

## Education

### Access to education and its impact on regional development

9.1 Access to lifelong education and training opportunities is second only to access to information and communication technologies in shaping the future for regional Australians. The Productivity Commission has reported the importance of education levels as a determinant of employment and income levels.<sup>1</sup> It has also emphasised the importance of education levels when a regional economy is changing.

9.2 **Lack of access to educational opportunities and the unavailability of a skilled workforce can retard regional development:**

An integral factor associated with the continued economic growth of rural areas is the availability of education and training. Limited opportunities are frequently cited as a major contributor to the increasing gap in economic and social welfare between the regions in Western Australia and the metropolitan area.<sup>2</sup>

9.3 The National Tertiary Education Union (NTEU) drew the committee's attention to the role of education in redressing the social and economic disadvantage faced by many regional areas, and in assisting the regions to respond to change:

Education plays a critical role in regional development. It supports the development of industries and enterprises through the provision of essential skills and knowledge; it provides research

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1 Productivity Commission, *Impact of Competition Policy Reforms on Rural and Regional Australia*, Report No. 8, September 1999, Canberra, p. 33.

2 Curtin University of Technology, Submission no. 78, p. 2.

and analysis of key industrial and environmental factors which impinge on the regions themselves; and it contributes to economic activity and job creation more efficiently than any other industry. Education provides valuable skill development opportunities for young Australians in regional areas, enabling them to develop and pursue aspirations towards meaningful and rewarding careers. The role of education is of particular importance to young Indigenous Australians, providing a resource to enable them to work within their communities to address economic and social disadvantage.

And:

A wide variety of effects is felt by communities undergoing ... diverse changes. Essential to the capacity of any community to respond to change and pursue its development potential is the presence of viable and effective infrastructure. Education is an important part of that infrastructure.<sup>3</sup>

### Participation rates and regional disadvantages

9.4 In its 1999 report on the provision of government services, the Productivity Commission reported that education participation and retention rates are lower in regional areas. Similar findings have been reported by the Human Rights and Equal Opportunity Commission (HREOC) and DETYA. The differences between urban and rural areas in participation rates at secondary level are not significant but the disadvantage of rural students is compounded by lack of choice, lower standards, and the need, for many students, to live away from home.<sup>4</sup>

9.5 The problem may, in part, be due to the urban focus of educational authorities. Professor J Pratley from Charles Sturt University submitted that:

From a rural perspective, many of the policy decisions are from a the metropolitan culture and make no allowance for the rural position. For school children, most activities are run in metropolitan areas which put unfair financial burden on the families of those in the country.<sup>5</sup>

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3 National Tertiary Education Union, Submission no. 230, p. 4.

4 The Department of Education, Training and Youth Affairs stated in its Submission to the committee that the gap in 1997 participation rates was just two per cent - Submission no. 258, p. 5.

5 J E Pratley, Submission no. 44, p. 3.

- 9.6 The Regional Australia Summit heard a similar view from Margaret Alston, the Director of the Centre for Rural Social research at Charles Sturt University:

... education is centralised and framed around an urbocentric model of conceptualisation and delivery.<sup>6</sup>

- 9.7 Rural schools are reported to have limited subject choice, lack of specialist teachers, and fewer resources in areas such as libraries, information technology and sports. Rural schools also have to cope with high staff turnover, relatively inexperienced teachers, and difficulties in filling vacancies.<sup>7</sup>

- 9.8 Students from isolated communities and those on remote properties face particular problems, as illustrated in a study cited by the National Farmers' Federation (NFF) submission to the committee, which revealed the trends in terms of access (to tertiary education) for rural and remote students compared with other disadvantaged groups:

Isolated children are well below parity and have remained constant, while those for rural areas are below parity and this access has actually declined in the period 1991 – 1995. ... In contrast, access to higher education for a number of other disadvantaged groups has improved significantly and actually risen above population norms.<sup>8</sup>

- 9.9 The impossibility of providing the full range of on-site educational facilities for every student whose home is in an isolated area is recognised. The New South Wales Farmers' Association, for example, accepts that it may not be possible for government to provide the physical infrastructure required for the education needs of rural and remote Australians to be met where they live.<sup>9</sup> However, the Association and the Isolated Children's Parent's Association of Australia (ICPA), amongst others, also argued for the need for such students to have adequate access to educational opportunities. ICPA pointed out that education facilities, no matter how well they provide for the needs of the community, are of little consequence for those who cannot access them because of distance and cost. They are concerned that without policies to provide adequate educational opportunities:

... the current scenario whereby a significant proportion of rural and remote youth that receive higher education never return to

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6 M Alston 1999, *Education and Training in Regional Australia*, paper given at the Regional Australia Summit, p. 7.

7 *ibid.*

8 National Farmers' Federation, Submission no. 238, p. 15.

9 New South Wales Farmers' Association, Submission no. 228, p. 5.

their regions because of limited professional job opportunities and substandard physical and social infrastructure, will continue to flourish.<sup>10</sup>

- 9.10 The impact of educational infrastructure deficiencies becomes more apparent with higher level education. The NFF explained that:

These problems increase as the child gets older and eventually seeks tertiary education. Most rural children can access primary school while living at home, but many have to leave home to access secondary school. Almost all students from rural and remote areas have to leave home to access tertiary education.<sup>11</sup>

- 9.11 It is at the tertiary level that the inequality between urban and rural areas is more evident. Professor John Chudleigh of the Orange Agricultural College told the Regional Australia Summit that participation rates in tertiary education by 19 to 21 year olds was 50 to 60 per cent lower than the urban participation rate. Students from rural and remote areas are however more likely to take up vocational education and training (VET) with participation rates for 19 - 21 year olds from these areas being higher than for urban areas.

- 9.12 This lack of participation in tertiary education is the result of many complex and varied factors. A study by Curtin University of Technology found that, for over 2 500 high school students from rural and isolated areas with significant interest in gaining tertiary qualifications, the factors that determined whether they would proceed included cost, availability of local employment, and having to leave home.<sup>12</sup>

- 9.13 Higher participation in vocational post secondary education might reflect regional needs for skilled labour but is probably the result of the cost and access difficulties associated with higher levels of tertiary education for many regional students. It will be necessary to continue the relative success of vocational education in rural areas but the results achieved to date will soon not be sufficient. Professor Chudleigh has found that there is no shortage of work for skilled people in rural areas and he is of the view that the lack of a trained workforce may seriously inhibit regional development:

Rural and regional Australia is facing a critical shortage of tertiary educated personnel to capture the developing highly technical and sophisticated workplace of rural Australia. Manual jobs are diminishing and being replaced by those requiring well trained

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10 Isolated Children's Parent's Association (Inc), Submission no. 94, p. 2.

