children and every morning she straps a twenty-five litre container to her back and begins her search for water in the hills. Sometimes it takes her up to half a day to find and fetch water that is rife with disease and bacteria, contributing to recurring bouts of diarrhoea, malaria, intestinal worms, conjunctivitis and various skin diseases for her children. The illnesses mean her children often miss school.

The irony is that many people on Bougainville Island are surrounded with a vast ocean of salty water but have never had proper access to a fresh water supply. In the dry season, the rivers, streams and springs are often dry or else they are polluted by human and animal waste because of a lack of toilets on the island.

Partnering with communities on the island, World Vision has drilled six bore holes up to sixty metres deep; dug fifteen shallow wells with fitted hand pumps; and built thirty latrines across twenty-two water starved communities. This has improved the lives of more than 16,000 people in some of the most remote villages on the coast.

Francisca is enthusiastic about the changes. "Instead of polluting the mangroves where we find the shell fish, we now use the pit toilets. The children don't need to worry about slipping in the mud or cutting their feet on the coral. In my life time government services have never reached our village, but this project will change our future."

Francisca and her community are learning how hygiene reduces disease and enjoying better health and more time for schooling and gardening.

The boreholes and toilets in Bougainville have not only decreased the rate of preventable waterborne illness and hygiene related diseases but has also transformed gender roles. "Water collection has always been women's work," said Francisca. "But now my boys and my husband are happy to pump water. Collecting water was the most difficult aspect of my life. I feel blessed knowing life will be different for my daughters."



Francisca points to the hill where she would look for water.

	Australia	Niger	PNG	Laos
Population (million)	19.9	13.1	5.7	5.7
Population below \$2 a day	0%	85.3%		73.2%
Population with sustainable access to an improved water source	1990 - 100% 2002 - 100%	1990 - 40% 2002 - 46%	1990 - 39% 2002 - 39%	1990 2002 - 43%
Population with sustainable access to improved sanitation	100%	12%	45%	24%
Male/Female life epectancy (years)	M. 77.7 F. 82.8	M. 44.3 F. 44.4	M.54.9 F. 56.0	M.53.4 F. 55.9
Under 5 Child mortality per 1000 live births	1970 - 20 2003 - 6	1970-330 2003- 262	1970-147 2003 - 93	1970-218 2003 - 91
GDP per capita (US\$)	29,632	835	2,619	1,759
Human Development Index (HDI ranking)	0.955 (3)	0.394 (166)	0.523 (137)	0.545 (133)
Male/Female adult literacy rate %	M. 99 F. 99	M. 19.6 F. 9.4	M. 63.4 F. 50.9	M. 77.0 F. 60.9
% of children reaching Year 5	100	69	51	64
Malaria cases per 100,000		1,693	1,688	759

Source: United Nations Human Development Report 2005

Improved water source: availability of at least 20 litres of safe water for a person within 1km of the user's dwelling

Improved sanitation: access to an excreta disposal system that effectively prevents human, animal and insect contact with excreta.

Human Development Index (HDI): a combined measure of life expectancy, education (literacy; school enrolment), and wealth (GDP) of a nation ranging from 0-1.

FOR YOU TO DO!

- Read and compare Francisca's story in PNG with Abida's and Zalipha's stories in Niger.
- Imagine you have been asked to interview one of them about the significance of water in their life.
- Prepare 3-4 questions you will ask.
- Put yourself in their shoes and write the answers you imagine they would give.
- Role play your interview in front of the class.
- Read about how this community worked with a non-government organization (NGO) to bring about this change in Bougainville on p. 20.



don't have access to safe, clean drinking what happens



Child bathing in water provided by one of the new bores

FOR YOU TO DO!

- 1. **Use** an atlas to find each of these countries and identify their region of the world (see Global map p. 4)
- 2. **Draw** a bar graph comparing each country's access to an improved water source. Give your graph a title and label both axes clearly.
- 3. Write three paragraphs describing how access to safe water is related to (i) wealth, (ii) education and (iii) health. Use evidence from the table to support your argument.
- 4. Go to the Human Development Report Website at http://hdr.undp.org/statistics/data/ indicators.cfm?x=62&y=1&z=1
- 5. Find 10 countries where access to an improved water source has improved by 10% or more since 1990. Find 10 countries where less than 50% of the population has access to an improved water source. What regions of the world do these come from?



Dr. Susan Bliss – NSW Manager Global Education

Quotes

"Health promotion has been described as the process of enabling people to increase control over, and to improve their health.

To reach a state of complete physical, mental and social wellbeing an individual or group must be able to identify and realise aspirations, to satisfy needs and to change or cope with the environment."

www.healthinfonet.ecu.edu.au/html/ html_programs/health_promotion/ programs_healthpromotion.htm

"While comparative health statistics of the Aboriginal and non-Aboriginal populations are useful, the wide disparity in social, demographic, economic and cultural characteristics of these groups can make interpretation of these statistics difficult. Intra-sub-population analysis can be beneficial in highlighting more subtle variations in bealth measures. This can lead to identification of areas where significant improvements in health are being made or those places where more direction or appropriate resources are required".

www.aboriginal.health.wa.gov.au/htm /health/default.htm

GEOGRAPHICAL TOOLS WORKSHEET USING ICT IN FOCUS AREAS: 4G3, 5A3 AND 5A4

Geography Syllabus (BOS 2003)

