

## MODULE IV

### NURTURING THROUGH NATURE

#### **4.1. Role of Experiential Learning and Outdoor education**

Experiential learning is the process of learning through experience, and is more specifically defined as "learning through reflection on doing". Hands-on learning is a form of experiential learning but does not necessarily involve students reflecting on their product. Experiential learning is distinct from rote or didactic learning, in which the learner plays a comparatively passive role. It is related to but not synonymous with other forms of active learning such as action learning, adventure learning, free choice learning, cooperative learning, and service-learning.

Experiential learning is often used synonymously with the term "experiential education", but while experiential education is a broader philosophy of education, experiential learning considers the individual learning process. As such, compared to experiential education, experiential learning is concerned with more concrete issues related to the learner and the learning context.

Experiential learning is a method of educating through first-hand experience. Skills, knowledge, and experience are acquired outside of the traditional academic classroom setting, and may include internships, studies abroad, field trips, field research, and service-learning projects.

The general concept of learning through experience is ancient. Around 350 BCE, Aristotle wrote in the *Nicomachean Ethics* "for the things we have to learn before we can do them, we learn by doing them". But as an articulated educational approach, experiential learning is of much more recent vintage. Beginning in the 1970s, David A. Kolb helped to develop the modern theory of experiential learning, drawing heavily on the work of John Dewey, Kurt Lewin, and Jean Piaget. It was made popular by education theorist David A. Kolb, who, along with John Fry, developed the experiential learning theory, which is based on the idea that learning is a process whereby knowledge is created through transformation of experience. It is based on four main elements which operate in a continuous cycle during the learning experience:

- Concrete experience

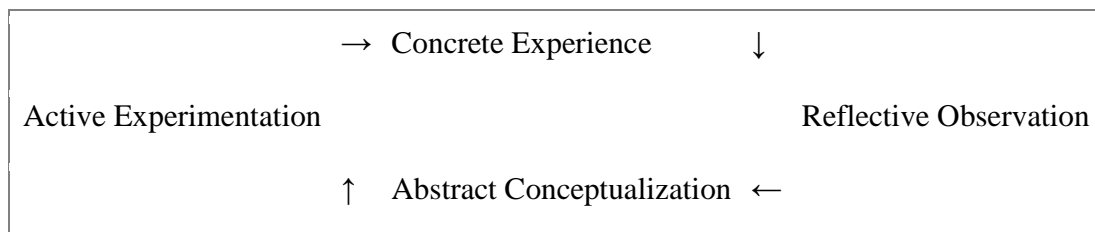
- Reflective observation
- Abstract conceptualization
- Active experimentation

Experiential learning has significant teaching advantages. Peter Senge, author of *The Fifth Discipline* (1990), states that teaching is of utmost importance to motivate people. Learning only has good effects when learners have the desire to absorb the knowledge. Therefore, experiential learning requires the showing of directions for learners.

### **Kolb Experiential Learning Model**

Experiential learning focuses on the learning process for the individual. In this model one makes discoveries and experiments with knowledge firsthand, instead of hearing or reading about others' experiences

### **David Kolb's Experiential Learning Model (ELM)**



Experiential learning can exist without a teacher and relates solely to the meaning-making process of the individual's direct experience. However, though the gaining of knowledge is an inherent process that occurs naturally, a genuine learning experience requires certain elements. <sup>1</sup>According to Kolb, knowledge is continuously gained through both personal and environmental experiences. Kolb states that in order to gain genuine knowledge from an experience, the learner must have four abilities:

- The learner must be willing to be actively involved in the experience;
- The learner must be able to reflect on the experience;
- The learner must possess and use analytical skills to conceptualize the experience; and
- The learner must possess decision making and problem solving skills in order to use the new ideas gained from the experience.

Experiential learning could be supported by schools in different ways:

- Students should be engaged in experiential learning through activities such as workshops, fieldtrips, cultural exchanges, museum tours, and nature expeditions.
- Devotes a definite duration of each school year to experiential learning.
- Allow students to visit surrounding states to engage in community service, visit museums and scientific institutions, and engage in activities such as farming, agriculture activities, tree planting, cleaning the city, mountain biking, backpacking, and canoeing etc:
- Give opportunities to the students to have direct interaction with nature, plants, animals, birds etc: This is to help children for the context of the biological diversity and to support them to develop ecologically oriented values.
- Provide chances to get interact with the environmentalists and the NGOS working for nature protection.

