

Fact sheet – Responding to younger learners with minimal or no schooling

These fact sheets have been developed by the AMEP Research Centre to provide AMEP teachers with information on areas of professional concern. They provide a summary as well as identifying some annotated references that can be used to broaden knowledge and extend understanding. These references can be obtained through the AMEP Resource Centre at rescentr@nceltr.mq.edu.au

The *AMEP Fact sheets* have been funded by the Department of Immigration and Multicultural Affairs through the AMEP Special Projects Research Program, and have been informed by the Australian-based research that the program has funded. The *AMEP Fact sheets* can be accessed through the Professional Connections website: <http://www.nceltr.mq.edu.au/pdamep>

Context

Increasingly, the AMEP is being asked to make provision for a new group of learners who add challenging layers to the diversity of existing classrooms. The new group of learners is itself very diverse, but is characterised by being both younger than many previous AMEP clients and also having severely disrupted lives. Since many of these learners come from different countries or regions in Africa from whence fewer migrants to Australia have previously come, a further layer of differences in cultural and educational experiences raises additional issues for teachers.

Broadly, this group of learners can be located in the top left corner of the diagram below.

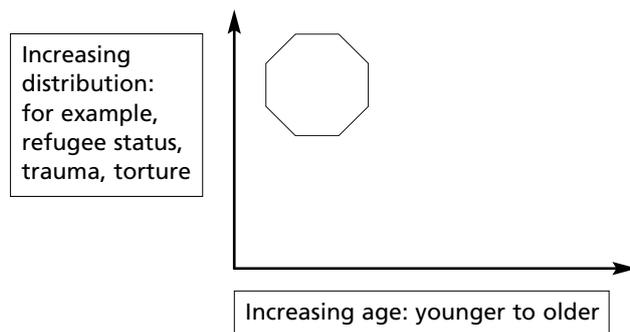


Figure 1: Broad profile of the new group of learners in the AMEP

As Figure 1 indicates, the boundaries between older and younger learners are not simple and the degree of disruption of education and lives for all learners in the AMEP varies gradually along a continuum. Thus, younger people are not always easy to recognise and do not form a discrete group. Their experiences, attitudes and behaviours overlap with those of other AMEP clients, but these overlaps can also disguise differences. One of the challenges for AMEP teachers

is recognising specific needs within the diversity of their class.

The nature of younger learners in the AMEP

The younger learners who may participate in the AMEP can be as young as 16, although they are more frequently between 18 and 24 years of age. Their age is the most obvious feature distinguishing them from other learners, but they have a variety of other characteristics that have contributed to how and why they have come to be in the AMEP.

Younger learners in the AMEP bring varied educational experiences with them. Some have grown up in intact families in undisrupted circumstances. Others have experienced extreme disruption and trauma. One way into the potential diversity of experiences of younger learners is by exploring the relationships between 'me', 'my family' and the 'wider community and world'. In undisrupted circumstances, we can think, somewhat idealistically, of the maturing 'child' as embedded within clear and discrete layers of life experiences as illustrated in Figure 2.

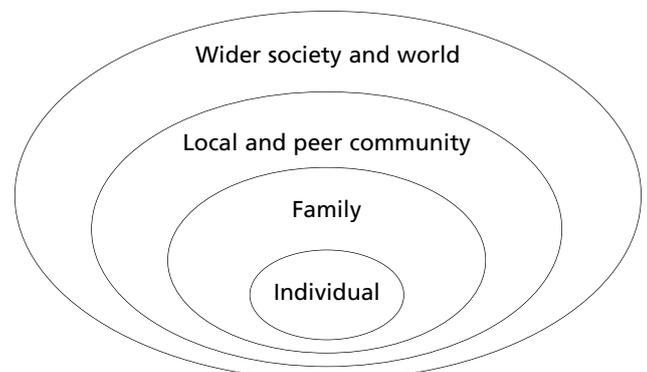


Figure 2: Standard layers of life experiences for a maturing child in undisrupted circumstances

This view of the world shows learners as gradually maturing into their surrounding and widening community with continuous connections to their (extended) families. This context allows them to explore and experience new aspects of life with feedback and support from relevant peers or caregivers. These relatively stable relationships contextualise and reduce 'risk' and allow younger learners to differentiate themselves from their parents or other caregivers as they gradually evolve an 'adult' identity.