Cross-curriculum content

Aboriginal and Indigenous, Difference and Diversity and Multicultural

Values and attitudes

- a just society
- intercultural understanding
- informed and active citizenship

Geographical issue

Main ICT sources:

www.healthinfonet.ecu.edu.au/ www.medicineau.net.au/AbHealth/ www.aboriginal.health.wa.gov.au/ www.health.nsw.gov.au/living/atsi.html www.crcah.org.au/

www.betterhealth.vic.gov.au/bhcv2/ bhcarticles.nsf/pages/ Aboriginal_health_issues?open

Quote

"Health is not just the physical wellbeing of an individual, but the social, emotional, and cultural wellbeing of the whole community in which each individual is able to achieve their full potential as a human being thereby bringing about the total wellbeing of their community"

www.healthinfonet.ecu.edu.au/

Article:

Mavis Golds, Aboriginal bealth coordinator for the NRAHS, offers some suggestions on how to improve health services to Aboriginals. www.medicineau.net.au/clinical/ abhealth/MavisGolds.html

Many Aboriginal communities have major problems with alcohol, high unemployment rates and educational standards way below the

Objectives Students will develop:	Stage 4 Outcomes A student:	Stage 5 Outcomes A student:
knowledge and understanding about how physical, social, cultural, economic and political factors shape communities, including the global community	4.9 describes differences in life opportunities throughout the world	5.8 accounts for differences within and between Australian communities 5.9 explains Australia's links with other countries and its role in the global community
knowledge and understanding about civics for informed and active citizenship	4. 10 explains how geographical knowledge, understanding and skills combine with knowledge of civics to contribute to informed citizenship	5.10 applies geographical knowledge, understanding and skills with knowledge of civics to demonstrate informed and active citizenship

POSTER INTERPRETATION



Hepatitis poster: www.adac.org.au/images/p hepc jpg.jpg Refer to the website. What is the message?

Focus Area 4G3: Global Change

Students learn about:	Students learn to:
 Global inequalities extremes of poverty and wealth variations in the access of people to essential aspects of life including: education, food, health, shelter, water different life opportunities and quality of life throughout the world Global organisations global organisations by investigating a group involved in reducing global inequalities 	 identify global patterns of poverty and wealth describe global variations in the access of people to a range of essential aspects of life describe different global life opportunities and quality of life, including those based on gender discuss methods used by groups to influence the global community

Focus Area 5A3: Issues in Australian Environments

 Geographical issues geographical issues affecting Australian environments: spatial inequality Spatial inequality must include: the geographical processes the perceptions of different groups individual, group and government responses decision-making processes involved in the management management and implications for social justice and equity describe each geographical issue in relation to: its nature its impacts the responses by individuals, groups and governments to the issue explain the interaction of the physical and • recognise the responsibility of the levels of government to the issue propose actions that promote: social justice equity evaluate the success of individuals, groups and the levels of government in managing the issue 	Students learn about:	Students learn to:
 Investigate a geographical issue through fieldwork by developing and implementing a research action plan develop a research action plan apply fieldwork techniques present geographical information in an appropriate format 	 Geographical issues geographical issues affecting Australian environments: spatial inequality Spatial inequality must include: the geographical processes the perceptions of different groups individual, group and government responses decision-making processes involved in the management management and implications for social justice and equity Investigate a geographical issue through fieldwork by developing and implementing a research action plan 	 describe each geographical issue in relation to: its nature its impacts the responses by individuals, groups and governments to the issue explain the interaction of the physical and • recognise the responsibility of the levels of government to the issue propose actions that promote: social justice equity evaluate the success of individuals, groups and the levels of government in managing the issue develop a research action plan apply fieldwork techniques present geographical information in an appropriate format

Focus Area 5A4: Australia in Its Regional and Global Contexts.

Students learn about:	Students learn to:
 Human rights future challenges for Australia in relation to human rights strategies to address the challenges 	 identify human rights agreements describe responses of individuals, groups and governments in Australia to these challenges suggest strategies Australia can adopt to address the challenges better in the future

mainstream. She said the life expectancy of Aboriginal people was 54 years as opposed to 76 years in the wider community.

One of the things Mavis considers important is for the mainstream service providers to recognise the significance of history and culture to Aboriginal people, and to be sensitive to sometimes different needs, and different perspectives. She says we need to look at strategies that do and do not work.

Some of the recommendations Mavis puts forward include:

- The need to employ Aboriginal and Torres Strait Islander people in hospitals. This would help to break down many barriers. Aboriginal people would use the services more, as has been shown in other places where this policy has been implemented.
- Asking patients to identify their Aboriginality for statistical and cultural purposes - most do not mind.
- Arranging on-going cultural awareness programmes for staff. These help health workers understand how a lot of Aboriginals' current health problems are related to their history.
- Displaying culturally sensitive posters and pamphlets to create a more friendly environment.

At the end of the day, reconciliation between the Indigenous population of this country and the rest of the population will benefit everyone. Mavis knows the difficulties her people face, but is upbeat about the future, saying she thinks it will be her children's generation that will implement a lot of changes."

Key Points for Australia

• The mean birth weight of babies born to Indigenous mothers was 3,169 grams

compared with 3,363 grams for those born to all Australian women.

