



## **Schools for Resilience**

Linking schools with  
local communities' sustainability

### **Making the case for community resilience**

***by Davie Philips***



***This is a referenced paper by Cultivate's Davie Philip (WP3 leader) that strengthens the case for using the frame of community or local resilience as the theme at the core of the Schools for Resilience learning programme.***

The Schools for Resilience project is an innovative learning programme taking a new approach to environmental education and education for sustainable development in schools. It is based on actions towards healthier, more responsive, and more resilient local communities, and developing the competencies students will need in the 21<sup>st</sup> century to collaboratively engage with challenges such as climate change.

Using a place based learning approach students will build their capacity to identify local risks and to better understand ways to mitigate and respond to global challenges. The Schools for Resilience learning programme also aims to take a systemic and values based approach that fosters a stronger sense of place and a greater ability in students to meet challenges. The students will work together to devise a project that can be implemented in their community that will reinforce their connection to the people and the environment around them, and therefor strengthening their own and their community's resilience.

It is predicted that over the next thirty years we will see more change than any other period in recorded human history. The need to build a more sustainable economic system and the necessity to accelerate the transition a low carbon society has never been so apparent.

Underpinning the Schools for Resilience project is the concept of community resilience. The word resilience is used by a number of different sectors and disciplines all of which have relevance in some way to the learning programme we are developing. This document builds the case for using this concept as a key theme in this learning programme.

The word resilience is derived from the Latin word 'resalire', which means to spring back, or rebound. Metallurgists traditionally used the term to describe the malleable properties of metal and its ability to return to its original form after being bent, compressed, or stretched. The common usage of the word describes our ability to deal with trauma and any threat to our health; this is our personal resilience. The more resilient we are the faster we will bounce back from difficult experiences. In the field of mental health psychologists use the word resilience to describe our capacity to confront and cope with life's challenges and to remain buoyant in the face of adversity. From the literature in this area the key factors that positively affect personal resilience are activities that promote wellbeing, social capital and the development of psychological coping strategies.

***"Resilience refers to the capacity of an individual to cope with stress, overcome adversity or adapt positively to change."* Kaplan, H.B. (1999). **Toward an understanding of resilience. A critical review of definitions and models.****

***"Regardless of the origin of resilience, there is evidence to suggest that it can be developed and enhanced to promote greater wellbeing. Resilience is not regarded as a quality that is either present or absent in a person or group but rather a process which may vary across circumstances and time."* Luthar, S. S. (2006). **Resilience in development: A synthesis of research across five decades.****

***"Resilience is the process of successfully adapting to difficult or challenging life experiences. Resilient people overcome adversity, bounce back from setbacks, and can thrive under extreme, on-going pressure without acting in dysfunctional or harmful ways. The most resilient people recover from traumatic experiences stronger, better, and wiser."* Siebert A (2005). **The Resiliency Advantage: Master Change, Thrive Under Pressure, and Bounce Back from Setbacks****



Resiliency then is the ability to adapt to life's changes and crises and can be seen as the key to a healthy, productive life. In an article by Albert Siebert titled "How To Develop Resiliency Strengths", he proposes five levels of internal resiliency which are useful for our Schools for Resilience programme:

- Maintaining one's emotional stability, health, and well being
- Focusing outward and developing good problem-solving skills. (his research indicates that problem-focused coping leads to resiliency better than emotion-focused coping).
- Focusing inward and developing strong inner "selves" such as self-esteem, self-confidence, and a positive self-concept.
- Developing the ability to convert misfortune into good fortune
- Constantly learn from experience. Rapidly assimilate new or unexpected experiences and facilitate being changed by them. Ask "What is the lesson here? What early clues did I ignore? The next time that happens I will...."

In the 1970's ecological researchers began to use the term to describe ecosystems that continue to function in spite of adversity. Buzz Holling and his colleagues at the Stockholm Resilience Centre are credited as first introducing the concept of resilience as a framework to understand how individuals, communities and ecosystems cope with uncertainty and change. Holling promoted the use of systems theory and is credited with the introduction of ecological economics, the adaptive cycle, and a model to understand the cycle of transformation in human and natural systems he termed Panarchy.

In a paper Buzz Holling published he defined the resilience of an ecosystem as the measure of its ability to absorb changes and still exist. He compared and contrasted the concept of resilience with the notion of stability, which he defined as the ability of a system to return to its equilibrium state after a temporary disturbance; that is the more rapidly the system returns to its equilibrium, the more stable it is. He concluded that resilience and stability are two important properties of an ecological system. Holling (1973). *Resilience and Stability of Ecological Systems*

Building the capacity of communities to better understand and steward our ecosystems and landscapes to provide the goods and services that sustain us was a theme in *Resilience Thinking*, a book by scientist Brian Walker and science writer David Salt. *Resilience Thinking* introduces an approach to understanding what qualities of a system need to be maintained or enhanced in order to achieve sustainability and be resilient.

