

3rd Education Nation Conference

“Education for the better future of Malaysia”

7/8 April 2015, Kuala Lumpur

The following paper was presented by Steve McMurtrie on behalf of Outdoors Victoria at the 3rd Nation Education Conference held in Kuala Lumpur, Malaysia.

This paper can be read in conjunction with the PowerPoint presentation saved as PDF.

A classroom without walls - The power of outdoor learning

Slide 2 - Healthy Life Outdoors

(This section is from the work of Cathryn Carpenter and Nevin Harper -Health and Wellbeing Benefits of Activities in the Outdoors

International Handbook of Outdoor Studies, Barbara Humberstone, Heather Prince, & Karla Henderson (editors) and publishers Routledge (part of the Taylor and Francis Group, UK – IN PRESS))

The World Health Organization’s predicts that by 2020 depression will be the second largest cause of ill-health.

They define health as the “complete state of physical, mental and social wellbeing, and not merely the absence of disease or infirmity” (WHO, 1946, p.1)

This definition is quite different to the biomedical model of health that treats illness or disease in isolation from person and place. Models incorporating the social and environmental context are increasingly relevant – Hence the power of OUTDOOR LEARNING.

Slide 3 - Live life outdoors

((This section is from the work of Cathryn Carpenter and Nevin Harper -Health and Wellbeing Benefits of Activities in the Outdoors

International Handbook of Outdoor Studies, Barbara Humberstone, Heather Prince, & Karla Henderson (editors) and publishers Routledge (part of the Taylor and Francis Group, UK- IN PRESS))

Human health and wellbeing is enhanced through meaningful connections between people and places in 4 areas:

- Socio-ecological health and wellbeing
- Individual health and wellbeing
- Social Context: Relationships
- Community and natural environment

Research suggests that outdoor activities enable people to engage physically, intellectually, emotionally, and spiritually with other people within outdoor environments

Slide 4 - Socio-ecological health and wellbeing

In his book, "Understanding health: A determinants approach", Murphy refers to Socio-ecology being the complexity of interactions between people, and their social and physical environments. The socio-ecological approach to health acknowledges the influence that infrastructure and systems can exert on these interactions, particularly with respect to social and health outcomes (p. 165).

To be 'healthy' implies empowerment of individuals to manage their lives.

Many outdoor activity programmes aspire to enhance personal development, social engagement and community responsibilities. The challenge is to design programmes that facilitate individual growth, positive social dynamics, and develop interdependent relationships with both their community and outdoor environments.

In short, to promote health through a multi-dimensional approach.

Slide 5 - Individual context for health and wellbeing

Participants in outdoor programmes generally eat healthy diets, complete daily physical activity, have lowered distractions or stress from their usual daily living, and subsequently provide their bodies with an opportunity to cleanse and heal.

Outdoor living and travel conditions demand individuals and groups maintain vigilance over their own, and others health and wellbeing.

Recent research has emerged which looks explicitly at the benefits of exercising in outdoor 'green' environments, and subsequently linking the physical benefits to overall health and wellbeing (See Barton & Pretty, 2010).

Simply being active outdoors demands physical effort (e.g., walking on uneven surfaces or carrying a pack). The constant physical demands of the environment requires a moderate level of physical activity which has been suggested as the most effective approach to reaching and maintaining physical health

Physical activity, however, is only one aspect.

Research in outdoor programmes has consistently demonstrated improvements in adolescent wellbeing as measured by mental health standards (Hattie, Marsh, Neill, & Richards, 1997; Russell 2003; Bowen & Neil 2013).

Measures of physical health and psychological wellbeing from participation in outdoor programmes, is a growing area of research and bringing promising results (e.g. Beil, Hanes, & Zwicky, 2014)

Slide 6 - Social context: relationships

The group context is an important part of the experiential learning processes since the social dimensions of the group enables members to think beyond their own individual needs.

The dynamic and unpredictable outdoor learning environment provides the basis of the challenges and problems with which the individual and the group will be confronted. This encourages the group members to communicate and work together to achieve personal and group goals as well as developing healthy relationships and connections with others.