- Babies born to Indigenous women were almost twice as likely to be of low birth weight (11.8%) than were babies born to all Australian women (6.6%).
- 19 deaths per 1,000 population for Indigenous males was 2.7 times that of the total Australian male population (7 per 1,000).
- 12 per 1,000 for Indigenous females were 2.4 times that of the total Australian female population (5 per 1,000).
- Indigenous males born in 1998-2000 could be expected to live to 56.0 years, almost 21 years less than the 76.6 years expected for all Australian males.
- The expectation of life at birth of 62.7 years for Indigenous females was more than 19 years less than the expectation of 82.0 years for all Australian females.
- The maternal mortality ratio for Indigenous women in 1994-1996 was 34.8 per 100,000 confinements, more than three times higher than the ratio of 10.1 per 100,000 for non-indigenous women.
- In 1998-99 Indigenous males were admitted to hospitals across Australia 1.8 times more than other males, and Indigenous females 1.9 times more than other females.
- Deaths from respiratory disease were five to six times more common for Indigenous people than non-indigenous Australians in 1997-1999.
- Injury is the most common cause of hospitalisation among Indigenous males and the third most frequent cause among Indigenous females (excluding renal dialysis for both males and females).
- In 1995-1997, deaths from

diabetes were 9 times more common than expected for Indigenous males living in WA, SA and the NT, and 16 times more common for Indigenous females.

- The incidence rate of new tuberculosis disease was 15.3 per 100,000 for Indigenous people, compared with 1.2 per 100,000 for Australian-born non-indigenous people (97%).
- Overall rates of HIV and AIDS are low in comparison with other countries.
- The median age of diagnosis of AIDS among Indigenous people was 32 years compared with almost 37 years for the total population.
- In capital cities and other urban areas, most Indigenous people live near many of the health services that they need, but people living in rural areas often have to travel a long distance to receive health services. In rural areas 2 in 10 Indigenous people did not have access to a doctor within 25 km of where they lived, 2 in 10 did not have access to a nurse, 3 in 10 were not near an Aboriginal Health Worker. and 6 in 10 did not have access to a

dentist within 25 km of where they lived.

- About 3 out of 4 Indigenous children aged 12 years or less had been breastfed or were being breastfed.
- Over 40% of males and almost 50% of females 13 years or older believed that family violence was a common problem.
- Scabies is endemic in many remote Indigenous communities, with prevalence in children up to 50%.
- Estimated total expenditure by Australian governments and the private sector on health. services to Aboriginal and Torres Strait Islander people in the 1998-1999 financial year was \$1,245 million. This is equivalent to \$3,065 per person compared with \$2,518 per person for non-indigenous people - a ratio of 1.22:1 (this compares with a ratio of 1.08 in 1995-96.

Activity 1:

From Table 1 answer the following tasks:

- What state or territory has the largest and smallest Indigenous population?
- What state or territory has

State or territory	Indigenous population	Proportion of Australian Indigenous population (%)	Proportion of population (%)
New South Wales	123,405	28.4	1.8
Victoria	24,974	5.8	0.5
Queensland	121,601	27.7	3.1
Western Australia	62,577	14.4	3.2
South Australia	24,770	5.7	1.5
Tasmania	16,917	3.9	3.2
ACT	3,699	0.8	1.0
Northern Territory	57,236	13.2	28.5
Australia	435,381	100.0	2.2

Table 1. Indigenous population in Australia 30 June 2002

Source: Australian Bureau of Statistics www.healthinfonet.ecu.edu.au/

Approximately 410,000 Indigenous people were counted in the 2001 census that was more that 16% counted in the 1996 Census

the largest and smallest proportion of Indigenous people?

- What proportion of the Australian population are Indigenous people?
- Account for the small proportion of Indigenous people in Australia.
- Draw the proportion of Australian Indigenous population (%) as a pie graph.

• Using Internet compare table with current statistics. Account for any changes.

Activity 2:

From the population pyramid answer whether the following statements are true or false.

- Non-indigenous population has more babies than the Indigenous population.
- Indigenous people live longer than non-indigenous

Graph 1. Population pyramid of Indigenous and non-indigenous populations, 2002



Source: www.healthinfonet.ecu.edu.au/

The median age of Indigenous mothers was 24.5 years compared with 29.8 years for all women. More than one-fifth of births to Indigenous women (22.8%) were to women aged less than 20 years, compared with 4.0% of those to non-indigenous women.

Table 2: Age-specific fertility rates for Indigenous women and all women, Australia, 2000

Age group	Indigenous Mothers	Total population
15-19	85	17
20-24	133	57
25-29	114	107
30-34	71	111
35-39	31	49
40-44	7	9

Source: Australian Bureau of Statistics, 2001

people.

- The indigenous population is younger than the nonindigenous population.
- 40% of Indigenous people are aged under 15 years compared with 21% of nonindigenous people.
- Indigenous women tended to have more babies and to have them at younger ages than did non-indigenous women.
- 2.6% of the Indigenous population was aged 65 years or over, compared with 12% of the nonindigenous population.

What is the proportion of Indigenous and non-indigenous people between 15 and 65 years? Why is this figure important?

Analyse the pyramid graph and give reasons for the differences between Indigenous and nonindigenous Australians.