11 National Farmers Federation, Submission no. 238, p. 14.

12 Curtin University of Technology, Submission no. 78, p. 2.

people and the growing shortage in many skill areas is further threatening to limit the potential for growth in regional Australia.<sup>13</sup>

- 9.14 The lack of skilled workers in some regions can in part be traced to the failure to retain and train local students. In Emerald, for example, the committee was told that the shortage of skilled trades people in the region was partly due to the departure of young people to take up tertiary education opportunities outside the region.
- 9.15 This lack of access and participation in education is reflected in the educational levels of the rural workforce. Rural area and towns have a high proportion of people with no post secondary qualifications or vocational qualifications only. More than 50 per cent of farmers, who make up 12 per cent of the work force, have not completed more than four years of secondary education, and less than a third have completed secondary education.<sup>14</sup> Both Professor Chudleigh and Margaret Alston in their papers to the Regional Australia Summit identified the cost and perceived value of tertiary education as the main barrier to participation.
- 9.16 The NFF is concerned that the lack of participation of rural Australians in tertiary education will have negative effects on individual rural households and communities within the rural sector, including agriculture.<sup>15</sup>

### Equity and social capital

- 9.17 Access to education should be seen as more than an economic investment. It is a basic human right and fulfils basic human needs. Difficulties in accessing education was one of the matters taken up by the Human Rights and Equal Opportunities Commission (HREOC) in their inquiry into the human rights of rural and remote communities. As pointed out by the New South Wales Farmers' Association:
- Access to high quality primary, secondary and tertiary education and training is a basic need of rural people.<sup>16</sup>
- 9.18 Education and training is also important to the cohesiveness of regional communities. The committee's visit to the UNE in Armidale provided an opportunity to talk to Richard Stayner of the Rural Development Centre about the emerging concept of human and social capital.<sup>17</sup> He explained

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13 J W Chudleigh, *Education and Training in Rural Australia*, paper to the Regional Australia Summit, p. 2.

14 Productivity Commission, *Impact of Competition Policy Reforms on Rural and Regional Australia*, Report No. 8, September 1999, p. 35.

15 National Farmers' Federation, Submission no. 238, p. 14.

16 New South Wales Farmers' Association Submission no. 228, p. 4.

17 R Stayner, Submission no. 281, p. 2.

that it is regional characteristics such as social organisation, networks, norms, and trust that contribute to social capital. They facilitate coordination and cooperation for mutual benefit. Education and educational networks are vital to these processes. Mr Stayner suggested that regional social capital is being eroded and stretched very thin by a number of forces, not least being the actions of governments in both withdrawing services which allow social capital to operate, and in pursuing policies which, on balance, favour mobility over attachment to place.

- 9.19 These considerations apply particularly in rural areas where the school is an integral part of the community's resources. It is often the centre of many activities - both educational and social. ICPA argues therefore that this is one of the reasons why it is essential that support and maintenance of schools in these communities continue.<sup>18</sup>

### **Regional needs**

- 9.20 The provision of education facilities that are accessible at the local regional level contributes much to the infrastructure of the regions and also facilitates participation. Research has identified a stronger relationship between higher education provision and retention rates in rural areas than in urban centres.<sup>19</sup>
- 9.21 Attention to the maintenance of human capital and the retention of regional people with educational qualifications will help overcome problems of attracting other qualified people to regional communities.
- 9.22 A sound and expanding knowledge base is characteristic of regions that show continuing growth. The submission from Australian Project Developments Pty Ltd cited an OECD finding, reflected in Australia, that certain regions develop advantages that become self-sustaining.<sup>20</sup> Dominant regions tend to attract business through a clustering effect and an expansionist regime becomes established, based on the exploitation of external economies in conjunction with innovation, skills development and an entrepreneurial culture. One of the factors that was found to differ in Australia's approach compared to some other countries was that others were adopting policies that ensured the supply of high quality inputs, including educated citizens.

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18 Isolated Children's Parents' Association (Inc), Submission no. 94, p. 6.

19 These findings from a study of rural participation by the Department of Education, Training and Youth Affairs are summarised in Department of the Parliamentary Library, Research Note 21 1999-2000, *Higher Education in Regional Australia*.

20 Australian Project Development Pty Ltd, Submission no. 254, p. 5.

- 9.23 The Institution of Engineers, Australia provided information about the developing shortage of engineering skills, particularly as government services are withdrawn and replaced by contract arrangements with the private sector.<sup>21</sup> It was noted, for example, that 56 per cent of rail companies predicted a shortfall in skilled engineers within 5 to 10 years. With increasing development and maintenance of regional infrastructure by the private sector, there is increasing need to consider a regional response to emerging skills shortages.
- 9.24 The primary, secondary, vocational and tertiary education sectors all have a role to play in building regional growth and can deliver the knowledge and skills required in the regions. However, they all face barriers to the delivery of the benefits they could provide.

## Primary and secondary education in the regions

- 9.25 **More attention needs to be given to the provision of adequate primary and secondary education as a precursor to tertiary and vocational training if young people are to be retained, educated and employed in their local regions. The provision of local educational services not only gives students opportunities to become educated but also creates economic, cultural and recreational assets within the regions. Failure to provide adequate education opportunities and to retain students will have serious implications.**
- 9.26 The Gosford City Council, for example, submitted that the central coast region of New South Wales has a large, unskilled workforce and that the lower than average educational attainment of the local population has a serious negative implication for attracting future industries.<sup>22</sup> This reflects lower than state average school retention rates and participation in tertiary education.
- 9.27 Edith Cowan University noted a similar trend in Western Australia where 'the need for quality year 11 and 12 programming causes many rural families to move to the cities'. The implications of this was put most pointedly:

This leaves rural communities bereft of exactly those citizens most likely to contribute to the region's growth.<sup>23</sup>

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21 Institution of Engineers Australia, Submission no. 234, p. 9.

22 Gosford City Council, Submission no. 108, p. 9.

23 Edith Cowan University, Submission no. 269, p. 1.

- 9.28 Educational facilities are more than centres for teaching primary and secondary students. They contribute much to the quality of life in rural communities and also help create an environment that is more attractive for investment and relocation of economic activity. The extent to which this potential above and beyond the basic educational role can be achieved depends on schools sharing facilities such as libraries, halls and sporting facilities with the community. Schools are not even fully utilised as educational facilities. A district educational superintendent in north west Tasmania proposed to the committee that, with the addition of suitable communication and computing technology, schools in that region could become centres of learning for the entire community over extended hours and weeks of the year rather than continuing to be relatively under-utilised for approximately 25 per cent of the year.<sup>24</sup>
- 9.29 The issue of sharing and community use of school sporting and recreational facilities was addressed by the House of Representatives Standing Committee on Environment, Recreation and the Arts in its report *Rethinking the funding of community sporting and recreational facilities: A sporting chance*. The Commonwealth government noted the recommendations and undertook to raise these matters with the states and territories.

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### **Recommendation 75**

- 9.30 **The committee recommends that the Commonwealth government:**
- **review its response to the report by the House of Representatives Standing Committee on Environment, Recreation and the Arts on the funding of community sporting and recreational facilities; and**
  - **advise the House of progress in encouraging the sharing of school facilities in regional and remote communities.**
- 9.31 Local schools have a particular role in this regard in small communities, as ICPA observed:
- ... in small communities the school is an integral part of the community. It is often the centre of many activities - both educational and social.<sup>25</sup>

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24 Carey McIver, Submission no. 61, p. 2.