One intentional feature of outdoor activity programmes is the use of risk, challenge and group initiatives to generate new understandings of what is possible.

This facilitated stress intentionally increases perceptions of risk, difficulty, and increases the likelihood that individuals will have the opportunity to work through and overcome difficult situations.

Slide 7 - Community and natural environment context

In the past, education may have ignored the human relationships with the natural world, focusing instead on the built environments or human-centric places.

However, emphasises on contact with surrounding environments inclusive of gardens, parks, and reserves is equally important.

Research is confirming the necessity for connections to nature for our health and wellness.

Recent studies have found that life stress can be buffered or reduced in children through simply living in proximity to nature, and that exposure to forest environments reduces cortisol levels, pulse rate, blood pressure, and sympathetic nerve activity

If relationships with the natural world can be seen as an essential part of health and wellbeing, then adventures and journeys in remote locations – implemented with intention – can be utilised as effective ways in which to facilitate an enhanced relationship with both the natural environment and social communities

Slide 8 - Learn life outdoors

(This section is from the work of Cathryn Carpenter and Nevin Harper -Health and Wellbeing Benefits of Activities in the Outdoors

International Handbook of Outdoor Studies, Barbara Humberstone, Heather Prince, & Karla Henderson (editors) and publishers Routledge (part of the Taylor and Francis Group, UK – IN PRESS)

Opportunities to develop positive relationships with the environment, others and ourselves through interaction with the natural world can be achieved through learning life outdoors.

These relationships are essential for the wellbeing and sustainability of individuals, society and our global environment.

Learning outdoors engages students in practical and active learning experiences in natural environments and settings typically beyond the school classroom.

In these environments, students develop the skills and understandings to move safely and competently while valuing a positive relationship with natural environments and promoting the sustainable use of these environments.

I would like to provide you with seven well recognised and significant educational outcomes from learning in the outdoors.

Slide 9 - Self-awareness and emotional intelligence

Outdoor Education has maintained enduring educational outcomes linked to personal development. At the heart of learning outdoors is the notion of challenge and success from intelligent persistence.

Adventure based activities as part of an outdoor learning environment, create ways for students to directly learn strategies for coping, mechanisms for enhancing self-efficacy and internalising attributions of success.

Reflection is an essential part of learning outdoors process as it promotes an emotional intelligence that is both specific and transferable.

Slide 10 - Community living

Much of learning outdoors occurs in teams, in non-competitive settings, over time, often for extended periods and frequently in residential contexts.

Unlike schools, residential experiences include 24hr a day challenges for students learning to live, share and work together. Shared enterprise is valued in many settings, but learning outdoors has the opportunity to deliberately and carefully construct an alternative temporary community to help students learn, and better apply, the knowledge and skills of how to live well with the diversity of those around them.

Slide 11 - Socio-critical thinking – step back and reflect

Socio-critical thinking is a key educational goal from the Melbourne Declaration –which I will speak more about later. Learning outdoors challenges students to examine some of the taken for granted assumptions in their lives. Experiences in nature help students look back at the world and their everyday living.

Slide 12 - Up close with nature – appreciation, stewardship and care

Rising obesity, increased virtual existence, disassociation from the resources and needs of living, phobias and a culture of fear are some of the complaints experienced by contemporary youth that have correlated with decreasing outdoor experiences.

Direct contact and play outdoors in nature has been repeatedly shown to improve such issues. Personal repeated contact with nature from an early age is also directly, positively correlated to adopting more sustainable environmentally friendly living practices into adulthood.

However, the first step towards sustainable practices is developing an emotional appreciation of the natural world, one that can grow through curiosity and inquiry to practices of stewardship.

In a world where environmental degradation is widespread, educating for a more sustainable future by instilling a foundation of appreciation, stewardship and care through an emotional connection to nature in childhood seems a worthy goal.

Slide 13 - Skills of outdoor living and travel skills

Learning outdoors teaches the skills and knowledge of how to recreate, enjoy and safely travel, not only within the Australian outdoors, but the global outdoors.