The median age of Indigenous mothers was 24.5 years compared with 29.8 years for all women. More than one-fifth of births to Indigenous women (22.8%) were to women aged less than 20 years, compared with 4.0% of those to nonindigenous women

Activity 3

Answer these questions from Table 2:

- At what age did most Indigenous women and total population have babies? Account for the differences.
- Draw two line graphs illustrating age-specific fertility rates for Indigenous women and all Australian women.
- Using ICT compare table with current statistics. Account for any changes.

Activity 4:

Answer these questions from Table 3:

• What were the total fertility rates per 1,000 for Indigenous women and for all women? Account for the differences

- Total fertility rates for Indigenous women were highest in what state or territory? Account for the differences
- Total fertility rates for Indigenous women were lowest in what state or territory? Account for the differences
- Using the Internet compare table with current statistics. Account for any changes

Activity 5

Answer the questions from Table 4

- What is the life expectancy for males and females in Australia? Account for the difference
- What is the life expectancy for Indigenous males and females in Australia? Account for the difference
- In what state or territory do male and female Indigenous people live longer? Account for the difference

Activity 6

From Table 5 answer whether the following statements are true or false:

- The Indigenous infant mortality rate of 13.6 infant deaths per 1,000 live births was 3.0 times the nonindigenous rate of 4.6.
- The highest mortality rates were for the Northern Territory.
- The lowest mortality rates were in New South Wales.

Account for the differences in Activity 7

From Table 6 answer whether the following statements are true or false:

• The most frequent causes of death for Indigenous people were neoplasms (cancers) (1.5 times that of the total population), injuries (including transport accidents, intentional selfharm and assault) (2.3), endocrine diseases (particularly diabetes) (8.3) and disease of the respiratory system (3.6).

• The next most frequent cause of death was disease of the circulatory system (including heart disease and stroke).

Account for the differences in the cause of death between Indigenous men and women

Activity 8

From Table 7 answer whether the following statements are true or false

Table 3: Total fertility rates for Indigenous women and all women, Australia and selected States, 2000
--

Population	Indigenous women	All women
Australia	2,207	1,749
New South Wales	1,985	1,809
Queensland	2,316	1,784
Western Australia	2,580	1,777
South Australia	2,143	1,713
Northern Territory	2,755	2,216

Source: Australian Bureau of Statistics, 2001

Table 4: Expectation of life at birth for Indigenous people and the total population 1998-2000

Indigenous Population	Males	Females
Australia	56.0	62.7
New South Wales	56.3	63.6
Victoria	56.1	63.5
Queensland	56.2	62.7
Western Australia	55.5	62.6
South Australia	55.3	61.2
Northern Territory	55.9	61.6
Australia	76.6	82.0

Source: Australian Bureau of Statistics, Australian Institute of Health and Welfare, 2001

 Table 5: Infant mortality rates by Indigenous status and Indigenous:

 non-indigenous rate ratios.

Australia State/Territory	Indigenous	Non-indigenous	Rate ratio
Australia	13.6	4.6	3.0
New South Wales	12.4	4.7	2.6
Victoria	13.3	4.2	3.2
Queensland	10.7	6.0	1.8
Western Australia	16.9	3.3	5.1
South Australia	11.1	4.3	2.6
Northern Territory	22.9	3.7	6.2

Source: Australian Bureau of Statistics, 2001

- 1997-2001, the notification rate for HIV infection was 3.7 cases per 100,000 for the Indigenous population and 3.6 cases per 100,000 in the non-indigenous population.
- 1997-2001 rates are higher than those reported for 1992-1998.
- AIDS diagnoses were 1.3 per 100,000 for the Indigenous population and 1.4 for the non-indigenous population.
- Using the Internet compare the table with current statistics. Account for any changes.

Key points for NSW

www.health.nsw.gov.au/publichealth/chorep/atsi/atsi hlt.htm

- Around 134,888 Indigenous people live in NSW, making up just over 2% of the total population.
- In 2001, a higher percentage of Indigenous than nonindigenous families had an income less than \$500 per week; Indigenous households were more likely than others to be multifamily and to live in rented homes; Indigenous adults were more likely to be

-		-	
Males		Females	
Number	MR	Number	MR
750	3.1	568	2.8
496	2.8	205	3.3
320	1.4	267	1.4
206	4.1	159	4.0
169	7.2	202	6.2
119	4.7	96	4.0
62	2.4	34	2.3
58	5.8	85	7.6
58	4.2	45	5.4
55	2.3	39	1.8
76	6.0	43	5.3
2,515	2.9	1,864	2.9
	Number 750 496 320 206 169 119 62 58 58 55 76 2,515	Males Number MR 750 3.1 496 2.8 320 1.4 206 4.1 169 7.2 119 4.7 62 2.4 58 5.8 55 2.3 76 6.0 2,515 2.9	Males Ferr Number MR Number 750 3.1 568 496 2.8 205 320 1.4 267 206 4.1 159 169 7.2 202 119 4.7 96 62 2.4 34 58 5.8 85 58 4.2 45 55 2.3 39 76 6.0 43

Table 6: Numbers of Indigenous deaths and mortality ratios

Source: Australian Bureau of Statistics, Australian Institute of Health and Welfare, 2001

 Table 7 Numbers and rates of newly diagnosed HIV infection, by

 Indigenous status and year, 1997-2001

Voor	Indigenous		Non-indigenous	
Tear	No. of cases	Rate	No. of cases	Rate
1997	15	3.8	707	3.9
1998	26	6.5	645	3.5
1999	9	2.2	692	3.7
2000	14	3.3	641	3.4
2001	12	2.8	685	3.6
1997-2001	76	3.7	3, 370	3.6

Sources: National Centre in HIV Epidemiology and Clinical Research (2002); ABS (1998); ABS (1997-2001) unemployed and to have no post-school qualifications; and young Indigenous adults and children were less likely to use a computer at home.