However, various sets of life experiences for some younger learners disrupt the mutually reinforcing experiences that are assumed within intact cultures and socialisation processes. For instance, some younger learners may have no immediate family to support them. In extreme cases, they may have been kidnapped by armed groups and (mal)treated as quasi-adults. In slightly less dramatic circumstances, they may have become parents a long time before they reached conventional adulthood. They may have had little or no experience of education. Instead of their families and community being in their immediate environment, those families and communities may be dispersed across many different parts of the world, and there may have been little or no physical contact with members of the immediate family, coupled with sometimes extreme anxiety about arranging travel or financial support for those same family members. Nevertheless, for important parts of their lives (physically and emotionally), these learners are also participants in 'youth' cultures that are increasingly globalised (for example, through the media or music). These experiences have the power to create a sense of belonging and identification with groups and cultures that are a long way removed from the physical location of the individual.

As Figure 3 below shows, the nature of the life experiences of some younger learners in the AMEP is anything but as gradual and discretely embedded as the representation in Figure 2. This experience of being 'young' combines in different ways with

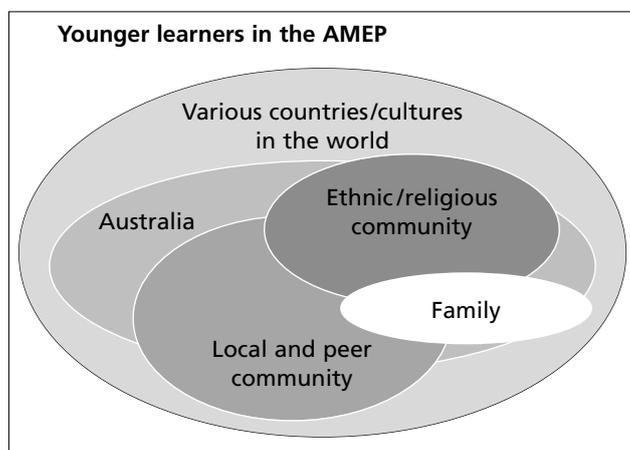


Figure 3: The nature of life experiences of some younger learners in the AMEP

various other experiences of life in diverse ways that disrupt gradual induction into a local culture (either through trauma or migration or both) to shape the widely varied behaviour and expectations of younger learners in the AMEP.

There are many ways in which younger learners' experiences of life and circumstances in Australia may be different from those of older learners:

- Their peer group relationships may be a more significant aspect of their life than their relationships with people of different ages.
- They may be in a variety of family circumstances, ranging from living in Australia independently to living within extended family units. When they are living independently, they may be grappling with new responsibilities for themselves. When they are living with their families, they may have significant responsibilities for younger siblings or their own children, or for assisting their parents or older relatives with whom they are living.
- They may have had few of the relatively carefree experiences of childhood and adolescence usually experienced by children growing up in peaceful and stable societies. This may mean that they can be more mature in some respects for their age. But it can also mean that, in the relative security of a new country, they may revert in some aspects of their lives to the adolescence they have missed out on.
- They may be greater risk-takers. Their risk taking may stem from a naivety, in that they are not fully aware of the risks they are taking, or of the consequences of their actions, or it may stem from a reduced ability to protect themselves in situations, in ways that older people can and often do.
- They often have different interests from older adults.
- They may have different health and welfare issues.
- Many, especially young men, are more physically active and desire opportunities to participate in sports or other physical activities.

A number of support services for refugees and immigrants recognise the specific needs of younger people ('Youth') and provide specialised services for them. Research with young refugees indicates that what happens after settlement in a new country has a greater impact on their settlement in that country than their experiences prior to arrival in a country such as Australia. It is therefore important to strive to achieve the best possible learning outcomes for young learners in the AMEP and to recognise that, despite the very dramatic influence of pre-migration experiences, what happens in the AMEP classroom and in general settlement into Australian society has

a substantial impact on the learners (even though many teachers report that, for them, the impact is not obvious).