**(For Extra Reading:Kolb - Learning Styles**

David Kolb published his learning styles model in 1984 from which he developed his learning style inventory. Kolb's experiential learning theory works on two levels: a four stage cycle of learning and four separate learning styles. Much of Kolb's theory is concerned with the learner's internal cognitive processes. Kolb states that learning involves the acquisition of abstract concepts that can be applied flexibly in a range of situations. In Kolb's theory, the impetus for the development of new concepts is provided by new experiences. "Learning is the process whereby knowledge is created through the transformation of experience" (Kolb, 1984, p. 38)

Kolb proposes that experiential learning has six main characteristics:

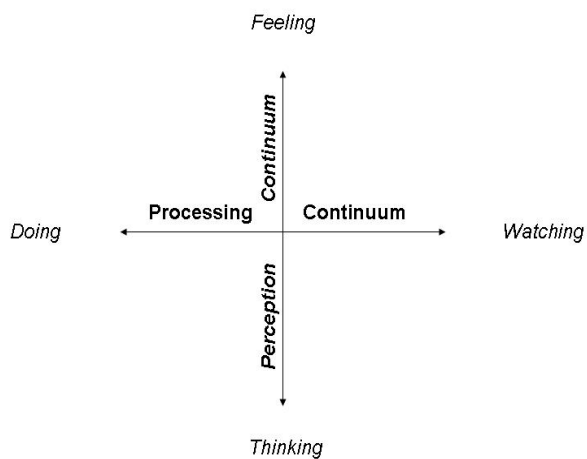
- Learning is best conceived as a process, not in terms of outcomes(products).
- Learning is a continuous process grounded in experience.
- Learning requires the resolution of conflicts between dialectically opposed modes of adaptation to the world (learning is by its very nature full of tension).
- Learning is a holistic process of adaptation to the world.
- Learning involves transactions between the person and the environment.

- Learning is the process of creating knowledge that is the result of the transaction between social knowledge and personal knowledge.

Kolb's learning theory sets out four distinct learning styles, which are based on a four-stage learning cycle. In this respect, Kolb's model differs from others since it offers both a way to understand individual learning styles, which he named the "Learning Styles Inventory" (LSI), and also an explanation of a cycle of experiential learning that applies to all learners.

### **Basis of Kolb's Experimental Learning Model**

Kolb uses the term "experiential" as his theory is based more on reflection of experiences. While others use "experimental" when referencing an experimental-inquiry technique that requires learners to test hypothesis (experiment) about content knowledge. Kolb's learning model is based on two continuums that form a quadrant:

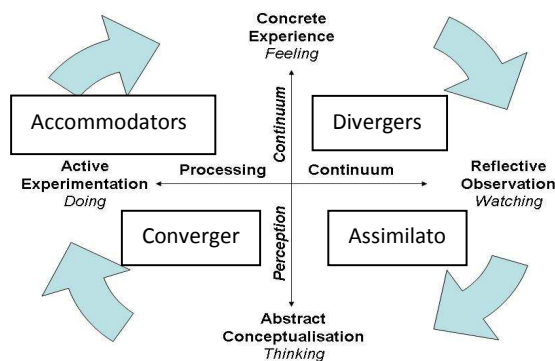


- Processing Continuum: Our approach to a task, such as preferring to learn by doing or watching.

- Perception Continuum: Our emotional response, such as preferring to learn by thinking or feeling.

## The Learning Cycle

This matrix provides a learning cycle that involves four processes that must be present for learning to occur. Kolb called this *Experiential Learning* since experience is the source of learning and development (1984). Each ends of the continuums (modes) provide a step in the learning process:



**CONCRETE EXPERIENCE (CE) (Feeling):** Learning from specific experiences and relating to people. Sensitive to other's feelings. A receptive, experience based approach to learning that relies for a large part on judgements based on feelings. CE individuals tend to be empathetic and people oriented. They are not primarily interested in theory; instead they like to treat each case as unique and learn best from specific examples. In their learning they are more oriented towards peers than to authority and they learn best from discussion and feedback with fellow CE learners.