25 Isolated Children's Parent's Association (Inc), Submission no. 94, p. 6.



- 9.32 The continuing support of these vital schools in rural areas raises several problems identified by ICPA:
- the personal and professional isolation of teachers;
  - the reduced secondary curriculum options which can be offered;
  - the levels of staff experience;
  - the additional postage and telephone costs;
  - the difficulties and costs of technology; and
  - the additional time staff and students have to be away from schools to participate in a range of activities, together with associated costs.
- 9.33 Overcoming these difficulties, and retaining students for the whole of their secondary education involves costs, but it is in the interest of regional communities to see that these costs are met. In describing how education facilities can act as a catalyst to regional development, the Queensland government noted that, in addition to providing good community facilities, schools are often one of the largest employers in small regional communities.<sup>26</sup> Schools purchase local goods and services and their capital works programs generate local employment. The Queensland government also noted the importance of good educational facilities to corporate regional investment decisions:
- The presence of education facilities may be a factor considered by service industries in establishing their base in a centre. ... Indeed, one of the many influences on corporate planning in recent years has been an increased emphasis on competition and choice for schools. In larger urban areas, parents are encouraged to think they have the opportunity to exercise choice.
- In remote areas, quite often there is only one school in a community - the State school. Given policies governing eligibility for transport and boarding school subsidies, many parents have no choice but to rely on the State school for their children's education. In such cases it is important that rural schools are able to deliver a range of educational programs, particularly for secondary students.<sup>27</sup>
- 9.34 ICPA also noted the impact of government policies on the delivery of educational services to regional and remote areas:
- ... while a highly educated rural and remote population can facilitate both ecologically and economically sustainable growth,
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26 Queensland government, Submission no. 257, p. 22.

27 *ibid.*

such a scenario begs the question as to whether this can happen without interventionist economic policies by the Commonwealth and State Governments.<sup>28</sup>

## **Recommendation 76**

- 9.35 The committee recommends that the Department of Education, Training and Youth Affairs place greater emphasis on providing vocational education and training for Year 11 and 12 students in regional areas.**

### **Educational infrastructure**

#### **Telecommunications**

- 9.36 Distance and isolation, and the associated costs, are critical factors in the educational disadvantaging that is characteristic of regional Australia. Policies and programs to provide better communications and transport services will help overcome these deficiencies. Communication and information technology services, as discussed elsewhere in this report, are crucial to the provision of adequate modern educational infrastructure to regional Australia.**

- 9.37 The importance of information and communication technologies to education services was highlighted by DETYA:

Information infrastructure ... provides access to worldwide information sources, facilitates regional, national and global collaboration for students, teachers and researchers, supports more flexible delivery of education and assists the development of industry-driven research, applications and services.

Most forms of what was termed distance education, but is now known as “flexible” or “open” learning, take advantage of a range of innovative technologies. These support cost-effective, high quality and equitable education and training outcomes for students who would be unable to access their education and training through conventional means, particularly at the tertiary level.<sup>29</sup>

- 9.38 However, HREOC reported that:

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28 Isolated Children's Parent's Association (Inc), Submission no. 94, p. 2.

29 Department of Education, Training and Youth Affairs, Submission no. 258, p. 8.

... distance education is generally agreed to be adequate for primary students, although an unremunerated burden on the supervising parent(s). Distance education is a poor substitute for an interactive secondary school.<sup>30</sup>

**9.39 HREOC found evidence of the unsuitability of the telecommunications network for distance education:**

The quality of telecommunications technology is inadequate for teaching and learning in many parts of Australia.<sup>31</sup>

**9.40 These deficiencies were also acknowledged by DETYA:**

... teachers, students, researchers and industry personnel in regional areas continue to be disadvantaged by inadequate telecommunications services, lack of advanced information infrastructures, and appropriate skills, applications and services.

A major issue facing the schools sector is the absence of adequate telecommunications infrastructure and the high cost of Internet connectivity. Levels of connectivity vary across jurisdictions and vary significantly between metropolitan and rural areas. Many rural and remote schools do not have access to online services that enable the potential benefits of these services to be realised. In order to take advantage of the on line world, schools need more than a single connection via a modem and a standard telephone line. Ideally they need high speed permanent connections permitting multiple users to access the Internet at any one time. Such connections can be prohibitively expensive and in some remote areas the only access to online services is through costly satellite connections.

Many schools still have single dial-up connections while others have ISDN links but not the internal infrastructure to make full and proper educational use of the connections; and some schools still have no connections at all. Costs per student continue to rise as the bandwidth needed to support optimum classroom practice increases. Given the importance of equitable access to information and communications technology, consideration could be given to policies which promote access by all schools in Australia to appropriate telecommunications at an affordable price.<sup>32</sup>

**9.41 DETYA reported that the costs of providing and updating infrastructure and the ongoing expenses are comparatively high in rural and remote**

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30 Human Rights and Equal Opportunities Commission, *Bush Talks*, p. 11.

31 *ibid.*

32 Department of Education, Training and Youth Affairs, Submission no. 258, p. 8.

areas. This affects a considerable proportion of the education and training community. This is particularly the case with old school buildings that lack appropriate electrical wiring and cabling for new technologies. The costs of going online for rural, remote schools are, according to DETYA, close to treble the cost to metropolitan schools.

- 9.42 Through the Education Network Australia (EdNA), DETYA is involved in several initiatives to improve access to infrastructure in rural and regional Australia. This program aims to:
- minimise duplication of effort by the Commonwealth, states and territories; and
  - promote information sharing and communication between all systems, sectors, educators and students.
- 9.43 The Commonwealth also has a policy of donating high quality surplus Commonwealth government computers and IT equipment to schools.<sup>33</sup> An EdNA Reference Committee, through its Schools Advisory Group, is managing the implementation of this policy across Australia. State and territory based cross sectoral committees have been established to assist with implementation. The committees receive the computers and information technology equipment and distribute them to schools, including schools in regional Australia. Each committee has policy guidelines to ensure that the equipment is given to those schools in greatest need, and structures in place to ensure the equipment will be used effectively. Under a community access pilot project all state and territory committees have selected a school or cluster of schools who will make information technology equipment and specialist assistance available outside school hours.
- 9.44 ICPA considers that distance education is a way of meeting the needs of remote Australians but sees a need for an integrated and coordinated service centred on personal interaction for all primary and secondary levels. This would offer a complete network of programs, facilities and support services to be delivered to geographically isolated students homes and to schools in rural and remote areas.<sup>34</sup>
- 9.45 According to ICPA, priority should be given to establishing clear reliable two way voice and data communications from all School of the Air or Distance Education Centres, for all primary and secondary years. This would include supply of computer systems equipped with modems accessible to all students.

