Summary

This article explores how children's innate understanding of systems can be developed through deliberate educational programs that support systems thinking. This can happen by encouraging students to identify patterns, consequences and feedback (loops) associated with social, environmental and economic problems; and by drawing on their understanding of systems principles.

Analysis

The author contends that children have an innate understanding of complex systems and that our education system should be designed to nurture this systems-based intuition. She posits that a silo approach to teaching disciplines, where knowledge is fragmented, does not support systems thinking. A silo approach is contrary to the demands of our increasingly complex and interconnected world.

Booth Sweeney suggests that if everyone says 'me first' we need to think of the impact on the whole world and not just ourselves, even if we think the action is defensible. When individual elements are combined, the effect on the whole can be devastating.

The author suggests that systems thinkers look for multiple causes for challenges or problems – they look for recurring problems to find patterns and interrelated causes. Systems thinkers also view things from different perspectives.

Systems thinking requires a combination of the knowledge of systems principles and behaviours as well as reasoning skills such as seeing patterns, seeing situations in a wider context, tracing interrelationships and noting changing patterns over time. Systems thinking involves moving beyond simple, linear explanations of causes. It means no longer viewing what you do or who you are as separate and unconnected.

Reflection

It is important to seize the opportunities of building on students' innate systems thinking abilities so that we can strive for desirable outcomes in our complex world and acknowledge the interconnectedness between all system components. Shifting thinking from 'me' to 'us' or 'them' is a powerful message when developing students' systems literacy.