**REFLECTIVE OBSERVATION (RO) (watching):** Observing before making a judgment by viewing the environment from different perspectives. Looks for the meaning of things. A tentative, impartial and reflective approach to learning. They rely on careful observation of others and/or like to develop observations about their own experience. They like lecture format

learning so they can be impartial objective observers. They are Introverts. They like to do Self-reflection exercises, journals, brainstorming etc:

**ABSTRACT CONCEPTUALISATION (AC) (thinking):** An analytical, conceptual approach to learning: logical thinking, rational evaluation. These learners are oriented to things rather than to people. They learn best from authority-directed learning situations that emphasize theory. They don't benefit from unstructured discovery type learning approaches. They learn through logical analysis of ideas and acting on intellectual understanding of a situation.

**ACTIVE EXPERIMENTATION (AE) (doing):** An active, doing approach to learning that relies heavily on experimentation. These learners learn best when they can engage in projects, homework, small group discussion. They don't like lectures, and tend to be extroverts. Ability to get things done by influencing people and events through action. Includes risk-taking. They like to do Simulations, case studies, homework etc:

Depending upon the situation or environment, the learners may enter the learning cycle at any point and will best learn the new task if they practice all four modes. Effective learning is seen when a person progresses through a cycle of four stages: of (1) having a concrete experience followed by (2) observation of and reflection on that experience which leads to (3) the formation of abstract concepts (analysis) and generalizations (conclusions) which are then (4) used to test hypothesis in future situations, resulting in new experiences.

Hartman (1995) took Kolb's learning styles and gave examples of how one might teach to each them:

1. for the concrete experienter: offer labs, field work, observations or videos
2. for the reflective observer: use logs, journals or brainstorming
3. for the abstract conceptualizer: lectures, papers and analogies work well
4. for the active experimenter: offer simulations, case studies and homework

### **Learning Styles Descriptions**

Knowing a person's (and your own) learning style enables learning to be orientated according to the preferred method. That said, everyone responds to and needs the stimulus of all types of

learning styles to one extent or another - it's a matter of using emphasis that fits best with the given situation and a person's learning style preferences.

Here are brief descriptions of the four Kolb learning styles or **Types of Learners:**

➤ **Diverging (feeling and watching - CE/RO)**

These people are able to look at things from different perspectives. They are sensitive. They prefer to watch rather than do, tending to gather information and use imagination to solve problems. They are best at viewing concrete situations at several different viewpoints.

Kolb called this style 'diverging' because these people perform better in situations that require ideas-generation, for example, brainstorming. People with a diverging learning style have broad cultural interests and like to gather information. They are interested in people, tend to be imaginative and emotional, and tend to be strong in the arts. People with the diverging style prefer to work in groups, to listen with an open mind and to receive personal feedback.

➤ **Assimilating (watching and thinking - AC/RO)**

The Assimilating learning preference is for a concise, logical approach. Ideas and concepts are more important than people. These people require good clear explanation rather than practical opportunity. They excel at understanding wide-ranging information and organizing it in a clear logical format. People with an assimilating learning style are less focused on people and more interested in ideas and abstract concepts. People with this style are more attracted to logically sound theories than approaches based on practical value. This learning style is important for effectiveness in information and science careers. In formal learning situations, people with this style prefer readings, lectures, exploring analytical models, and having time to think things through.

➤ **Converging (doing and thinking - AC/AE)**

People with a converging learning style can solve problems and will use their learning to find solutions to practical issues. They prefer technical tasks, and are less concerned with people and interpersonal aspects. People with a converging learning style are best at finding practical uses

for ideas and theories. They can solve problems and make decisions by finding solutions to questions and problems. People with a converging learning style are more attracted to technical tasks and problems than social or interpersonal issues. A converging learning style enables specialist and technology abilities. People with a converging style like to experiment with new ideas, to simulate, and to work with practical applications.