- In 1999-2001, newborn Indigenous males in NSW could expect to live 57 years, and newborn Indigenous females could expect to live 64 years. This was about 20 years less than the life expectancy for the general population.
- Indigenous people are more likely to die at younger ages. People aged less than 25 years make up around 10% of deaths of Indigenous people, compared with 2% of deaths among nonindigenous people. Deaths among people aged 65 years and over comprise around 38% of Indigenous deaths, compared with 80% of nonindigenous deaths.
- Around 12% of Indigenous babies are born prematurely, and a similar percentage are of low birthweight. These rates are higher than for the general population.
- Indigenous people have higher smoking rates than non-indigenous people and are more likely to report drinking alcohol at levels that are risky for health.
- Indigenous people have higher hospitalisation rates than non-indigenous people for many health conditions. Compared with nonindigenous people, Indigenous people in NSW:
 - are 1.7 times more likely to be hospitalised for injury and poisoning;
 - are twice as likely to be hospitalised for heart disease and stroke;
 - are 4 to 5 times more likely to be hospitalised for diabetes;
 - are 3 to 5 times more likely to be hospitalised for chronic respiratory diseases;

- are 3 times more likely to be hospitalised for acute respiratory diseases;
- are more likely to be hospitalised as children for middle ear infections.

Activity 9

- Compare the IMR among Indigenous population and general population in NSW.
- Account for the differences.
- Explain why there has been a decrease in IMR since 1997.

Activity 10:

- Compare the 7 socioeconomic factors between Indigenous and Nonindigenous people in NSW.
- How can this inequality be reduced?

Moving forward

www.health.nsw.gov.au/areas/ccahs/ kooris/kooris.html





What is the message?

Quick Meals for Kooris is a 'hands-on' cooking program designed to assist urban Aboriginal people to cook healthy meals for the family. It is delivered in two three-hour sessions and is very flexible and versatile. It can be used as a standalone activity or incorporated within larger programs.

The recipes used include

'everyday' foods, fresh, frozen and tinned, which are always the cheapest to buy and often in the cupboard.

"Quick Meals for Kooris" is designed to be run by an Aboriginal Health Worker or a member of the Aboriginal community. The group leader does not need extensive nutrition knowledge, just some basic home cooking skills and



Table 8 Infant Mortality Rate

Source: www.health.nsw.gov.au/public-health/chorep/atsi/atsi infdth.htm

Table 9 Socio-economic factors



Source: www.health.nsw.gov.au/public-health/chorep/atsi/atsi infdth.htm

knowledge of their local community

Anthony "The Man"Mundine lends a hand for health



The CRCAH is proud to be a major sponsor of the Hoops 4 Health Challenge. Created by Ex-NBL player Timmy Duggan, this fantastic program aims to educate and improve the health and well-being of young Indigenous Australians. To see how you can get involved check out the Hoops 4 Health website.

www.hoopsnhealth.org.au/

Scholarships are available to provide support for Indigenous students to undertake research training in areas of particular relevance to the promotion of health in Aboriginal communities.

FURTHER READING, GRAPHS AND TABLES – EXTENSION FOR THE GIFTED AND TALENTED

* The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples.

www.healthinfonet.ecu.edu.au/

• Australia's Health 2002 highlights.

www.aihw.gov.au/media/2002/ mr020627.pdf

CIVICS AND CITIZENSHIP USING INFORMATION TECHNOLOGY

1. Aboriginal Drug and Alcohol Council www.adac.org.au/

What is the Aboriginal Family Intervention Project? www.adac.org.au/whatwedo/mentor.htm

2. Kimberley Aboriginal Medicine Services Council (KAMSC)

www.kamsc.org.au/

- Where are the community controlled health clinics in the Kimberley area located? www.kamsc.org.au/acchs.h tm.
- Draw the map
- What are the key functions of the KAMSC?
- 3. Centre for Indigenous Peoples' Nutrition and Environment

http://cine.mcgill.ca/

"Some of the animals eaten by Northern Aboriginal peoples are known to have contaminants in them, yet these traditional foods are also a source of excellent nutrition not easily replaced by market foods." Find out about traditional food.

http://cine.mcgill.ca/TF/tfMain.htm.

What are the benefits and costs of traditional food?