*"Resilience is the capacity of a system to absorb disturbance and re-organize while undergoing change so as to still retain essentially the same function, structure, identity and feedback."* Walker, B.H. and D. Salt. (2006) **Resilience Thinking: Sustaining Ecosystems and People in a Changing World.**

The understanding of resilience has led to a development of the term in the social sciences, where the concept is applied to describe responses at different scales, for instance communities, organisations and economies.

In the 1990's the concept of resilience began to be used in terms of disasters and the ability of a place to prepare for and recover from a hazardous event.

*"The ability of a community to withstand an extreme event without suffering devastating*



*losses, damage, diminished productivity, or quality of life without a large amount of assistance from outside the community.” Mileti, D. (1999). Disasters by Design: A Reassessment of Natural Hazards in the United States. Joseph Henry Press, Washington, DC.*

An approach labeled ‘resilience building’ is used by both the humanitarian and international development communities, which combines emergency response, recovery and disaster risk reduction.

It was noted that some emergency responses to extreme events did not improve people’s underlying structural poverty in a way that would make them less vulnerable to shocks in the future. Resilience building therefore focused on the improvement of the lives and livelihoods of communities in the short and longer term. Bahadur, A. V., Ibrahim, M., & Tanner, T. (2010). The resilience renaissance. Unpacking of resilience for tackling climate change and disasters. Institute of Development Studies.

There is now widespread agreement in policy circles that resilience should be a central concern and is more appealing than a focus on ‘vulnerability’, even though it may address similar issues. However, there are legitimate concerns that ‘resilience-building’ programmes may be applied as a descriptive term to re-package interventions which have been run for decades without noticeably challenging the structural factors that keep people in poverty. Levine, S., Pain, A., Bailey, S. and L. Fan et al. (2012) The Relevance of ‘Resilience’, Humanitarian Policy Group Policy Brief 49. September 2012. Overseas Development Institute.

*“Resilience is the ability of individuals, communities and states and their institutions to absorb and recover from shocks, whilst positively adapting and transforming their structures and means for living in the face of long term changes and uncertainty.” OECD, 2012*

But being resilient is more than just bouncing back to where we were before. If we are resilient we stretch ourselves, we spring forward and, because of the challenges we face, we emerge stronger. This transformational view of resilience emphasises renewal, regeneration and re-organisation, it is not just about recovering or preparing for shock, it is about human agency and the power to learn to navigate effectively through life.

I recommend watching a short animation on YouTube that Cultivate made called [‘Surfing the Waves of Change’](#). It explores how we can nurture our personal and community resilience to surf the most powerful waves of change with confidence and optimism. The metaphor of surfing is a powerful one for resiliency building.

Since the UN’s first Earth Summit in 1992 the interconnected issues of environmental degradation, biodiversity loss, food security, climate change and development have been progressed under the term “sustainable development” or “sustainability”. This was the notion that with the right policies and technologies we might achieve an economy and society that is in equilibrium with the environment ensuring a sustainable future that meets our needs without compromising the ability of future generations to meet theirs.

In their book, Resilience: Why Things Bounce Back, Andrew Zolli and Anne Marie Healy challenge sustainable development and show how the concept of resilience is a more powerful lens through which we might cope with the challenges we face. They believe that by encouraging adaptation, agility, and cooperation, this new approach will not only help us weather disruptions, but also bring us to a different way of being in and engaging with the world. *“Among a growing number of scientists, social innovators, community leaders, non-governmental organizations, philanthropies, governments and corporations, a new*



*dialogue is emerging around a new idea, resilience: how to help vulnerable people, organizations and systems persist, perhaps even thrive, amid unforeseeable disruptions. Where sustainability aims to put the world back into balance, resilience looks for ways to manage in an imbalanced world.”* **Zolli A, Healy A M (2013) Resilience: Why Things Bounce Back**

William E. Rees, author of Thinking Resilience, a chapter of the Post Carbon Reader [2010], believes that resilience thinking is a complement to sustainability, not a substitute. “Resilience has become a theoretical construct for sustainability that: a) guides against breaching unknown systems boundaries; b) suggests that continuous changes in certain driving variables is inherently dangerous (e.g., continuously increasing fishing pressure, escalating GHG emissions, or constant material growth) and; c) warns that surviving the breach of a major tipping point, whether human induced or natural, will require unprecedented levels of investment, cooperation and other forms of institutional and societal adaptation.”

The term ‘resilience’ is now becoming increasingly used within policies, programming and thinking around climate change adaptation. The outcome document of the United Nations Conference on Sustainable Development (UNCSD), also known as Rio+20, The Future We Want, stresses the need for the integrated and sustainable management of natural resources and ecosystems as a prerequisite for economic, social and human development and as a means to enhance resilience to climate change and natural disasters.