➤ **Accommodating (doing and feeling - CE/AE)**

The Accommodating learning style is 'hands-on', and relies on intuition rather than logic. These people use other people's analysis, and prefer to take a practical, experiential approach. They are attracted to new challenges and experiences, and to carrying out plans. They commonly act on 'gut' instinct rather than logical analysis. People with an accommodating learning style will tend to rely on others for information than carry out their own analysis. This learning style is prevalent within the general population.

**Educational Implications:** Both Kolb's (1984) learning stages and cycle could be used by teachers to critically evaluate the learning provision typically available to students, and to develop more appropriate learning opportunities.

Educators should ensure that activities are designed and carried out in ways that offer each learner the chance to engage in the manner that suits them best. Also, individuals can be helped to learn more effectively by the identification of their lesser preferred learning styles and the strengthening of these through the application of the experiential learning cycle.

Ideally, activities and material should be developed in ways that draw on abilities from each stage of the experiential learning cycle and take the students through the whole process in sequence.)

#### **4.2. Role of Nature in Nurturing the Personality of the Lerner**

Today's children and families often have limited opportunities to connect with the natural environment. Children spend more time viewing television and playing video games on computers than they do being physically active outside. The lifestyle of families is also changed.



The polluted environment, nutrient deficit food, stressful life situations, exposure to media and technology etc: cause the physical, social and psychological problems to the children.

If children are immersed and involved from a very young age, they will develop a respect and love for nature, helping them to care for it. Children who play regularly in natural environments show more advanced motor fitness, including coordination, balance and agility, and they are sick less often. Studies show that the children play in natural environments, their play is more diverse with imaginative and creative play that fosters language and collaborative skills. Nature offers 'magical moments' to deepen learning in a way that is closely connected to the child. The ability to vocalize and reflect, to inspire, to problem solve are attributes that have come from a place where children have been given some autonomy and space 'to think outside the box', both in terms of curriculum and the spaces they are in. The resources we provide are flexible and open-ended that ensures they have multiple uses across the curriculum.

Many studies show the positive links between direct experiences in nature and children's mental, emotional and physical health and well-being. The studies show that regular direct access to nature can:

- Increase self-esteem and resilience against stress and adversity.
- Improve concentration, learning, creativity, cognitive development, cooperation, flexibility and self-awareness.
- Helpful for keeping good health and prevent childhood obesity, vitamin & mineral deficiencies.

Research has also shown that through positive experiences in nature, children will develop their love of nature and a foundation for the development of responsible environmental behaviour. Studies of adults who demonstrate a commitment to protect the natural world suggest that childhood experience with nature plays a critical role in determining life attitudes, knowledge or behaviours regarding the environment.

**Nature supports multiple development domains of the individual in learning.** Nature is important to children's development in every major way—intellectually, emotionally, socially, spiritually and physically.

**Learning through and in nature supports creativity and problem solving ability of the learner.** Studies of children in schoolyards found that children engage in more creative forms of play in the green areas. They also played more cooperatively. Play and study in nature is

especially important for developing capacities for creativity, problem-solving, and intellectual development.

**Nature enhances cognitive abilities.** Proximity to, views of, and daily exposure to natural settings increases children's ability to focus and enhances cognitive abilities.

**Learning in natural settings Improves academic performance.** Some research studies proved that the schools that use outdoor classrooms and other forms of nature-based experiential education support significant student gains in social studies, science, language arts, and math.

**Spending time in nature reduces Attention Deficit Disorder (ADD) symptoms.** Contact with the natural world can significantly reduce symptoms of attention deficit disorder in children as young as five years old.

**Interaction with nature increases physical activity.** Children who experience school grounds with diverse natural settings are more physically active, more aware of nutrition, more civil to one another and more creative.

**Nature improves nutrition.** Children who live with nature eat fruits and vegetables and to show higher levels of knowledge about nutrition. They are also more likely to continue healthy eating habits throughout their lives and they do not have vitamin deficiencies.

**Nature improves eyesight.** More time spent outdoors is related to reduce rates of nearsightedness, also known as myopia, in children and adolescents.

**Interaction with nature improves social relations.** Children will be smarter, better able to get along with others, healthier and happier when they have regular opportunities for free and unstructured play in the out-of-doors

**Nature helps to improve self-discipline.** Access to green spaces, and even a view of green settings, enhances peace, self-control and self-discipline.