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33 Department of Education, Training and Youth Affairs, Submission no. 258, p. 9.

34 Isolated Children's Parent's Association (Inc), Submission no. 94, p. 8.

9.46 The Northern Territory identified several resource issues related to the development of its education services. Among them were deficiencies in communications infrastructure that were a major impediment to the delivery of remote area services.<sup>35</sup> The limited capacity of the telecommunications network prohibits remote schools from making effective internet connections. This has impacts not only for the education of students but also restricts the professional development of teachers. The Northern Territory government submitted that:

Adequate communications services will enable schools to provide appropriate levels of education and assist to remove the sense of isolation for staff. Internet access for teachers in remote areas would enable the electronic delivery of course material, professional development and on-line assistance.

At present the delivery of professional development to teachers in remote communities is not achievable due to the lack of locally available relief teachers and the time and resources involved in travel. Enhanced communications also would allow teachers to receive real time demonstrations as well as accessing professional advice and counselling.

The provision of adequate communications as well as other infrastructure can have a positive impact on staff morale and a consequent reduction in the high staff turnover rates in remote community schools. This would have an overall effect of reducing the cost to Government of providing educational services to remote areas.<sup>36</sup>

9.47 Cost is the main impediment to on-line education services in regions where service delivery is adequate. The New South Wales government submitted that appropriate and cost effective information infrastructure in regional communities is now mandatory to meet access and equity standards in government service provision, including education and training options.<sup>37</sup> There is concern that the current charges for use of on-line services and communications are prohibitive and place regions at a competitive disadvantage when providing education services critical to regional attractiveness and development.

9.48 The New South Wales government pointed out that the Commonwealth regulates all telecommunications pricing and upgrading of communication infrastructure. A major issue for New South Wales is funding the high cost of telecommunications in rural and remote areas. It

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35 Northern Territory government, Submission no. 232, p. 67.

36 Northern Territory government, *op cit*, p. 68.

37 New South Wales government, Submission no. 260, p. 10.

has been necessary for the New South Wales government to subsidise the STD charges associated with internet access for schools in remote and rural NSW. In 1998, this subsidy amounted to \$4.4 million.<sup>38</sup>

### **Recommendation 77**

- 9.49 The committee recommends that the Commonwealth government ensure that reliable and inexpensive internet connection is available to all schools in rural and regional Australia.** (see also recommendation 28)

### **Other infrastructure issues - transport to school**

- 9.50 The School of Curriculum Studies at UNE and ICPA both drew the committee's attention to the need for affordable transportation services. ICPA called for allowances ensuring access to school, place of board or educational facilities by the most appropriate means provided by bus, coach, boat, train or where necessary air services. Transport difficulties are apparently a common problem with access to school for rural and remote region students often interrupted by inadequate travel services, particularly road closures. The New South Wales Farmers Association submitted that:

Adequate road infrastructure is also important to ensure that children are able to access school in inclement weather. In NSW last year numerous families were unable to access schools because of severe flooding which made roads impassable for months.<sup>39</sup>

- 9.51 ICPA proposed that the Commonwealth government and relevant authorities increase the percentage of fuel tax returned for maintenance of country roads, which are used for students to access education.

### **Teacher development**

- 9.52 Improved access to communications may have benefits in the professional development and retention of teaching staff, as envisaged by the Northern Territory government, but will not meet all the special needs of teachers in rural and remote areas.
- 9.53 The School of Curriculum Studies at the UNE suggested that improved communications would, among other things, 'encourage teachers and students to stay in and stay committed to rural regional areas and their

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38 New South Wales government, Submission no. 260, p. 21.

39 New South Wales Farmers' Association, Submission no. 228, p. 6.

educational services'. ICPA saw the need for the preparation of teachers for rural service to also receive attention and recommended that:

- a 'rural education' component be included in pre service teacher training courses, to prepare teachers for the diversity of teaching situations in rural and remote schools; and
- the 'rural education' component be supported by pre-service practical experiences conducted in a diversity of teaching situations in rural and remote areas.<sup>40</sup>

### Support and assistance - the role of governments

- 9.54 The Commonwealth has a limited role in the direct delivery of primary and secondary educational services, although the impact of its infrastructure decisions can be crucial. Furthermore, the Commonwealth's role in providing funding for schools and its income support and allowance programs can also be crucial in ensuring education participation in rural and remote areas.
- 9.55 Two programs that the Commonwealth manages to support rural and remote education are the Country Areas Program (CAP) and the Assistance for Isolated Children (AIC) Scheme.
- 9.56 The CAP aims to ensure that primary and secondary students in rural and geographically isolated areas continue to have access to education which will assist them to achieve outcomes and participation rates equal to students in urban areas. The Commonwealth provides \$17.7 million annually to government and non-government education authorities to assist primary and secondary students in rural and geographically isolated areas of Australia.<sup>41</sup>
- 9.57 Funding is provided through CAP for projects that:
- focus on pooling and sharing activities involving communities and clusters of schools;
  - support educational participation, including integrated assistance to individuals and other agencies and groups;
  - foster curriculum appropriate for the experiences and interests of isolated students;
  - support secondary students in making the transition to work;
  - focus on using technology to overcome distance barriers to education; and

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40 Isolated Children's Parent's Association (Inc), Submission no. 94, p. 6.

41 Department of Education, Training and Youth Affairs, Submission no. 258, p. 2.

- support the documentation, evaluation and dissemination of program activities.

9.58 To qualify for CAP funding, schools must be:

- a government or non-government primary or secondary school; and
- located in geographically isolated areas, or
- a distance education facility servicing these areas.

Activities in special schools or schools with special units which meet the above criteria are also eligible for support.

9.59 To meet funding requirements, schools must provide specific financial and educational reports, and must provide written advice to the Commonwealth on:

- principles for allocation of funding within systems and to schools, including details of the schools involved in the program; and
- arrangements for consulting with the relevant educational and community groups on program priorities and targeting.

9.60 The AIC scheme aims to help the families of students who are unable to attend an appropriate local school, primarily because of geographic isolation.

9.61 To qualify for assistance, students must be enrolled in full-time primary, secondary or, in limited cases, tertiary studies in Australia. Depending on the student's circumstances, AIC provides boarding, second home or distance education allowances or a Pensioner Education Supplement, all of which are free of income and assets tests. An additional boarding allowance is available on an income-tested basis.

9.62 In 1998, AIC assisted approximately 12 200 students at a cost of \$28 million. In 1999, the AIC's basic boarding allowance increased from \$2 900 to \$3 500 per annum and is to be indexed in future years. Also, the maximum that can be received under a combination of the basic and additional boarding allowances increased to \$4 377 per annum for both primary and secondary students.<sup>42</sup>

9.63 ICPA considers that the CAP is an extremely valuable program but has sought an extension of the benefits under the AIC scheme.<sup>43</sup> It has also called for an expansion of the support for facilities that provide service to students from rural and remote areas:

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42 Department of Education, Training and Youth Affairs, Submission no. 258, p. 3.