4. Standing Committee: Indigenous Health www.aph.gov.au/house/committee/ fca/indhea/inginde2.htm

"In view of the unacceptably high morbidity and mortality of Aboriginal and Torres Strait Islander people the House of Representatives Standing Committee on Family and Community Affairs was requested, during the Thirty-Eighth Parliament, to conduct an inquiry into Indigenous Health. The Committee was unable to complete its work due to the dissolution of the House of Representatives on 30 August 1998. Consequently, the Committee, on 12 January 1999 was asked by the Minister for Health and Aged Care to complete this inquiry in the Thirty-Ninth Parliament, reporting on the same terms of reference as follows:

- ways to achieve effective Commonwealth coordination of the provision of health and related programs to Aboriginal and Torres Strait Islander communities, with particular emphasis on the regulation, planning and delivery of such services;
- barriers to access to mainstream health services, to explore avenues to improve the capacity and quality of mainstream health service delivery to Aboriginal and Torres Strait Islander people and the development of linkages between Aboriginal and Torres Strait Islander and mainstream services;
- the need for improved education of medical practitioners, specialists, nurses and health workers, with respect to the health status of Aboriginal and Torres Strait Islander people and its implications for care;
- the extent to which social and cultural factors and location, influence health, especially maternal and child health, diet, alcohol and tobacco consumption;
- the extent to which Aboriginal and Torres Strait Islander health status is affected by educational and employment opportunities, access to transport services and proximity to other community supports, particularly in rural and remote communities; and
- the extent to which past structures for delivery of

health care services have contributed to the poor health status of Aboriginal and Torres Strait Islander people"

www.aph.gov.au/house/committee/ fca/indhea/reportfinal.pdf

- 5. Indigenous Peoples of Australia Health www.ldb.org/oz_h.htm
- 6. Health Watch



www.ldb.org/ www.ldb.org/iphw/orgs.htm

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Promoting the health of Indigenous Australians: a review of infrastructure support for Aboriginal and Torres Strait Islander health advancement. Canberra: National Health and Medical Research Council

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- 13. Aboriginal and Islander Health Worker Journal (2004) The Indigenous health promotion resources guide (4th ed.). Sydney: Aboriginal and Islander Health Worker Journal

Macquarie Revision Guides School Certificate Australian Geography

From a series of study aids written by teachers for NSW students in Year 10 to 12, it focuses on all the topics to be examined in the Australian Geography, Civics and Citizenship component of the School Certificate examination for 2006 and beyond. That is, Investigating Australia's Physical Environments, Changing Australian Communities, Issues in Australian Environments and Australia in its Regional and Global Context.

The guide is divided into ten chapters that are consistent with the syllabus with a broad overview of the topics covered, a list of key areas, key terms and defined geographical tools that relate to the topic.

Each chapter includes sample questions in the style of the School Certificate examination, including multiple-choice, short response and extended response questions. These also include the appropriate space the complete the responses (that is, ruled lines have been included). The author is to be congratulated for incorporating suggested answers to these questions with analysis of the responses to give the reader an understanding of the standard achieved.

These should give students and teachers a reasonable idea of what to expect in the examination. It also provides an opportunity for revision immediately prior to the examination or as you are studying each topic individually.

If you are looking for a resource highlighting and summarising specific case studies, this is not it. This study aid gives generic summaries for the topics covered, with the exception of the three examples of Issues in Australian Environments and four global links in the Australia in its Regional and Global Context topic. It is designed to be used in conjunction with your regular textbook and other resources.

> Reviewed by Sarab Menassa Redlands

Green Power: Environmentalists who have changed the face of Australia



Williams, C. Lothian Books (2006) Paper back, 215 pages, with index ISBN 1 0 7344 0898 6 RRP: \$24.95

Green Power is

an interesting concept. In putting together the book, experienced journalist and academic, Christine Williams, selected some of Australia's leading environmentalists, both past and present, and provided a snapshot of their work.

William's selection is interesting. She includes the well known – Bob Brown, Peter Garrett and Ian Kiernan as well as some famous names that are not so much associated with environmentalism (but which after reading the biographies deserve the title or environmentalist) – Albert Namatjira and Judith Wright. Williams has also examined the pioneers of Australia's environmental movement – Miles and Milo Dunphy and Vincent Serventy.

In total, Williams has produced 18 short biographies that are incredibly diverse. She has concentrated on those people who have played a key role in political change in relation to environmentalism. For example, there are few scientists or academics included in her list. Names such as Tim Flannery and Mike Archer are perhaps notable by their exception. Never-the-less, the people Williams has included have a fascinating tale to tell about the environment and the work that has been done, and is being done, to protect it in Australia.

Williams writes with economy. At times I would have liked to hear more about the people themselves. By far the best chapter, in my view, was Tassie Tiger, the examination of Bob Brown. I liked this chapter because it was much more than a simple resume of his professional work – instead it went into what makes Bob Brown so passionate about the environment and also gave us an insight into the man himself. Some of the chapters, particularly those focussing on the pioneering environmentalists, lacked this insight and I found them a little mundane and descriptive.

That said, there is much of interest in this book which I enjoyed reading. Each chapter is self contained and short enough to be read in a brief sitting, or in my case on the bus to work! Williams has thoroughly researched her material and in some cases has interviewed the subjects.

If you have an interest in the development of environmentalism in this country and about some of the people behind it then Green Power is worth a look.