**Nature reduces stress.** Green plants and vistas reduce stress among highly stressed children. Locations with greater number of plants, greener views, and access to natural play areas show more significant results.

### **Psychological Benefits of Nature**

- **Relaxation, Stress Reduction:** Nature helps for faster recovery from stress.
- **Healing, Faster Recovery from Surgery, Reduced Pain:** Nature is a very good healer.

- **Cognitive Benefits (Attention, Problem-Solving):** Broad range of exposure to nature develops cognitive restoration. Cognitive restoration may also mediate other benefits like reduce mental fatigue negative emotions, etc.
- **Emotions, Well-Being, Vitality, and Self-Esteem:** Psychological well-being, meaningfulness and vitality were found to be robustly correlated with connectedness to nature.
- **Pro-Social Values and Behaviors:** Nature reduces anger and aggression, leads to greater pro-social values, and promotes generosity.
- **Transpersonal and Spiritual Development:** Direct contact with nature is a portal to the deepest and highest levels of mental health.

### 4.3. Ecopsychology

Ecopsychology studies the relationship between human beings and the natural world through ecological and psychological principles. The field seeks to develop and understand ways of expanding the emotional connection between individuals and the natural world, thereby assisting individuals with developing sustainable lifestyles and remedying alienation from nature. Theodore Roszak is credited with coining the term in his 1992 book, *The Voice of the Earth*. He later expanded the idea in the 1995 anthology *Ecopsychology* with co-editors Mary Gomes and Allen Kanner. This subfield extends beyond the traditional built environment of psychology in order to examine why people continue environmentally damaging behaviour, and to develop methods of positive motivation for adopting sustainable practices. Ecopsychology is defined by John Davis as, The story of the home of the soul. It is concerned with healing the relationship between the human soul and the "soul of the world" .It acts as a bridge between the fields of ecology and psychology to address the psychological and spiritual roots of the ecological and human crisis that we are experiencing (Davis, 2006). Ecopsychology refers to a variety of endeavors — theoretical, applied, and clinical — that brings together the methods and understandings of *ecology* and *psychology* to address the psychological, social, cultural, and spiritual roots of the ecological crisis.–*Will Keepin*.

Ecopsychology explores humans' psychological interdependence with the rest of nature and the implications for identity, health and well-being. Ecopsychology topics include emotional

responses to nature; the impacts of environmental issues such as natural disasters and global climate change; and the transpersonal dimensions of environmental identity and concern.

The main premise of Ecopsychology is that while today the human mind is shaped by the modern social world, it is adapted to the natural environment in which it evolved. According to the biophilia hypothesis of biologist E.O. Wilson, human beings have an innate instinct to connect emotionally with nature, particularly the aspects of nature that recall what evolutionary psychologists have termed the environment of evolutionary adaptiveness, the natural conditions that the human species evolved to inhabit.

Ecopsychology integrates ecology and psychology and its aims are:

- shifting environmental action from anxiety, blame, and coercion to invitation, joy, devotion, and love;
- fostering ecological thinking and direct contact with the natural world in psychotherapy and personal growth; and
- Supporting lifestyles which are both ecologically and psychologically healthy and sustainable.

Ecopsychology offers three insights.

1. There is a deeply bonded and reciprocal relationship between humans and nature. Ecopsychology draws on two metaphors for this relationship: (a) nature as home and family (e.g., Earth as mother, animals as siblings) and (b) nature as Self, in which self-identifications are broadened to include the "greater-than-human" world and Gaia.
2. The illusion of a separation of humans and nature leads to suffering both for the environment (as ecological devastation) and for humans (as grief, despair, and alienation).
3. Realizing the connection between humans and nature is healing for both. This reconnection includes the healing potential of contact with nature, work on grief and despair about environmental destruction, ecotherapy, and psycho emotional bonding with the world as a source of environmental action and sustainable lifestyles.