43 Isolated Children's Parent's Association (Inc), Submission no. 94, p. 4.



Significant areas of rural and remote Australia have endured drought and economic depression for a number of years, consequently the viability of these regional facilities is being affected by lack of isolated students and absence of government support. Boarding facilities play a large and important part in ensuring that children from rural and remote areas are able to access a school education, whether they attend a government or non government school. ICPA (Aust) seeks to have boarding schools and school term hostels as a recognised form of access to education for geographically isolated students who must live away from home to access an appropriate primary and/or secondary education.

- 9.64 The committee is aware that HREOC is currently inquiring into the provision of school education in rural and remote regions. Nevertheless, it is concerned that the distribution of funds from programs such as CAP meets Commonwealth criteria and that assistance reaches students in need. It believes that a review by the Commonwealth of its rural and remote education support arrangements is necessary.
- 9.65 It is not just isolated children living in remote areas who are disadvantaged, but also children living in regional areas who are forced to travel and live away from home in order to further their education. Both these groups require assistance. This has been an ongoing problem for many generations. The committee believes that this is a national disgrace. It is now time for all governments to redress this serious situation.

### **Recommendation 78**

- 9.66 **The committee recommends that the Commonwealth government:**
- **review and extend its financial assistance programs for rural and remote students with a view to increasing secondary school participation and completion rates in regional Australia; and**
  - **ensure that the distribution of funds from programs such as the Country Areas Program is in accordance with Commonwealth criteria.**

## **Tertiary education and vocational training**

- 9.67 Tertiary education institutions do not have the same physical presence in rural and remote areas as primary and secondary schools but their

importance to the regions is just as significant. Regional Australians' access to post secondary education is beset with the same difficulties as their access to basic education. Tertiary education participation rates fall even further behind urban Australia as the effects of distance, cost and lack of infrastructure inhibit continuing involvement in mainstream learning.

- 9.68 The general perception is that students from regional areas have lower post secondary education participation and completion rates than their urban counterparts. This picture requires some clarification, as detailed by DETYA in its submission to the committee. There is some statistical data to suggest that students from rural and remote areas have higher pass rates and completion rates, and marginally higher participation rates, in VET.<sup>44</sup> DETYA explain that, when account is taken of a student's home location, not just where they are studying, it becomes apparent that:
- tertiary education participation rates are very much higher in metropolitan regions than in non-metropolitan regions;
  - this pattern is evident for both university and TAFE participation, but the variation in regional university participation is much higher than in TAFE participation; and
  - in general, participation in TAFE at the regional level does not offset low university participation.<sup>45</sup>
- 9.69 DETYA concluded that equalising university participation rates between metropolitan and non-metropolitan areas would make an important contribution to reducing the overall discrepancy in regional participation rates, but that it would by no means completely remove it.
- 9.70 **Although regional students have lower participation rates, it appears that when they can access local post secondary courses they do well and increase their local employment prospects.** The University of South Australia's Whyalla campus advised the committee that virtually all their graduating students for 1998 were employed and had remained in the region. La Trobe University's Mt Buller campus reported high retention rates due to the supportive environment offered by a regional university, and claimed that regional students attending metropolitan universities were more likely to discontinue study.
- 9.71 Campuses in the regions find it harder to provide for the educational and personal needs of students. The UNE has found that while some drift of students to major urban areas is inevitable, given individual choice and
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44 Department of Education, Training and Youth Affairs, Submission no. 258, p. 6.

45 Department of Education, Training and Youth Affairs, *op cit*, p. 8.

personal inclination, much of it is accentuated by some of the deficiencies in the region.<sup>46</sup> Narrower financial opportunities through factors such as lack of part-time work rather than unhappiness with academic programs, often leads students to shift to a metropolitan centre according to the UNE. Regional institutions like UNE often see students, otherwise happy with their learning experiences, shift away from the program of choice simply because of circumstance.<sup>47</sup>

- 9.72 Limited subject choice and generally poorer year 12 outcomes restrict the opportunities for students to enrol in engineering, computer and information science and the applied sciences, all skills of major significance to rural and regional areas.<sup>48</sup>
- 9.73 The extent of the failure of regional campuses to fully meet the needs of students from their local regions was discussed during the committee's visit to Cairns where it was advised that the local campus of James Cook University has about 2 300 students. Even though enrolments have been growing at 30 per cent per year since 1995 the number should be around 10 000, but the region has a relatively low participation rate in higher education, especially by males. It was suggested that encouragement for boys to undertake higher education is needed to ensure there will be adequate skills and human capital in the future for new and emerging industries and services.
- 9.74 Geraldton's Central West College of TAFE stated that regional institutions provided many benefits to regional students. By providing the first year of tertiary education in a supportive and familiar environment, higher retention rates for regional students could be achieved. There was an opportunity in Geraldton to provide world class training in marine aquaculture for species and an industry specific to the region. Unmet demand for such training exists. A major problem facing staff and students was the region's size. Considerable travelling by staff to reach students scattered throughout the region was required.
- 9.75 Geraldton TAFE claimed that delivery of appropriate TAFE education in the region was being prevented for a number of reasons. It argued that ANTA's apprenticeship funding model did not take adequate account of travelling time required by staff if they were to meet the demand for education throughout the region. Additionally, the funding model was not appropriate for regional areas since the threshold number of students required to attract federal funding for particular courses was often unattainable in regions. This was preventing the development of a

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46 University of New England, Submission no. 100, p. 4.

47 *ibid.*

48 University of South Australia-Whyalla Campus, Submission no. 73, p. 3.

curriculum and the establishment of infrastructure to provide courses and training in marine aquaculture specific to the Geraldton region. State government funding, staff and skills were available, but federal funding to support research and development activities was needed. Geraldton TAFE claimed that it was expected 'to be everything to everybody' in the regions. Refer to recommendation 79.

## Regional impacts

- 9.76 Lack of resources and low participation rates do not mean that regional universities and vocational training institutions have little impact in the regions. On the contrary it can be shown that, despite the disadvantages they face, regional institutions make major economic and cultural contributions:

There can be no doubt that rural universities play an enormous role in the regional economy. They also make a most significant contribution to the culture of the region and support the R&D needs of the rural environment through thick and thin. Yet Governments do not provide funding that recognises the higher cost structure of these institutions – STD calls, travel costs, multicampus costs, even the need for financial incentives to attract the top staff.<sup>49</sup>

- 9.77 Tertiary institutions contribute directly to regional development in at least three important ways. First, as pointed out by the NTEU, universities provide education for students from rural and isolated areas, irrespective of where the university is located. Second, universities located in regional areas play a role beyond educating local students: they provide important economic activity, employment, services, facilities and critical knowledge to support the development of the communities in which they are located.<sup>50</sup> Third, they provide leadership to assist in achieving regional development. For example, at a private meeting with the committee, UNE described the process it has developed to ensure community driven development through a cooperative and coordinated partnership between agencies from all levels of government, regional development organisations, individuals and communities.
- 9.78 The extent of the economic contribution was outlined in several submissions. The 70 staff of the Whyalla campus of the University of South Australia and the South Australian Centre for Rural and Remote Health generates \$3 million in salaries that are spent in Whyalla.<sup>51</sup> The

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49 J E Pratley, Submission no. 44, p. 4.