> Reviewed by David Hamper International Grammar School

Text Types: A writing guide for students



Quill, A. & Oostenbroek, P. Farr Books (2006) Paper back, 48 pages ISBN 1 921 228 008 RRP: \$9.95 (Available from

Townsend, A,

Farr Books - farrbooks.com.au; PO Box 97, Wilston QLD, 4051; Fax 07 3356 4545)

It might seem a little strange to our readers that Geography Bulletin is reviewing what is essentially a literacy book. However, literacy is at the core of Geography. If our students are unable to communicate effectively in writing they will never gain recognition for the geographical knowledge and understandings they develop. Take the Higher School Certificate Examination for example. Sixty percent of the marks available in this exam are derived from extended responses. It is, therefore, my view that all Geography teachers have a responsibility for teaching core literacy and writing skills.

Text Types is a tool to assist students to better understand the complexities of different writing genres. It is a generic text that is not written just for Geography students alone. However, all of the key text types that our students are required to use are covered in this book.

In all, 21 different text types are addressed. Some of these are of limited use to Geography students, such as writing poetry and biographies. However, a quick glance through the table of contents reveals just how many different ways of writing Geography students are expected to use: discussions, descriptions, narratives, explanations and expositions. Additionally, there are included some text types that we often take for granted but our students need to master: e-mails, letters, posters and PowerPoint presentations - these are all covered in the text.

Text Types is a remarkably simple idea – a basic two-page spread for each text type with a scaffold of instructions on the left hand page and a worked example on the right hand side. It is this example that differentiates this book from others that cover similar subject matter. The examples, demonstrate not just how to write the text type but also what the finished product should look like.

At less than \$10.00 this simple little book is great value.

Far too many Geography students struggle with their writing, as is evidenced by the number of students who have difficulty with the extended response sections in both the School Certificate and Higher School Certificate examinations. This book is an excellent way to assist teachers (and parents) develop their students understanding of the processes and features of the various text types they are expected to use.

I strongly recommend this book. As is often the case, it is the simple ideas that reap the best results. Text Types is a basic book there is no "flashy" layout or design elements. It is not colourful or packed with graphics and icons. Instead, it focuses on a simple layout that makes understanding the information easy.

This is the kind of text that I think every student would benefit from owning. I would suggest that, if possible, every student, particularly senior students, should have their own copy. Because it is applicable to so many subjects the \$10 outlay represents a cost effective exercise. Its small size makes it easy to fit inside a work folder allowing students access to it all the time.

> Reviewed by David Hamper International Grammar School

We Are the Weather Makers: The story of global warming



Flannery, T. Text Publishing (2006) Paper back, 275 pages, illustrated & with index ISBN 1 9211 4534 X RRP: \$19.95

I have reviewed many books as the Reviews Editor of the Geography Bulletin. Of all these books We Are the Weather Makers is the first one that I would describe as "important". It is much more than a repository of information relating to geographical processes. It is a book that has the potential to change the way that people live their lives. This makes it a truly remarkable work.

On the front cover Dr Karl Kruszelnicki asks: "if you want to save the world, read this book". When I noticed this I initially dismissed it as little more than marketing spin. However, once you start reading the book you'll find yourself agreeing with Kruszelnicki. This book challenges the reader to go beyond being just concerned about global warming but to actually do something about it.

I have enormous respect for Tim Flannery. I have read many of his books and I like the way he writes. He covers complex topics in a way that engages the reader but at the same time retains the academic integrity of what is written. We Are the Weather Makers is no exception.

The book is divided into five sections, each containing several chapters. Part 1, The Atmosphere deals with the structure of the atmosphere and how it has developed over time. Part 2, One in Ten Thousand examines the impact of global warming on various aspects of climate and climatic processes, such as El Nino and La Nina (Chapter 9).

Part 3, The Science of Prediction, looks at how predictions about global warming are made and the scientific validity of these predictions. Part 4, People in Greenhouses, explores what the world has done, or is not doing in relation to global warming, including a very interesting discussion on the Kyoto Protocol (Chapter 23).

Part 5, The Solution, examines, as its title suggests, what can be done to reduce the hazards of global warming. I really liked these four chapters because they focussed on the future and what can be done. This inclusion meant that the book was not just a story of "doom and gloom". It instead challenges the reader to actually do something and to make a difference.

I noted at the start of this review that this was an important book, but important for whom? Who should be reading this book? The answer to that question in many respects is simple – everyone! I would like to see politicians, car manufacturers and power company executives reading this book. It cuts through the science and gets to the point that simply doing nothing and maintaining the status quo is not an option.

In reality, many of these people will probably not read Flannery's work but the next generation of politicians and business executives are sitting our classrooms right now and they should be reading it. After all, as Flannery points out, the 21st Century is their century – they and their children will still be here as 2100 looms and they will be facing the consequences of climate change much more directly than today's generation of leaders.

For this reason it is important that our students are exposed to this book. We Are the Weather Makers is written in such a way that senior students can easily understand and, because it is based on real research, it will help our students develop a valid and well-reasoned opinion on the issue of global climate change.

As Bill Bryon said of his review of the book: "It would be hard to imagine a better or more important book". I agree whole-heartedly.

> Reviewed by David Hamper International Grammar School

The Macmillan Visual Guide: Weather



Buckley, Hopkins & Whitaker (2004) 303 Pages, with index Illustrated RRP: \$45.00

This is a part of a new series by Macmillan focussing on the physical forces that shape the world. From the moment I opened the cover of this book I was treated to a visual feast. The book has some of the most amazing photographs I have ever seen.