The adventure activities that underpin learning outdoors enable students to learn the skills and knowledge in ways that can remain with them for a lifetime, opening future possibilities for safe outdoor recreation across their lifespan.

Slide 14 - Risk management awareness and astute judgement

Children evolve strategies for safe living and astute judgement through experience over time.

There is substantial evidence to indicate that restrictive parenting practices inadvertently limit early exploration and impact upon children's capacity to develop appropriate self-moderated risk management behaviours.

Unlike sports, where umpires determine what is and is not safe, learning outdoors teaches students to develop specific strategies for assessing and managing risks.

Such skills of astute judgement are context specific, but elements and processes do transfer and can inform everyday judgements young people make about the actions and consequences in their lives.

Slide 15 & 16- Associated physical and psychological benefits

Human affiliation with nature is an evolutionary trait. Research has repeatedly confirmed a series of physiological and emotional benefits of personal contact with nature.

Such research has informed practices as diverse as architectural planning, interior decoration, landscape gardening, elite performance training, rehabilitation, early childhood education and of course Outdoor Education.

Human affiliation with nature underscores many potential benefits of learning in the outdoors in motivating ongoing participation in active physical recreation.

Research indicates that:

- children who play outside with a dominance of natural elements demonstrate increased creativity compared to those who do not.
- children who play in free outdoor spaces demonstrate more expansive movement patterns
- direct personal contact with nature improves mood states and well-being, lowers heart rates and blood pressure when compared with responses in other settings.
- outdoor recreation activities are assessable to a wide population and demographic. Activity such as walking outdoors is reportedly the most popular form of exercise across the life span, so is more likely to continue past schooling than any other sports or games, therefore providing an avenue to maintain lifelong health and well-being.
- camping in natural settings is a popular form of family based recreation, is affordable, builds community and connection to nature.

Slide 17 - Nature and the numinous

Spirituality is one dimension of human existence, and often left out of the modern 'health and wellbeing' equation. Outdoor activities intentionally facilitated or not, carry with them inherent significant prospects for numinous experience. Harper, Carpenter, and Segal (2012) argued for outdoor programmes to recognize potential such as spirituality in their design and delivery. Hay (2000) and Berry (1999) both posited that we as humans—in our modern western world—are trapped by highly individualized thinking, and have lost our 'spiritual selves'. They also propose that our innate desire to connect with the more-than-human world may be central to our re-engagement with spirituality, leading toward increased maturity and spiritual health and wellbeing.

Slide 18 - The Victorian Landscape

Slide 19 & 20 - Melbourne Declaration 2008

All Australian Education Ministers released a national declaration on 12 December 2008 of the educational goals for young Australians

The Melbourne Declaration on Educational Goals for Young Australians (2008) identified five major developments over a 20 year period that changed the ways in which people interacted and thought about schooling.

- Global integration and international mobility.
- The growing influence of India, China and Asia on the rest of the world.
- Globalisation and technological change placing demands on education and skill development.
- Complex environmental social and economic pressures, such as climate change, that extends beyond national borders.
- Rapid and continued advances in ICT that change the nature of information and communication.

These major changes are paralleled by social changes evident in the lives of young people in Australia today. Young adulthood remains a time of transition and growing independence, but research shows the experiences of young adults today can be quite different to those in previous decades.

There are several emerging challenges for the health and well-being of young Australian's today.

- Many young people are overweight or obese, most do not do enough physical activity, and nearly all do not eat enough fruit and vegetables.
- Considerable proportions of young people consume alcohol at risky levels, are victims of alcohol- or drug-related violence, or are homeless.
- There are rising rates of diabetes and sexually transmissible infections (largely chlamydia).
- Mental health problems and disorders account for the highest burden of disease among young people.
- Among young males, road deaths are a particular area of concern, being nearly three times as high as for females.

(<http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=10737419385>)

The Melbourne Declaration on Educational Goals for Young Australians (2008) commits 'to supporting all young Australians to become successful learners, confident and creative individuals, and active and informed citizens', and to promoting equity and excellence in education.