Their circumstances mean that young people have distinct characteristics and needs as learners, and so they may not be as comfortable in the same classes as older people (possibly including their parents) for reasons ranging from a need for physical activity, through an ability to progress faster in some areas of learning to a desire not to show up older members of their communities by succeeding more rapidly than those whom they respect.

Younger learners:

- may, despite often being faster learners, experience surprisingly greater difficulty with new and unfamiliar topics or texts;
- may have high aspirations. They often express a desire for high status or highly paid professional careers such as being a doctor or an engineer. These aspirations may not be matched by a clear understanding of what is involved in attaining their goals, or awareness of the usual pathways of young people into such careers in Australia;
- may, in comparison with older learners, have different interests and enjoy different types of learning tasks that reflect their connection with international 'youth culture'. Younger learners may be particularly interested in certain topics, such as the use of technology, which may not appeal so much to older learners, and may not see much relevance in some topics that are of interest for older learners, such as home ownership;
- may develop greater fluency in spoken language more quickly than in written language (particularly when they are still acquiring literacy), partly because they may work at a high intensity and quickly in speaking about a topic in class, but need plenty of time to complete relatively straightforward written work in class;
- respond differently to different teachers, and may be more comfortable with some teachers than with others. Younger learners are often comfortable with a reasonably direct, yet respectful style of interaction. They often appreciate a light-hearted, humorous atmosphere in the classroom;
- require different types of support in maintaining attendance and motivation, with a particular emphasis on physical activity, especially (but not exclusively) for males;
- require different types of preparation for entering mainstream education and employment;
- may be particularly resentful or uncomfortable with basic literacy teaching materials originally designed to teach literacy to young children, because they dislike the childish nature of such materials.

SPP Youth

Young learners eligible for the Special Preparatory Program (SPP) are registered on humanitarian or refugee settlement entry programs, and have limited or severely disrupted schooling, often with low levels of literacy in their first language. This is associated with experience of war, torture and other trauma. Where they have not been directly affected, they may be living in families where another family member is experiencing the after-effects of trauma.

Providers in the AMEP can offer certain young learners up to 400 hours in addition to the basic 510-hour entitlement.

Humanitarian entrants who hold permanent visas, and are assessed by an AMEP Service Provider as having special needs, are eligible for the SPP.

Up to 100 hours of English language tuition may be provided to humanitarian entrants 18 years and older, who have had difficult pre-migration experiences, for example, torture and trauma.

Up to 400 hours of English language tuition may be provided to humanitarian entrants aged between 16 and 24 years who have low levels of schooling, that is, between 0 and 7 years of formal schooling.

Access to the 400 hours of English language tuition for eligible clients between the ages of 16 and 18 years will be subject to confirmation that they are unable to be placed in an appropriate school program.

Source:

<http://www.immi.gov.au/amep/client/pubs/SPP/SPP.pdf>

Eligibility is based on self-reporting. This can be one source of difficulty for AMEP providers and teachers since young people or their families may report that they have more extensive schooling than is the case, or that they have less experience of war and trauma than may be the case. This reflects these young people's varied perceptions of how they can best advance themselves within the new society, combined with varied ways of protecting themselves from the effects of their previous traumatic experiences. In response to this dilemma, some providers have developed specialised interviewing protocols.

In the various research projects conducted by the AMEP Research Centre focusing on youth issues and in feedback and information provided by teachers and AMEP service providers, it is clear that although the term 'SPP Youth' has been used to identify a budget item, the funds that have been provided cannot and do not support a discrete 'program'. Firstly, youth who might be eligible for the additional support are dispersed across providers and across the country. Secondly, the needs of those still seeking school-related experiences are not the same

as those of other learners. Thirdly, the range of pre-migration experiences means that, even within a single 'age' group, the English proficiency and literacy levels of the learners, as well as their needs, vary enormously. For example, gender massively influences access to education and childcare responsibilities, while at the same time, regardless of gender or age, experiences of torture and trauma can lead to either very passive or very volatile behaviour in classrooms. There is, therefore, no single program to address the needs of learners in the younger age range, particularly since providers find it difficult or impossible to create viable separate classes. Furthermore, since the budget allocation covers all aspects of provision, including childcare, the range of needs that must be met varies enormously from provider to provider. However, many interviewees have said that if viable classes could be created, they would be desirable.