50 National Tertiary Education Union, Submission no. 230, p. 4.

51 University of South Australia-Whyalla Campus, Submission no. 73, p. 2.

Whyalla campus referred to a finding that regional university campuses contribute five times their revenue value to their regions and estimated that, on this basis, the Whyalla campus contributes \$20 to \$25 million.

- 9.79 UNE, a larger campus, has an even more significant regional economic impact. Using a multiplier of only 1.8, the UNE estimated that it contributes in the order of \$236 million to its regional economy.<sup>52</sup> The contribution by university staff and their families includes:
- support for local and regional schools;
  - support for businesses, professional services, and service industries; and
  - significant contributions to social, sporting and cultural activities, including contributions to civic life.
- 9.80 It is further estimated by the UNE that their students would contribute at least \$13.8 million per year to the local and regional economy.
- 9.81 Other examples of the economic impact of regional universities were summarised by the NTEU which, in its submission, suggested that the 1.8 multiplier was an understatement in most, but not all, cases.<sup>53</sup> Three instances were cited:
- James Cook University estimates their impact on output as \$283;
  - Southern Cross University estimates an impact of \$158 million; and
  - University of Southern Queensland estimated an impact of \$114 million.
- 9.82 According to a research note by an officer of the Parliamentary Library, **the importance of local higher education institutions to regional economies has long been recognised.** It refers to a study that found **Australia's regional universities contributed over \$2 billion to regional output.**
- 9.83 The NTEU submission also cited a study of the job-creation effects of a range of industries which found that education created more jobs per million dollars of expenditure than any other industry.<sup>54</sup> The broader economic significance of regional universities was explained by the University of Tasmania:

... regional universities have a major role in regional development. Research has argued that 'universities, research laboratories,

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52 University of New England, Submission no. 100, p. 2.

53 National Tertiary Education Union, Submission no. 230, p. 6.

54 National Tertiary Education Union, Submission no. 230, p. 7.

specialised infrastructure, or trained labour pools, are much more effective than subsidies' in assisting regional development. Indeed, in a number of analyses, regional universities around the world provide an important focus for development, especially as close links are established with local industry.<sup>55</sup>

**9.84 The development of local industries and enterprises through the provision of essential skills and knowledge is one of the critical roles in regional development played by regional TAFEs and universities.**

9.85 There are many examples of regional universities and TAFEs adding to the development of skills and knowledge relevant to their local industries. The committee saw several instances of this during its visit to each of the States including, for example, its visit to Geraldton where the TAFE conducts courses to support the local aquaculture industry. Other instances were outlined in the submission from the NTEU:

Many of ... [the regional university campuses] provide courses of study and research expertise of direct relevance to economic activities which are intensive in the region in which the particular campus is based. An example of this is the Kalgoorlie campus of Curtin University of Technology, and the Gladstone and Emerald campuses of Central Queensland University which provide critical support to the development of skills and knowledge in the mining industry. Similarly, Marcus Oldham College in Geelong and the Roseworthy campus of the University of Adelaide provide educational support to local agricultural initiatives. A further example is the role of James Cook University in initiatives in environmental and ecological research in North Queensland. JCU's work in Marine Biology is renowned as being critical to the preservation of the Great Barrier Reef, and is therefore of direct ecological relevance to the maintenance of tourist revenue within the region. Each of these institutions are internationally recognised as providing skills, knowledge and experience which are critical to the development of the regions in which they are located.<sup>56</sup>

9.86 Professor Hugh McKay of the University of Southern Queensland told the committee that the University was currently involved in the development of business opportunities with over 50 clients, sometimes in conjunction with local TAFEs. These business opportunities included training services and e-commerce.

9.87 When Southern Cross University was established, it was given a special responsibility for providing university education and support to facilitate

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55 University of Tasmania, Submission no. 123 p. 2.

56 National Tertiary Education Union, Submission no. 230, p. 6.

the development of the North Coast Region of New South Wales. According to the university, since its establishment, it has sought to implement these objectives in a variety of ways including skill development, knowledge transfer, research and innovation and local leadership.<sup>57</sup> Regional development is one of the core responsibilities set out in the University's strategic plan. The regional focus, and concentration on regionally relevant training and research and development, is demonstrated by the establishment of a Centre for Plant Conservation Genetics at the University in 1996 which lead to the creation of approximately 50 new jobs. The University is looking to establish other similar research groups to provide further stimulus to the regional economy. **Some of this success has been due to the correct choice of research area, which entirely fits in with the environment of the region.**<sup>58</sup>

- 9.88 This focus on regional needs is not unique and, for example, the committee was told that the UNE tailors courses specifically for the region, focussing on the distinct market niche of regional issues, interests and requirements. Similarly, the Whyalla campus of the University of South Australia has, in collaboration with the local TAFE established an IT Pathways Project to provide information technology training for regional students. More specifically, it and the Spencer Institute are:

... actively and successfully pursuing collaborative training activities in an industry of major significance to our region and our State. The Campus has a long history of supporting BHP-Steel. More recently, we have established telelearning centres at Roxby Downs, Port Pirie, and Coober Pedy. These position the Campus to provide mining education at the local level.<sup>59</sup>

- 9.89 In focussing on regional skill needs, some universities diversify their activities in rural centres to provide more than university level courses. Curtin University of Technology, for example, has campuses at Kalgoorlie and Esperance providing education and training for about 5 000 students each year, and more than 100 different VET courses ranging from basic literacy to post trades studies.<sup>60</sup> La Trobe University has well-developed course articulation with TAFE for several courses. At Mt Buller campus, tourism and hospitality courses are taught jointly by the university and TAFE, and students from all campuses undertaking these courses complete their third year at Mt Buller.

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57 Southern Cross University, Submission no. 190, p. 1.

58 Southern Cross University, *op cit*, p. 5.

59 University of South Australia-Whyalla Campus, Submission no. 73, p. 4.

60 Curtin University of Technology, Submission no. 78, p. 4.

- 9.90 In some cases the regional campuses have worked hard and lead the way in establishing more active links with regional business, - as discussed in the chapter on information technology, where the University of Ballarat has engaged with local industry in an effort to enhance regional computing and telecommunications capabilities.**

### **Funding for regional tertiary education**

- 9.91 The committee was advised that the regional nature of campuses and efforts to concentrate on the needs of local students and regional industries was not sufficiently recognised in funding policies. It is clear to the committee that regional universities warrant special support and students need to be encouraged to take up, and complete, studies at regional campuses.
- 9.92 The Commonwealth provides block operating grants to public higher education institutions each calendar year on a rolling triennial basis for a specified level of student load within the context of an agreed educational profile covering teaching and research activities. In addition, funds are set aside to achieve specific objectives through programs such as the Higher Education Innovations program and the Higher Education Equity program. The Commonwealth also administers funding arrangements that support the research activities of higher education institutions.
- 9.93 Commonwealth and state government financial support to enable the further development of regionally delivered education and training will be essential.
- 9.94 The submission from the University of Tasmania warns that regional Australia will pay a heavy long term price if the universities are not sufficiently resourced.<sup>61</sup> The submission argues that, despite the important linkages between regional universities and local industry, problems concerning university funding and uncertainty over government policy has contributed to the decline in industry investment in research and development.