Slide 21 - Learning Outdoors

Students exploring the Bogong High Plains, Victoria.

Slide 22& 23 - The Victorian Landscape

Victoria – “The Education State”

Late last year, Victoria had a change in government with the Victorian Labor party winning the State election.

Led by Premier Daniel Andrews, the Labor Government Platform outlines how it will work towards making Victoria’s education system the best in the country, stating that Victoria will be the ‘The Education State’.

In recognition of this goal, Labor will direct VicRoads to print ‘Victoria – The Education State’ on number plates for registered vehicles.

Last month, Daniel Andrews announced Labor’s plan to invest \$630 million to fix school buildings, implement a \$320 million TAFE Rescue Fund and reintroduce Tech Schools to give our kids the best start.

Labor’s education plan will commit \$180M to help struggling parents with the costs of uniforms, breakfasts, camps, sport and excursions.

Education is Labor’s number one priority.

The government are aiming develop a system where students:

- develop a sense of themselves as active learners, who can think, solve problems and make positive choices in life
- understand and appreciate the natural environment
- understand human interaction with different environments
- enjoy and participate in sporting and recreational activities
- develop confidence, initiative, adaptability, self- discipline, responsibility, honesty, kindness, tolerance, resilience and cooperation

The current state government seems to understand the importance of providing a holistic and balanced curriculum, with high standards of academic excellence and practical achievement that motivates and engages students in learning for their benefit and for the benefit of the society in which they live.

Slide 24 - Learning Outdoors

Access to the outdoors for all.

Slide 25 - Curriculum – A Systemic Approach

The Australian Curriculum

The Australian Curriculum sets consistent national standards to improve learning outcomes for all young Australians. It sets out what students should be taught and achieve, as they progress through school. It is the base for future learning, growth and active participation in the Australian community.

The Australian Curriculum in Victoria: AUSVELs

Victoria has developed AusVELs as their implementation platform of the Australian Curriculum. It is the Foundation/Prep to Year 10 curriculum that provides a single, coherent and comprehensive set of prescribed content and common achievement standards.

Slide 26 - Curriculum – A mapping exercise

The Australian Curriculum recognises that schools organise learning depending on student learning requirements, local needs, resource availability and timetabling structures. The content from the Australian Curriculum can be organised and delivered in a range of ways and through a number of different school subjects.

Outdoor Education Australia, the peak body in Australia for Outdoor Education, has undertaken a “mapping” process to identify content from the Australian Curriculum that can be organised and delivered through learning in the outdoors.

Elements of learning in the outdoors draw from 3 main learning areas:

Health and Physical Education

The primary content drawn from health and physical education are the areas of outdoor recreation and the influence of connection to place and communities on health and wellbeing.

Geography

Geography is a structured way of exploring, analysing and understanding the characteristics of the places that make up our world.

Learning outdoor programs provide opportunities for students to learn to question why the world is the way it is, reflect on their relationships with and responsibilities for that world, and propose actions designed to shape a socially just and sustainable future.

Science

Science provides opportunities for students to develop an understanding of important science concepts and processes, the practices used to develop scientific knowledge, Science’s contribution to our culture and society, and its applications in our lives.

Learning outdoor programs support students to develop and apply scientific knowledge, understanding and skills to make informed decisions about local, national and global issues related to their immediate school environment and environments that they may access through natural journeys or camps.

Slide 27 - Key Delivery models

In Victorian schools predominately provide learning outdoors via outdoor education programs. These programs are delivered across six differing forms.

Specific Purpose Schools

The State Government supported ROSA schools provide opportunity for approximately 15,000 students annually to attend a program at one of seven campuses. Students attend these campuses from home schools across the State.

The curriculum outcomes vary from campus to campus and across year levels, but are based upon the development of supportive communities for sustainable futures and are mapped against current AusVELs.

Formal subjects

Formal curriculum subjects such as the Victorian Certificate of Education Outdoor Environmental Studies or the Vocational Education Training in VCE Outdoor Recreation course are accredited State wide Outdoor Education subjects. Student participation remains relatively stable for these VCE study. In recent years approximately 6500 students have completed Units offered by around 180 schools.