Teachers working with such students report that these students require different approaches to teaching. They need to learn to understand the nature of literacy classroom routines and the expectations of formal schooling, as well as understanding the various pathways through different educational institutions that are available in Australia, along with the barriers that can exist to those pathways.

Modes of delivery for young learners

Much of what is needed to deliver effective learning programs can be found in established practices within the AMEP. However, younger learners with disrupted education resulting from traumatic experiences intensify the need for flexibility. They challenge some assumptions about simple connections between 'age' and 'life experiences'. In addition, they bring both a physical and emotional vibrancy and energy to their learning that may not be so regularly present with older learners. The frequent references by teachers to the need for physical activity, and the implications that this can have for the physical design of AMEP facilities (for example, access to sporting fields and places where loud music can be played), are issues that challenge AMEP providers in some locations. Similarly, the need to closely integrate services from diverse agencies and to allow learners to move backwards and forwards between various options challenge some existing communication lines and definitions of responsibility. Furthermore, the fact that there is no single group and that these learners are located in many different locations means that learners cannot be simply grouped into single classes or easily allocated to teachers who have experience of and enjoy some of the more 'youthful' antics of these learners. Despite these challenges, some providers

have found ways of achieving this. Allocating the right teacher for these learners and enabling those teachers to themselves refresh their energies is an ongoing issue for service providers.

Some providers have developed innovative programs to address the needs of young learners. These have sometimes involved cooperation with State-based agencies or schooling systems. Other providers have worked in cooperation with TAFE providers, either within their own facilities or in shared facilities. All providers have reported that the inter-agency cooperation that has been required has called for extensive and complex negotiation, and that options frequently have been made more difficult by the dispersed nature of many communities.

Learner pathways for young people aged 16–18 in the AMEP

Under DIMA funding guidelines, and Commonwealth–State agreements, young people aged between 16 and 18 may be enrolled in the AMEP only when schools cannot meet their needs. The issue of whether young people of this age are best catered for in an adult learning environment or in a school environment can be a complex issue, depending on the experiences and circumstances of the young person, and the capacities of schools and adult education providers in a particular locality. Some young learners and their families prefer an initial enrolment in schools, as they are more familiar with schools from their country of origin, and are unfamiliar with Adult Education programs in Australia. In some cases, this leads to an unsuccessful learning experience, as it emerges that the demands of senior secondary schooling are too great for young people with little experience of learning, limited literacy and little prior experience of schooling. In some cases, pathways for such learners have been developed by some AMEP providers, often in collaboration with school sector or TAFE authorities.

Issues surrounding 'intensity'

For some of these learners, an AMEP classroom can be the first stable refuge that they have encountered in many years. For such learners, the classroom and supportive interaction with the teacher and peers may be the only context in which they can establish a sense of routine and control over their lives. They may not be able to learn intensively, but for such learners, hours in the classroom are not to be equated with intensity. Teachers have to be sensitive to the need to vary the intensity or pace of learning activities with such learners, to frequently recycle materials and to allow the learners to self-regulate the intensity of their engagement with the learning materials. Teacher reports and student comments

suggest that reducing the number of hours to which these young learners can have access is not the best response to their needs, and the need for extended contact can be a factor influencing learners to seek programs in which they can find a larger number of hours of educational contact.

For other learners, the urgency to achieve an educational and employment status through which they will be able to provide for their families means that they push for as much and as intensive an engagement with English as they can possibly obtain. Service providers report that learners in this situation actively seek out additional classes, frequently request formal instruction about English and are eager to be involved in a wide range of learning experiences.