### *Regional universities*

- 9.95 Professor McKay argued that the University of Southern Queensland, in common with all regional universities, is consistently underfunded relative to city institutions, despite the higher costs of service delivery. The funding formula is based on what Professor McKay described as an outdated profile that has not been reappraised even though the situation and role of regional universities has changed.

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61 University of Tasmania, Submission no. 123, p. 2.



- 9.96 The only programs aimed specifically at regional universities, as outlined by DETYA in its submission to the committee, were aspects of the Higher Education Equity Program covering people from rural and isolated areas, and aspects of the Restructuring Program in which regional institutions were given particular consideration in the assessment of grants. Other general funding programs also apply to regional universities as well as those in urban centres.
- 9.97 Among the submissions to argue that funding was inadequate was the Southern Cross University which stated that:
- The North Coast of NSW is poorly serviced by the number of places available per head of population for university study in comparison with other areas of the country, with approximately one place per thousand persons. The inability of Southern Cross University to provide fully for the needs of the population is exacerbated by the funding arrangements which are based on a low average rate of dollars per Equivalent Full Time Student Unit, and do not enable the institution to undertake some of the higher cost activities which the widespread nature of the region and the agricultural base of the region would require. We believe that consideration of educational infrastructure is of great importance in the considerations of the Standing Committee.<sup>62</sup>
- 9.98 Professor J Pratley of Charles Sturt University submitted that governments do not provide funding that recognises the higher cost structure of rural universities, such as STD calls, travel costs, multicampus costs, and the need for financial incentives to attract the staff.<sup>63</sup> Professor Pratley also argued that further deregulation of education has enabled all institutions to enter the distance education market thus undermining the previous major providers that were largely rural-based institutions.
- 9.99 A comparison of the actual 1996 operating grant of regional campuses with the 2001 estimates derived from DETYA figures were reported in the submission to the committee from the NTEU, and it was argued that a number of significant regional universities have sustained cuts in operating grants since 1996. Cuts were not confined to operating grants but also included the loss of discretionary grants, and the failure to supplement salaries paid in universities.<sup>64</sup>
- 9.100 It was estimated, for example, that the cut to UNE's operating grant, which amounted to \$7 004 000 in 1999 dollars, would have resulted in the loss of 266 jobs in the community of Armidale and the region surrounding

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62 Southern Cross University, Submission no. 190, p. 4.

63 J E Pratley, Submission no. 44, p. 4.

64 National Tertiary Education Union, Submission no. 230, p. 13.

it. The NTEU suggested that, given the strong role that education expenditure plays in regional development, it should not come as a surprise that cuts in government expenditure on universities inhibit the role that universities play in regional development.

- 9.101 **La Trobe University pointed out that costs of service delivery for regional campuses were 30 to 40 per cent higher than for metropolitan campuses and claimed that, if infrastructure were available, universities with two to three thousand equivalent full time students would be competitive with larger universities, cost-wise.** It criticised the funding formula's emphasis on research output at the expense of regional universities' contribution to the regions, and emphasised the potential for research in regional Australia. It supported development of strategic alliances with industry and local businesses and communities as a means of attracting private sector funding for research appropriate to regions.
- 9.102 Another study by an officer of the Parliamentary Library showed a stronger relationship between higher education provision and participation in regional areas than that applying in metropolitan areas. From this it was proposed that it could be concluded that a significant improvement in regional participation is more likely to flow from the expansion of local facilities, rather than from overall growth in the higher education system.

*Vocational education and training (VET)*

- 9.103 As explained by DETYA in its submission to the committee, the Commonwealth provides funds for vocational education and training to ANTA for allocation to the states and territories, in order to support a vocational education and training system that has nationally agreed objectives, strategies and planning processes. In higher education, the Commonwealth's objective is to use higher education resources effectively to address Australia's social, cultural, economic and labour market objectives.
- 9.104 DETYA outlined the policies and programs it administers to improve vocational education and training in rural and remote areas:
- funding under the New Apprenticeships Strategic Intervention to the Rural Training Council of Australia;
  - the Rural and Regional New Apprenticeships incentive which was introduced from 1 January 1999, to boost training in rural and regional Australia;
  - aspects of the Workplace English Language and Literacy Program targeted at the forestry, agriculture and fishing industries; and

- the Commonwealth-funded Australian Student Traineeship Foundation which supports particular initiatives to promote VET in schools in rural and regional areas.
- 9.105 ANTA funds the Centre for Research and Learning in Regional Australia at the University of Tasmania which focuses on ‘vocational education and training for learners, trainers, businesses, funding bodies, policy makers and local communities.’<sup>65</sup> At a private meeting in Longford, the committee met with the Deputy Director of the Centre and representatives of organisations involved in facilitating VET in the region. It was advised of strong linkages developed for VET between industry, the secondary education and TAFE sectors and employment service providers such as Job Network. Students undertook structured workplace learning programs based on an audit of industry needs, with placements arranged through a service provider.
- 9.106 A ‘culture of training’ needed to be developed in the regions and regional business needed to accept responsibility for providing ongoing training and skills by students to match local industry needs. More information about government training programs and assistance, for example, ANTA training packages and VET programs, was needed as were ‘skills centres’ to allow training in supportive home environments. Facilitation to establish industry networks, to determine the training needs of particular industries, to provide information on VET programs and to coordinate applications from regional business and industry for government assistance was critical to providing appropriate training and skills development opportunities to regional areas.
- 9.107 The committee considers that the Commonwealth government should recognise the importance of the contribution of post-secondary educational institutions to regional areas by reviewing the formula for regional universities’ funding. In particular, the Commonwealth should take greater account, relative to research outputs, of regional universities’ contribution to regional economic development, through their provision of telecommunications networks and their involvement in technological innovation in regional communities.**

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65 Department of Education, Training and Youth Affairs, Submission no. 258, p. 3.