Elective subjects

Learning outdoors is also offered as an elective subject in schools, most frequently in middle years.. In the non-Government sector every large Independent school has a significant middle years Outdoor Education program. Many of these are modelled on Geelong Grammar's iconic Timbertop experience.

Programs in alternate settings

Sharing similarity to middle years OE programs are specialist outdoor programs in alternate settings. Typically, schools identify students who are deemed at risk or who are disengaged with school. Alternate programs then offer these students programs aimed at re-engaging, developing coping strategies, opportunities for success and enhanced relationship building.

Extra and co-curricular activity

Outdoor Education can occur in schools through extra and co-curricular activities such as school camps, clubs or activity groups. School camps remain the most common form of OE in schools.

Excursions in related disciplines

Finally, Outdoor Education contributes to learning in related discipline areas. Many teachers use the methods of Outdoor Education to engage students in learning in, about and for the outdoors. The experiential learning models that underpin much of OE pedagogy has application to many subject areas, but are particularly well suited to studies in Geography and the Earth sciences.

Slide 28 - Victorian Case Studies

I would now like to provide 3 case studies that will provide a more detailed overview of how learning in the outdoors is delivered within the Victorian Government Education system.

Slide 29 - Outdoor Education Group

Background

The Outdoor Education Group, founded in 1984, is an independent not for profit organisation that provides outdoor experiences for approximately 40,000 students per year from primary to senior years

Slide 30 – Educational Philosophy

OEG custom designs all programs to suit their client's particular educational parameters. In partnership they identify the targeted learning outcomes and then determine dates, location, activities and programming that can best suit this learning.

The Outdoor Education program encompasses Adventure Based Outdoor Learning, drawing upon experiences encountered during outdoor journeys. Students are equipped with foundation skills such as navigation, cooking and decision-making (in the outdoor context), and are then presented with opportunities to utilise these primary skills during a challenging experience.

The final element is the "transfer" of learning into everyday contexts whereby students are able to both recognise similar situations and to take more useful action in future similar situations.

Outdoor Education Group
Educational Framework - Core Curriculum

| Values | Definition |
|---|---|
| Respect & Responsibility for Self | A person values, respects, cares for, and takes responsibility for him/herself. |
| Respect & Responsibility for Others | A person values, respects, helps, and cares for other people. |
| Respect & Responsibility for the Natural World | A person values, respects, cares for, and takes responsibility for the natural world. |

Slide 31 - Classrooms without Walls

The Outdoor Education Group offers two distinct types of service:

Journey based programs:

- 5 Day multi-activity programs in various parks and national parks around the State.
- 10 Day expeditions – mainly the culmination of a 3 or 4 year sequence
- 21 Day expedition– ‘Kosi to the Coast’
- 30 Day Expedition Trek - program for Yr 9 girls

Camps

5 camps across Victoria ranging from “off the grid” under canvas camps to a 270 bed camp offering multi activity programs

Slide 32 - Learning Outdoors

Enjoying the rivers of Victoria

Slide 33 - ROSA Outdoor Schools

The ROSA Network was formed in 2000, currently with 4 State Government schools as members with 7 sites across Victoria. Approximately 15,000 students per year attend a ROSA program.

Slide 34 – Vision

ROSA’s vision is that:

“All state school students participate in quality, education-based residential outdoor programs”

With seven campuses across the State, the ROSA schools provide programs for special needs and P-12 students within public education throughout Victoria. The overarching aim of these programs is to Educate for Sustainable Living. Students achieve success through a unique

personalised learning journey while living within a small community in a healthy, happy and safe environment.

Slide 35 - Classrooms without walls

Figure 1 below is an example of the Outdoor School Bogong curriculum framework that is mapped to AusVELS and informs the program development and teaching and learning processes.