Flexibility

In addition to these differences, there are distinguishing features associated with the living circumstances of the families. Some learners, predominantly younger women, have major child-rearing responsibilities – either because they are themselves parents or because they are the most senior member of the family group in Australia, or simply because of their gender. If they are members of a large family, these responsibilities can be very extensive. Since the shortage of childcare places means that multiple places in a single location cannot be assured, some learners may appear erratic in their attendance as they seek to juggle the needs of childcare (sometimes for different children in different centres) with their own needs as learners. Teachers need to be sensitive to this as a reason for absence, but not ignore issues of punctuality and attendance. Indicating to learners that their absence or arrival has been noted and following up is an important signal both of educational expectations and of respect for the learner as an individual.

Pathways to work and education

As indicated above, a further issue to be addressed is balancing the need for English learning and for vocational or employment preparation (including preparation for tertiary study). Many of these learners have educational expectations that can easily be described as ‘unrealistic’. However, as many teachers and service providers reminded us, young learners are extremely resourceful. They have survived issues of great trauma and challenge, and have negotiated highly complex situations and bureaucracies to arrive in Australia. Having lived for extended periods ‘on their wits’, they apply the same skills of persuasion and negotiation to the current situation. Many of them are used to taking risks and learning through those risks. They look for opportunities to achieve as much as they can, while finding it difficult to

distinguish between a frustrating barrier and professionally balanced advice based on hard-won expertise.

There is, therefore, a need to develop flexible pathways and relationships between the narrower sense of ‘learning English’ and a wider sense of preparation for work and study in a new culture. Some providers manage this within their own service. Others work in partnership with other organisations to offer the experience and evaluation of desired contexts. Providers who were not in a position to do this reported that learners would often attempt to manage the process themselves – withdrawing from AMEP classes to try something different, only (in some cases) to return later seeking to gain additional English skills because their external experiences had not been successful. The pathways that are possible are not clear to many learners, and there is a clear need for transparent diagrams that can be used by teachers and advisers with students to show learners the alternative routes that are available to them, and the relationships within and between those routes. Some progress has been made in this direction via the Settlement Planning Committees in some States, and links to this work can be found in the annotated bibliography via the DIMA site.

Bilingual support and the ‘settling in’ phase

The need for bilingual advice on a wide range of topics, provided repeatedly (and ideally at the location of the AMEP service provider, in conjunction with other, for example, State-based, organisations), was frequently alluded to. It was suggested that there is an approximately six-month period required for experimentation and initial settlement, during which support for very flexible and varied approaches and experiences needs to be planned for. A repeated theme was the need for sport and physical activities as part of the ‘settling in’ phase. Sport and connections with sporting organisations can also be developed, but need careful negotiation and intercultural discussion.

Appropriate topic content for SPP Youth

While topics that appeal to AMEP learners in general may be equally relevant to younger learners as to other learners, there are some topics they may not relate to as much as older learners do, and other topics in which they may be far more interested than older learners. For example, younger learners may be more interested in educational pathways for themselves than in finding out how to get a job immediately. They may also relate more easily to

aspects of youth culture, such as the music and media interests of their peer group (which may be particular to young people in their cultural communities rather than the youth culture of mainstream Australia), and may be interested in exploring topics they see as of interest to them, and not be so willing to engage with topics they see of little immediate relevance. Some providers are now using drama and connections with performing arts groups and centres or radio and other media centres to explore ways in which these younger learners can take control of some of their own life experiences through the development of more project-based education programs.

Content-based language teaching is a very useful strategy for increasing the sense of motivation and engagement of younger learners in AMEP classes (see other AMEP fact sheets). The focus on topic content provides younger learners with material they see as worthwhile and substantial, and language and literacy development can be productively integrated around a topic. It also becomes a context in which literacy skills can be developed and extended, and learners can be introduced to (and practise) useful strategies for learning how to learn and managing their learning.

Computer-mediated learning is also useful for younger learners because they are motivated by the technology rather than daunted by it. Younger learners usually enjoy working with computers and are willing to explore the possibilities of the technology, see it as important, and are not afraid of making mistakes as they explore possibilities. This applies to exploration of the Internet, as well as the use of computers (sometimes including mobile phones), to assist them in completing tasks. The use of other aspects of digital technology, such as digital photography and music, are motivating and interesting to younger learners.

