Education

The domain of education is defined as the outcomes derived from the formal and informal transfer of knowledge and skills and is measured using standardized test scores, literacy rates, educational attainment and participation, and various social, emotional, and developmental aspects in childhood. Education has been referred to as a basic capability leading to the expansion of other capabilities and is fundamental to well-being (Terzi 2004). Educational progress and benefits influence other well-being domains and may be measured at either the individual level by economic returns or by subjective feelings of achievement and accomplishment, or at a societal level by creating a skilled workforce with enhanced worker productivity, lower crime rates, and greater civic participation (Guhn et al. 2010, Hill et al. 2005).

Economic and social services provide funding and other programs that influence the access to and opportunities for education. Educational services provide programs aimed at reaching more students, especially those with disabilities or other special circumstances, and by hiring adequate and qualified teachers. Community and faith-based initiatives may also act in this manner to reach additional children and families. Communication through public broadcasting and public service announcements helps educate the public about various issues (e.g; public health issues). Financial assistance in the form of grants, scholarships, and student loans is also essential to allow opportunities for post-secondary education.

Relationship to Ecosystem Services:

Ecosystems provide a plethora of learning opportunities at many levels of education. Some areas may be designated as public learning centers and accessible to all ages, while post-secondary educational institutions may use natural areas for teaching and scientific research (EPA 1997). Environment-based education programs and school ground greening in elementary and secondary schools have shown several positive effects on the mental health and brain development in early and middle childhood. These benefits include improved standardized test scores and problem-solving skills, decreased symptoms of attention deficit disorder, and enhanced cooperation and interpersonal skills, all of which lead to a better educational experience and improved well-being (Lieberman and Hoody 1998, Louv 2005, Guhn et al. 2010).

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Ecosystem research is also integral to innovation and the progression of society. By studying the function and uses of organisms, we are able to discover untapped sources of pharmaceuticals, crops, and other goods and also transfer that knowledge into art, other scientific fields, and practical affairs (Wilson 1993). Local environmental knowledge is also important in providing historical accounts of an area, which contribute to scientific research and environmental management, but also to various cultural aspects of the area as knowledge is passed down through multiple generations (Huntington 2000). Continual research on ecosystems is crucial for understanding how ecosystems provide services that effect human well-being, as well as understanding how our actions affect the provisioning of these services.