**Recommendation 79**

- 9.108 The committee recommends that the Commonwealth government takes greater account of the contribution by regional universities and TAFEs to regional economic development and redress the disadvantage suffered by regional institutions by increasing regional tertiary and vocational education and training funding.**

**Student support**

- 9.109 It is clear that regional universities warrant special support and students need to be encouraged to take up, and complete, studies at regional campuses. In relation to support for rural and remote area tertiary students, several submissions raised the need to modify some aspects of the Youth Allowance. The NFF noted that almost all students from rural and remote areas have to leave home to access tertiary education and it went on to outline a case for extending the assistance that is available to those students. ICPA, Australian Women in Agriculture and the New South Wales Farmers' Association, among others, raised similar concerns.
- 9.110 The NFF pointed out that once students go to a tertiary institution, they have to transfer to the Youth Allowance that is subject to an assets test and an income test and, in most rural families' cases, an Actual Means Test. The NFF is concerned that despite the low returns currently being experienced by many farm families due to years of drought, poor commodity prices and the Asian crisis, many of them still have great difficulty accessing the Youth Allowance due to the very capital intensive nature of modern farming. In other words, the Assets test continues to discriminate against farm families.<sup>66</sup>
- 9.111 The NFF also argued for the introduction of a separate allowance based solely on a geographic qualification, without any means or assets test. Under this proposal, students would receive financial assistance on a similar basis to the AIC allowance.

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66 National Farmers' Federation, Submission no. 238, p 16.

**Recommendation 80**

**9.112 The committee recommends that the Department of Family and Community Services amend the Youth Allowance criteria to increase the discount for farm and business assets under the family assets test from 50 per cent to 100 per cent for students from rural and remote areas.**

**IT and communications**

- 9.113 In addition to funding, the evidence received by the committee often concerned problems with communications infrastructure that have been discussed elsewhere in this report. The role of the internet in teaching, research and general economic activity is now well established and James Cook University went so far as to submit that the internet is absolutely critical for the continued well-being of a regional university.<sup>67</sup>
- 9.114 The Northern Territory University, the Southern Cross University and the Curtin University of Technology also submitted that the lack of adequate and affordable telecommunications was the principal deficiency restricting their operations in regional Australia.
- 9.115 The costs to opportunities available to regional universities come in many areas, according to the James Cook University, including:
- national competitive research grants;
  - a range of options for basic, environmental, applied and industrial research;
  - high performance computing;
  - remote and electronic library access;
  - teaching and learning; and
  - capacity to recruit and retain staff of high quality.
- 9.116 The Southern Cross University suggested that research indicates that the need for equity of access to telecommunications will not be addressed by regulatory or commercial means alone and that specific intervention is needed to enable the sustainable development of the Northern Rivers Region.<sup>68</sup> The Commonwealth has recently provided seed funding for a

67 James Cook University, Submission no. 96, p. 1.

68 Southern Cross University, Submission no. 190, p. 2.

local planning initiative to implement a regional telecommunications infrastructure that will promote economic and social development within the Region. This infrastructure will support a fast and reliable e-mail and Internet service that will support the work of the training and education sector in the region, in addition to providing many other benefits.

- 9.117 DETYA agreed that telecommunications is a crucial element of the education services offered by universities and vocational training institutions:

In the case of vocational education and training (VET), providers and industry require access to an advanced information infrastructure (including high bandwidth, cable, fibre optics, satellite and telecommunications) at reasonable cost, so that VET providers can maximise flexible vocational learning opportunities for all Australians, including those in rural and remote locations.

Similarly, higher education institutions lack the universal facilities necessary for teaching complex applications and for research projects which require high levels of dedicated bandwidth. This particularly affects students in regional Australia who are most dependent on open learning methodologies and the associated information and communications technologies.<sup>69</sup>

### **AARNet**

- 9.118 Australian Universities pioneered the introduction of the internet to Australia with the development of AARNet that connects a single node or hub in each State at very high speed. James Cook University reported that it and other regional campuses are disadvantaged in its access to this important academic network:

In Queensland this hub is physically sited at the University of Queensland (St Lucia). Because of their physical proximity to the AARNet hub at UQ, universities in the SE-corner of Queensland can connect to the Internet at high speed (34Mbps) by use of microwave base communications at modest capital and maintenance costs. JCU and Central Queensland University [CQU] have much poorer access to the Internet. JCU's major campuses at Townsville and Cairns are approximately 1450 and 1850 km from the Qld AARNet hub in Brisbane and thus have no direct access to the hub. Instead both JCU and CQU's communications are currently supported by a shared, inadequate and saturated 2Mbps frame-relay connection leased from TELSTRA.<sup>70</sup>

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69 Department of Education, Training and Youth Affairs, Submission no. 258, p. 9.

70 James Cook University, Submission no. 96, p. 2.

9.119 During inspections in Victoria, La Trobe University also raised problems with AARNet and outlined the need for a review of AARNet arrangements. Many campuses, both regional and urban, have provided information about problems resulting from the Telecommunications Act and the current exemptions from carrier and carriage service provider obligations. There are significant regulatory obstacles to sharing facilities, transmitting data off-site, and establishing connections between universities and TAFEs. This has particular implications for institutions with regionally distributed campuses and those seeking to share facilities to broaden the delivery of vocational training and development courses. It also inhibits the development of commercial and professional links between educational institutions and local communities.

### Recommendation 81

9.120 **The committee recommends that the Commonwealth government review the telecommunications regulatory arrangements applying to AARNet and remove barriers to the shared use of facilities between universities and TAFEs in rural and regional areas.**

#### Some communications infrastructure funding options

- 9.121 James Cook University has investigated options for the provision of adequate services that will allow it to best access AARNet and overcome other communications problems, but they are either prohibitively expensive or technically unsuitable. The university has also explored alternative sources of government funding, but without success.<sup>71</sup>
- 9.122 According to James Cook University, current Commonwealth legislation restricts the ability of regional universities, business and government to effectively aggregate their data communications requirements. While the intent of the Telecommunications Act is to foster competition in the telecommunications market, in northern Queensland the Act has had the unforeseen effect of potentially restricting the region's access to high bandwidth communications as the stakeholders are prevented from effectively running data across the same network.<sup>72</sup>

71 James Cook University, Submission no. 96, p. 2.

72 James Cook University, *op cit*, p. 4.

- 9.123 To overcome some of the problems faced by regional campuses, particularly the need for affordable broadband communications, James Cook University proposed the establishment of a telecommunications trust fund for higher education with sufficient funds to subsidise universities for their broadband data expenses for a short period (three to five years). It was thought that this could generate sufficient interest for alternative carriers to enter the market. The University explained that such a fund would have a significant positive short term impact in northern Queensland and would also result in a dramatic improvement in the long term prospects of the region, as the development of the information economy grows.<sup>73</sup>
- 9.124 The Northern Territory University called for a USO of not less than a reliable high quality bandwidth of 56 kbps at an affordable price for all Australians, and updating of the USO as technologies and community expectations grow.<sup>74</sup> It was argued that this would enable the university and other educational providers to provide education and training in support of industry more easily and cost effectively.
- 9.125 The committee has discussed the USO question elsewhere in this report. There is some merit in the James Cook University proposals and a clear need to improve the communications infrastructure situation of regional vocational and university campuses.

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## Recommendation 82

- 9.126 **The committee recommends that the Commonwealth government establish a telecommunications trust fund for higher education with sufficient funds to subsidise regional universities for their broadband data expenses for three to five years. (see also recommendation 34)**

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73 *ibid.*

74 Northern Territory University, Submission p 2.