*“Globally, climactic conditions are increasingly variable, and the intensity of their effects stronger. As climate change brings new uncertainties, risks and changes to already existing risks, building resilience is critical if the agriculture sector is to adapt to climate change.”* **OECD - Building Resilience for Adaptation to Climate Change in the Agriculture**

*“The ability of the system to withstand either market or environmental shocks without losing the capacity to allocate resources efficiently.”* **Perrings, C. A. (2006). Resilience and sustainable development. Environment and Development Economics**

Resilience from a community point of view refers to the capacity of a local area to overcome adversity and adapt to change positively. Community resilience has become a way to describe a community’s ability to foresee challenges and respond or adapt to them.

*“Community resilience is the capability to anticipate risk, limit impact, and bounce back rapidly through survival, adaptability, evolution, and growth in the face of turbulent change.”* **Community and Regional Resilience Institute**

*“A resilient community is one that takes intentional action to enhance the personal collective capacity of its citizens and institutions to respond to, and influence the course of social and economic change.”* **Rural Resilience - Supporting Community Resilience. [www.ruralresilience.com](http://www.ruralresilience.com)**

Since 2006 the Transition Towns process has been a popular way for citizens to engage in the strengthening of their community’s resilience. The Transition process was initially proposed as a response to the vulnerabilities of energy scarcity and climate change. The kinds of activities being offered by local Transition initiatives include, awareness raising events, courses, initiating community gardens and community supported agriculture systems, localising energy production, starting car clubs, making community energy descent plans and the creation of livelihoods through the provision of local products or



services.

It is important to note that official bodies do not initiate these projects, although Transition initiatives are encouraged to work with local authorities and that these different projects are being linked together in whole local strategies for resilience. These types of initiatives are bottom up, led by citizens, build community and offer the potential of an extraordinary transformation in our local economic and social systems.

*“Transition is an inspiring vision and action plan for how a community can transition to an energy lean, carbon constrained, and relocalised future that is abundant, sustainable, pleasurable, and resilient.”* **Rob Hopkins co-founder of the Transition Network.**

*“Rebuilding local agriculture and food production, localising energy production, rethinking healthcare, rediscovering local building materials in the context of zero energy building, rethinking how we manage waste, all build resilience and offer the potential of an extraordinary renaissance – economic, cultural and spiritual.”* **Hopkins, R. (2009) The Transition Handbook**

*“A resilient community produces the food, energy, water, things, and incomes it needs locally.”* **John Robb** <http://www.resilientcommunities.com/>

*A Resilient Community is a city, town or neighbourhood that reduces its vulnerability to dramatic change or extreme events and responds creatively to economic, social and environmental change in order to increase its long-term sustainability.* **UN Resilient Communities & Cities Partnership Program**

*“Social Networks build a sense of community that contributes to the resilience of individuals and groups. Types of networks that are important include families, friends and community organisations. These groups provide strong bonds within a social group; a sense of belonging, identity and social support; and strong linkages to other outside groups that can bring in additional social, financial or political resources. Successful and enduring groups or social networks create relationships with a common purpose and promote shared interests, but can also have adaptable and flexible functions. They can provide emotional and practical support, information and resource sharing. They stay open, inclusive and diverse, and encourage community involvement.”* **Building Resilience in Rural Communities (2008) The University of Queensland and University of Southern Queensland**

*Building community resiliency is an ongoing process that is necessary to ensure that the basic needs of citizens are met and that individuals and families enjoy an optimal quality of life. However the capacity of a community to be resilient depends on its stock of social capital. Social capital includes “features of social organization, such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit”* **Putnam. R. (1995) Bowling Alone.**

Social capital can be defined as cooperation, trust, and social ties between individuals and groups of individuals. A high level of Social Capital in a community also strengthens resilience and the capacity of the neighbourhood or place to adapt to unanticipated events such as natural disasters, economic uncertainty and climate change.

As we have seen the concept of resilience is employed in very diverse fields including psychology, structural engineering, ecology, development, climate change adaptation, disaster-risk reduction and in the social sciences.

There is rich learning from the research and work done in all these fields for our Schools



for Resilience programme, however in the development of actions towards healthier, more responsive, and more resilient local communities, and developing the competencies students will need in the 21<sup>st</sup> century to collaboratively engage with challenges such as climate change, the frame of Community Resilience is most relevant.

A transformational view of resilience emphasises renewal, regeneration and re-organisation, it is not then just about recovering or preparing for shock, it is about human agency and the power to learn to navigate effectively through life. Resilience implies flexibility, adaptability and the ability cope with adversity, the healthier, buoyant and more flexible we are as citizens the more resilient our communities will be. This period of extraordinary change is an opportunity to nurture our resilience and ensure that the places we live are vibrant, innovative and have the potential to flourish.

The following knowledge, skills, and qualities are what we at Cultivate believe an individual needs to develop to play a part in the strengthening of their community's resilience.

- Have adaptive and coping skills
- Be capable of self-direction
- Be able to communicate well and problem-solve with others
- Have the ability to take a whole system perspective
- Have a strong sense of place
- Have an understanding of the challenges we face
- Have an understanding of community values
- Being able to appreciate the resources and the assets of the community

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William E. Rees, author of Thinking Resilience, a chapter of the Post Carbon Reader [2010],