Interviews with younger learners and their teachers conducted as part of a research project on appropriate topic content for SPP Youth revealed that the following topics were of interest to younger learners with limited prior experience of schooling:

- 'Survival' topics – topics that give students information, language and skills for living in their communities.
- Support services – topics that give students information about services of relevance to them and how to access them.
- Health and well-being, including attention to sport and leisure activities. The annotated bibliography indicates some useful resources here.
- Learning about Australian society, cultural expectations and practices.
- The Australian education and training system.

- Budgeting and money management.

Teachers working with young learners with disrupted schooling and traumatic experiences developed materials, in the appropriate topic content project, based on learning the basics of using a personal computer, educational and vocational training information, occupations that the students were interested in, and how to use the Internet to find out more about their vocational options and interests, using excerpts from episodes of 'Neighbours' to learn about Australian cultural values and practices, and using video materials to become more aware of good nutrition and the relationship between fast food and health.

DIMA has provided the AMEP Research Centre with funding to develop a series of self-contained curriculum modules that focus on the interests and learning needs of SPP Youth. These will be developed during 2006 and 2007 and will be provided free of charge to AMEP service providers.

The topics dealt with in the modules will cover:

- *Education and work in Australia*, which will explore educational and vocational pathways, and help young people to understand what is involved in planning career and job options;
- *Money matters*, which will explore issues related to managing money, including useful strategies and traps to look out for;
- *ICT*, which will extend learners' understanding of and skills in using Information and Computer-based Technology;
- *Intercultural competence*, which will explore aspects of cultural and social expectations in Australia, with some connection to aspects of requirements of the law;
- *Sport and recreation*, which will explore options for young people and issues they may encounter in accessing sport and recreation services in their communities;
- *Health and well-being*, which will explore health issues that may arise for young people.

The annotated bibliography contains some websites where ideas or materials that may be of use for teachers of younger learners in the AMEP may be obtained.

Classroom implications

Younger learners often develop fluency in speaking more quickly than in reading and writing, and they are relatively adventurous in exploring topics of interest to them. Therefore, they may be able to participate in tasks based on spoken language at a higher level of proficiency and challenge than the level at which they are able to complete written

work. While it is important to connect spoken and written work for young learners with limited literacy levels, teachers need to plan classroom work that extends the spoken repertoires of young learners, and yet that provides practice and consolidation of basic literacy skills such as word recognition, letter formation and adherence to the basic conventions of written texts, including spelling and understanding sound-symbol relationships. Explicit attention to strategies to enhance learning is essential.

Young learners usually appreciate having a clear sense of the expectations of them in classrooms, and often appreciate and learn a lot from explanations of the reasons behind requirements and expectations that apply to them.

Annotated bibliography

Bakopanos, C., & Gifford, S. M. (2002). *Off to a healthy start: A project report for young people*. Deakin University/The Victorian Foundation for Survivors of Torture.

Available for free download in .pdf format at <http://www.latrobe.edu.au/rhrc/publications.html>

This set of materials is the result of a research project in which 50 adolescent, recently arrived learners aged 12 to 18 explored what it is that keeps recently arrived young people healthy and happy. The materials include project findings, as well as materials used in the project to help the students to explore these issues.

Changing Cultures Project website:
<http://www.changingcultures.com.au>

This website reports on a collaborative project that brought together organisations in the health, welfare, education and migrant support areas that was conducted in the Northern region of Melbourne between 2000 and 2003. The project explored sustainable ways of supporting young refugees in education programs and connections with other welfare and support programs. Information about the activities undertaken in the project can be viewed on the site, and the whole project report can be downloaded. Information is also provided on the Good Futures Project, in which the post-compulsory schooling educational pathways for young refugees and immigrants were explored.