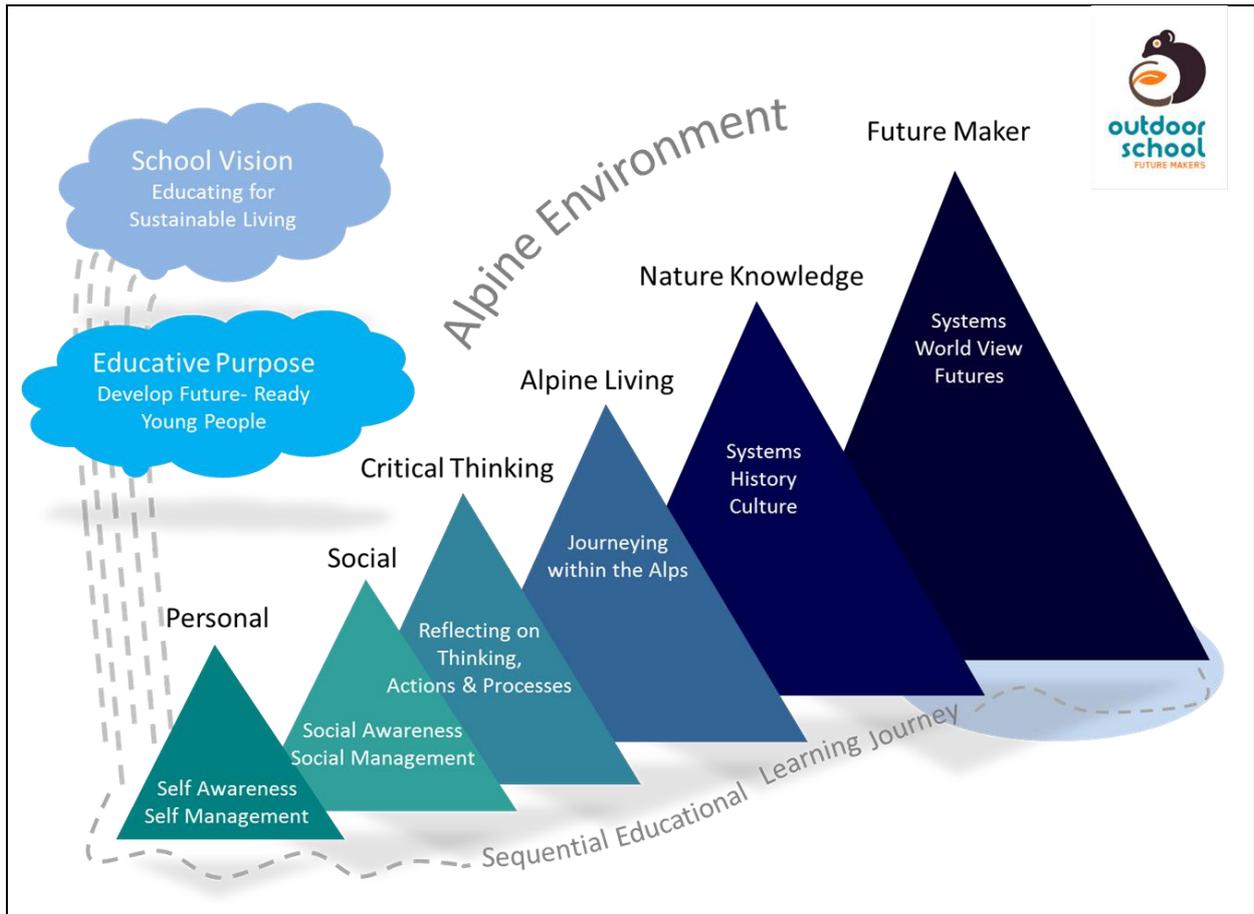


Figure 1: Outdoor School Bogong Curriculum Framework

Slide 36 - Learning Outdoors

Connecting with Nature

Slide 37 - School for Student Leadership

Background

Like the ROSA Schools, School for Student Leadership (SSL) is a Victorian Department of Education and Training school offering a unique residential education experience. It's first of 3 campuses was opened in 2000.

There are three campuses across Victoria -The Alpine School Campus, Snowy River Campus and the Gnurad-Gundidj Campus.