The book is divided into six main parts:

- 1. The Weather Engine that examines the forces that drive the weather;
- 2. Weather in Action examining the processes of weather;
- 3. Extreme Weather looking at the natural hazards associated with weather;
- 4. Watching the Weather the way weather is recorded;
- 5. Global Climate, examining the world's major climatic zones; and
- 6. The Changing Climate examining the issues surrounding human impacts on the weather.

Each of the sections includes a relatively small amount of text, a range of illustrations to explain key concepts and a large number of amazing photographs.

I thoroughly enjoyed reading this book. The layout was easy to read, the language level suited a reader with some, but not extensive, knowledge of weather and, of course, the photographs kept me wanting to turn to the next page for another treat.

How would you use this book? Clearly this book fits into the category of teacher resource and definitely a book for the library. It's also the kind of book that would be perfect for an award or indeed a gift for those with an interest in the weather and/or fine photography.

I have reviewed many books and resources for this journal in recent years. Amongst all of those I have reviewed I have always found some point on which to make a criticism. However, in this case try as I might there is nothing that I can point to and say: "That could be done better". Well done indeed to the authors and also Macmillan for producing such a wonderful book.

> Reviewed by David Hamper International Grammar School

GEOGRAPHY TEACHERS' ASSOCIATION OF NSW INC

Statement of Cash Receipts and Cash Payments

for the Year ended 30th June 2006

	2004-05				2005-06	
Receipts \$	Payments \$	\$		Receipts \$	Payments \$	\$
11 /02	<u>8 787</u>	\$11,946	Working cheque a/c CBA Rozelle 06 2243 0090 2649: Balance at start of year CST	14 706	9.642	\$15,370
32,533	25 / 36		Membership Teachers' Conferences (1)	58,034	5,042	
47,100	23,430		Teachers' Conf: Annual Teachers' Conf: Country Teachers' Conf: Other	14,305 11,066 15,262 8,164	7,369 7,795 8,439	
4,718	2,568		Students' Conferences Advertising	9,827 1 141	1,801	
1,262 573 79	1,492 2,675		Postage Awards Evening Interest	371 231 133	2,302 2,322	
405 16,843	39,231 1,013		Geography Bulletin Dictionary Posters	64 4,962 855	35,234	
559 12,098	129		GTA Publications Grant A/c Reimbursements (4)	1,044 6,564	78	
1,684 3,116 2,503	7,874		Aust Geog Tchrs Assoc Professional Tchrs Council (5)	2,818 145 6,044	6,684 3,652	
3,406 6,000	500		Copyright Agency DET Grant	10,115	001	
15	593		Sunaries	164	691	
242 23,642 6,644 272 1,930 13,767			Geog Office Committee (6) Office Expenses (7) Marketing and Membership Refunds (8) Australian Taxation Office (4)	1,215	576 31,771 7,238 290 1,282 11,617	
250 142,219	138,795		Unpresented chqs written back TOTAL Less: Deficit (Excess of payments over receipts)	176 180,118	154,543	
		3,424 15,370	Plus: Surplus for year to 30/6/06 Subtotal Balance on working account Plus transfer in from St George term a/c.			25,575 40,945 13,000
NOTES		\$15,370	Balance of working cheque account at end of year			\$53,945
(1) Tea (2) AG (3) AG (4) ATC	chers' Conferer QTP Grant Conf QTP Grant is m D payments and	nces figures ference mor oney receive refunds are	are shown in total for 2005. These were dissected in 20 hies are receipt from participants. ed from Australian Government to run conferences. e for the BAS for both the main and grant a/cs. BAS payr	06. nents are made f	rom the main a/	c and
sub (5) Gra (6) Off	sequently reim ant received for ice wages etc.	bursed from printing and	n the grant a/c. Payments to AIO also include PAYG salar I postage, some being for previous year.	y tax from the gr	ant a/c.	

Some of these expenses have subsequently been reimbursed by the Geographical Society of NSW. (7)

(8) Refunds mainly for Teachers' and Students' Conferences including 3 complimentary registrations given to country participants at Sydney Conference.

at 20/6/06

Cash Balances as at 30/6/06	\$
Reconciled Commonwealth Bank, Rozelle, interest-bearing working account 06 2243 00902649	53,945.11
St George term deposit 3361 02748 (including interest of \$1,835.22, matures 19/1/07)	25,626.58
St George term deposit 3359 04386 (incuding interest of \$335.65, matures 7/9/06)	8,644.02
St George term deposit 335904351 (including interest of \$671.32, matures 7/9/06)	17,288.02
St George term deposit 3333 24409 (including interest of \$314.45, matures 25/7/06)	8,097.92
Petty Cash	100.00
TOTAL	\$113,701.65
Other Assets	
Office Equipment – estimated to realise	\$1,000.00
The New Geography Dictionary – value will be known when sold	
Liabilities	nil

— Jenni Shipp, Treasurer, 4 August, 2006

AUDITOR'S REPORT:

The accounts are prepared on a cash-in cash-out basis.

Based on my inquiries and testing of the accounting system, I have formed the opinion that the above statements fairly present the financial affairs of the Geography Teachers' Association of NSW Inc.

— John S Richardson BEc, MBA (Syd), CPA 37 Bolwarra Avenue, West Pymble 2073, 4 August, 2006

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