

## SCHOOL AT SEA – THE PEDAGOGICAL BACKGROUND

School at Sea gives students the opportunity to discover. To discover the sea and life aboard a sailboat. To discover other countries and their inhabitants. To discover themselves and others on board. The goal of all this discovery is to contribute to the personal development of the pupil, to their growth into a self-conscious person who takes on the world full of life experience and confidence. School at Sea program is based on various pedagogical and psychological theories. These theories will be discussed in this pedagogical background and also how they fit into the School at Sea concept.

### THE PHASES OF DEVELOPMENT OF ADOLESCENTS

The School at Sea methodology takes into account the developmental phases of its pupils. It is important to acknowledge that the students, youngsters between 15 and 18 years old, are in their adolescence. During this phase adolescents go through multiple developmental changes and these can be divided into psychosocial developments and cognitive developments (Westenberg, 2008).

#### Psychosocial Aspect

Despite centuries of debate about the psychosocial development in adolescence there is still no clear theory or paradigm at hand. Prominent researchers in adolescent psychology, like Laurence Steinberg and Elizabeth Chauffman, name several features of the psychosocial development (Steinberg and Chauffman, 1996). Westenberg has summarized these features into the following four topics (Westenberg, 2008):

1. The ability to control one's own impulses and emotions.
2. The development of autonomy in relationships with parents and peers.
3. The growing capacity to empathize with others and to understand aberrant viewpoints.
4. The increasing feelings of responsibility for self and others.

Something that was missing in these theories on psychosocial development was how this development occurs. Studies by Westenberg et al. (2000; 2003) show that this process can be described as multiple sliding panels. Development is not abrupt and does not happen at the same pace for all children. Westenberg distinguishes four different panels in adolescence. Until the age of about 9 or 10 children are still true children; impulsive, dependent, focused on parents and caretakers for instruction, guidance, nurture and protection. The beginning of adolescence is characterized by a focus on independence and invulnerability; the self-protecting panel. Between the ages of 13 and 14 years old the conformist panel slides to the front; the egocentrism from the previous phase is replaced by conformism to the peer group. What other people think becomes as important as

what the adolescent thinks for itself. During the age of 17 the self-awareness panel slides into place. The conformism of the previous phase is replaced by one's own; own feelings, wishes and characteristics take centre stage, even when they differ from others in their surroundings. An awareness of the fact that differences can lead to conflict arises. The fourth and final panel is called the responsible panel. It is difficult to stipulate around what age this panel comes into focus, since the individual differences in age vary tremendously. The self-observing attitude gives room to self-expansion and self-enhancement. Thus a shift materializes from "who am I" to "who could or should I be". The young adult takes responsibility for the consequences of its own behaviour. The psychosocial development can continue on until the age of 24 and seems to be independent of the physical and cognitive development.

### **Cognitive Development**

Most researchers agree that when studying cognitive development one can observe an impressive diversity of features that develop during the first part of adolescence. A vast expansion in knowledge takes place. Working memory and information processing improve both in terms of efficiency as well as capacity. Spatial insight and logical reasoning arrive at a higher level. Furthermore a greater awareness of individual thinking develops the ability to conduct and monitor personal learning behaviour increases. Recent studies show (Paus, 2005) why especially the development of metacognitions, social awareness and feelings of responsibility continue on past puberty during the second half of adolescence. This is primarily attributed to the expansion of the brain. We have only recently started to observe brain development in action thanks to the arrival of the MRI-scan. Research in this area by Van Leijenhorst et al. (2010) shows that the part of the brain that is involved with emotions, sexual incentives and vulnerability to stress is also linked to reward susceptibility. This part of the brain develops earlier than the part that is sensitive to negative consequences of behaviour. This explains why teenagers show behaviour that becomes increasingly risky. The observed chance of reward increases and they simply do not have any stimuli in their brain that put this in perspective with the chance of negative consequences. So is growing up then just a matter of waiting it out? No, it is not. Research shows (Crone & van der Molen, 2004) that half of growing up is determined by our genes and the other half is influenced by the environment. The brain therefore is trainable and the environment should offer suitable incentives at appropriate times.

### **SCHOOL AT SEA AND THE PSYCHOSOCIAL AND COGNITIVE DEVELOPMENT**

There is room for all features of the psychosocial and cognitive development of the 15 to 18 year olds at School at Sea. Let's first take a closer look at the psychosocial features summarized in Westenberg's four topics.

1. *The ability to control one's own impulses and emotions.*











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