Approx. 1800 year 9 students each year. The reason for the lower student numbers is that SSL conduct 8-9 week programs with up to 50 students at each campus.

Slide 38 - Vision

A community where people are passionate, informed and active global citizens

Mission

We are a Year 9 residential school for Victorian government students, which provides opportunities for personal, community and leadership development

The curriculum focuses on personal development and team learning projects sourced from students' home regions.

Slide 39 - Classrooms without walls

From research conducted by the SSL, the vast majority of students described their time at the SSL as the most positive learning experience of their entire schooling to date. One of the key themes to emerge from their research indicates that the relationships built with each other and the staff contributes to this positive experience of schooling.

This research, with a major focus on the students who have participated in the SSL over the past decade, clearly illustrates that this innovative program, within a supportive environment, provides opportunities for adolescents to develop meaningful relationships with peers and teachers. It also assists students with developing skills in leadership, conflict resolution and self-awareness which are essential tools for helping them manage their relationships once they leave the supportive communal environment of the SSL.

Slide 40 - The Journey is just beginning...

My journey with you today is reaching its final destination, but I am aware that yours is just beginning

As outlined earlier, my intention was to provide you with a snapshot of the Victorian learning outdoors landscape in terms of state government schools.

My aim was to provide you with this small, but hopefully significant jigsaw piece that may help you gain a clearer picture of what education in Malaysia might look like for your next generation. This jigsaw piece may help in reaching your goal as outlined within the Malaysian Education Blueprint:

“To equip our students holistically to allow them to succeed in the 21st century, with all of the opportunities and challenges that this new era presents.....

....develop young Malaysians who are knowledgeable, think critically and creatively, have leadership skills and are able to communicate with the rest of the world.....

..... be imbued with values, ethics and a sense of nationhood, enabling them to make the right choices for themselves, their families and the country with a view towards enduring and overcoming life’s inevitable challenges.

(Tan Sri Dato’ Haji Muhyiddin bin Haji Mohd Yassin, Deputy Prime Minister and Minister of Education Malaysia)

Slide 41 - Acknowledgments

I would like to acknowledge the people and organisations for providing information for this presentation.

Dr Cathryn Carpenter – Victoria University

Associate Lecturer Brendon Munge – La Trobe University

Associate Professor Peter Martin – Federation University

ROSA Outdoor Schools

School for Student Leadership

Outdoor Education Group

Outdoors Victoria

References

- Barton, J. & Pretty, J. (2010). What is the best dose of nature and green exercise for improving mental health? A multi-study analysis. *Environmental Science & Technology* 44(10)
- Beil, K., Hanes, D. & Zwicky, H. (2014). Environmental influence on holistic health measures. *Explore* (10)2, 115-117.
- Berry, W. (1999). *The Great Work*. New York, NY: Bell Tower.
- Bowen, D. J. & Neill, J. T. (2013). A meta-analysis of adventure therapy outcomes and moderators. *The Open Psychology Journal*, 6, 28-53.
- Harper, N. J., Carpenter, C. & Segal, D. (2012). Self and Place: Journeys in the Land. *Ecopsychology* 4(4), 1-7.
- Hattie, J. A., Marsh, H. W., Neill, J. T. & Richards, G. E. (1997). Adventure education and Outward Bound: Out-of-class experiences that make a lasting difference. *Review of Educational Research*, 67, 43-87.
- Hay. (2000). Spirituality versus individualism: Why we should nurture relational consciousness. *International Journal of Children's Spirituality* 5(1), 37-48.
- Murphy, B. (2004). Health education and communication strategies. In H.Keleher & B. Murphy. (Eds.), *Understanding health: A determinants approach* (pp.152-169). Melbourne, Australia: Oxford University Press.
- Russell, K. C. (2003). An assessment of outcomes in outdoor behavioural healthcare treatment. *Child and Youth Care Forum* 32(6), 355-381.
- WHO (1946). *Preamble to the constitution of the World Health Organisation as adopted by the international health conference*. New York: World Health Organisation, 19-22 June, 1946.