CMYI (Centre for Multicultural Youth Issues) website:
www.cmyi.net.au

Although the CMYI is a Victorian-based organisation, and many of its materials contain specific references to Victoria, a considerable amount of information and material on this site is useful for AMEP teachers and providers in other States. As well as information about CMYI's activities, there are translations of materials designed as information for young refugees and immigrants. These may be useful as sources of information, or in providing materials for classroom discussions or even teaching. The following may be a guide that could be adapted for other States: 'Guide to

understanding the Victorian education and training system' (with some Victoria-specific material), 'Landing on your feet' (a guide to the legal system in Australia), and information about becoming involved in formal sporting activities. Other useful resources include translated parental consent forms, profiles of young people in immigrant communities (including Sudan and the Horn of Africa – though at the time of compiling this fact sheet these were dated, having been produced in 1997–1998). CMYI also publishes a regular email newsletter, which among other things includes information about new resources and reports. It also has good links to other sites.

DIMA Youth website: <http://www.immi.gov.au/settle/youth/>

Provides links for each State to organisations that have information and provide support in the following topics: General Information, Living and Health, Study, Recreation and Sport, Work, Need Help, Drugs and Alcohol. Many of the organisations listed and linked are mainstream and don't necessarily provide a focus on refugee and immigrant youth, but this site can be a starting point, and links to Migrant Resource Centres and ethnic community councils are included. A particularly useful set of links and resources can be found via <http://www.immi.gov.au/settle/publications>, including some information from Settlement Planning Committees in a number of States. There is a comprehensive document produced under the auspices of the Victorian Settlement Planning Committee in 2005, 'Good practice principles: guide for working with refugee young people', available for download at:
http://www.immi.gov.au/settle/publications/resource_gateway_2004.htm.

HealthWise Health Literacy Teaching Resource for Refugee and Other ESL Students (2004) Health materials for Foundation house available from:
<http://www.survivorsvic.org.au/publications.php>

'HealthWise' is a set of materials described on the website as a 'Health literacy program for secondary school-aged students from refugee and other culturally and linguistically diverse backgrounds learning English'. It contains materials for use with adolescent ESL students on issues such as nutrition and well-being. The site also contains teaching resources addressing other topics, such as 'Human rights and refugees issues', which are designed for other groups of learners (such as middle-years students in mainstream classes in Years 5 to 9), or for teachers in mainstream schools ('Schools in for Refugees: School readiness for dealing with refugee students'), which may provide ideas for AMEP teachers. There are also materials on addressing issues of trauma and torture faced by ESL learners. The materials are available as free downloads in .pdf format.

My Future website: Occupations section
<http://www.myfuture.edu.au/services/default.asp?FunctionID=5002&Action=Advanced>

The 'My Future' website is maintained by State and Territory governments in Australia, and contains a wealth of information to assist young people in making

career choices and selecting vocational pathways. The 'Occupations' section provides concise information in relatively simple language about a wide range of occupations. This includes the extent of opportunities, incomes earned, qualifications, and training options and requirements. Young AMEP learners can be guided through the website to show how it works and what it contains, and can be assisted to use the site to find out about occupations that they may be interested in.

Porter, M., & Haslam, N. (2005). Predisplacement and postdisplacement factors associated with mental health of refugees and internally displaced persons: A meta-analysis. *Journal of the American Medical Association*. 294: 602–12.

This report provides a valuable and up-to-date (though technical) analysis of the significance of post-migration settlement experiences for the well-being of refugee clients.

Refugee Health Research Centre

This centre, located at La Trobe University in Melbourne, <http://www.latrobe.edu.au/rhrc/>, provides a range of activities and resources, with a research project focusing on the longitudinal experiences of young refugees.

Wealth of All Nations: Identification of strategies to assist refugee people in transition to independence

This report to the National Youth Affairs Research Scheme is available for \$22 from the Australian Clearinghouse for Youth Studies (ACYS).

Follow this link to order:

<http://www.acys.utas.edu.au/ncys/nyars/n23.htm>

Compiled by

Alan Williams and Howard Nicholas

Senior Researchers

AMEP Research Centre

La Trobe University

Thanks to Julie Deblaquiere and Helen Moore