## **Roots of Ecopsychology**

### **I. Environmental Actions.**

The recognition of the deep distress of the environment, locally or globally, and the need to improve and refine our current efforts at changing environment is at the core of Ecopsychology. Ecopsychology argues that we need to shift the motivation for environmental action from shame, guilt, and fear to love, devotion, and joy. More psychologically-sophisticated strategies will appeal to our positive motivations, and these will be more effective and sustainable over the long-haul. Supporting our innate love for the natural world is part of this. Greater intimacy and broader identification with the natural world leads to more love for place and more engaged environmental action.

### **II. Love of nature, healing in nature.**

The Earth is a living system. Human beings are fundamentally interconnected with the Earth and with all life. Neither the Earth's problems nor humanity's problems can be resolved without taking full account of this interconnection. Ecopsychology seeks to heal the alienation between person and planet, and establish a healthy relationship between the two. A key element of this is recognizing that the needs of the person are the same as the needs of the planet. The rights of the person are the same as the rights of the planet.

## **Contributions of Ecopsychology**

1. **Including the natural environment in psychology and psychotherapy.** Direct encounters with the natural world foster mental health across a full spectrum including healing emotional trauma, working with addictions and recovery, reducing stress, strengthening self-confidence and leadership abilities, and cultivating peak experiences and spiritual growth.
2. **Promoting more effective strategies for environmental action.** Ecopsychology draws on positive emotions such as joy, love, and deep bonds with the natural world, rather than anxiety, guilt, and deprivation, to promote environmental action which is ecologically-

informed, psychologically-sophisticated, and sustainable over the long haul.

3. **Supporting more sustainable lifestyles through an integration of psychological and environmental perspectives.** Recognizing the fundamental connections between humans and the natural world provides a foundation for lifestyles which consider human health and welfare as inseparable from environmental health and welfare. Ecopsychology shows how long-term benefits to humans and the natural world are complementary. At the same time, it calls for critical thinking about the implications of human societies based on exploitation, consumerism, and domination - of other people as well as the environment.
4. **Expanding a nature-based spiritual path.** Ecopsychology can contribute both understanding and practices for including the natural world in spiritual paths. Note that this is my addition and not so common in other Eco psychological approaches.

## **Ecopsychology Practices**

The practice of Ecopsychology is in its infancy. It currently draws on deep ecology and experiential modalities, wilderness experience, nature as healer, psychological work with ecological activists, Gender healing and ecofeminism, Spiritual practices and philosophies , Environmental activism etc: We can list them as follows:

### **I. Nature-oriented awareness practices**

- a). Mindfulness and contemplative practices, e.g., meditation
- b). Sensory awareness (of the natural world)
- c). Mapping (as an integrated practice of both physical and psychological spaces)
- d). Animal-human communication

### **II. Earth work**

- a). Environmental action
- b). Environmental education
- c). Restoration

- d). Sustainability (developing and promoting lifestyles which environmentally, economically, socially, and psychologically sustainable)
- e). De-commercialization and re-localization; appropriate technology
- f). Bioregionalism
- g). Gardening, horticultural therapy

### **III. Nature-Based Psychological Practices :**

- a). Opportunities for direct contact with nature : Nearby nature, place-bonding b). Wilderness rites of passage and healing, e.g., vision fasts, walkabouts, etc.
- c). Nature-based soul work, e.g., nature as mirror, healing, nature as oracle, dream work
- d). Wilderness therapy, adventure counseling
- e). Shamanic journeying, guidance, and healing

### **IV. Eco therapy (Bringing the natural world into psychotherapy)**

- a). Despair and empowerment work
- b). Working with environmental fear, grief, and rage
- c). Eco centric assessment (e.g, including a person's environmental history in psychological assessment)
- d). Nature as therapist, conscious use of the mental health benefits of nature experiences

### **V. Ritual and Art as Ecopsychology practices**

- a). Earth-centered festivals
- b). Seasonal celebrations
- c). Dance, poetry, visual art, music, etc.

Ecopsychology calls for a new cosmology that embraces not only scientific models and understandings, but also spiritual teachings, ancient wisdom, and the non-Western knowledge of indigenous cultures. Ecopsychology calls for a profound revisioning of mental health and human consciousness. Today's dominant models of human consciousness define the human being as an isolated and fragmented entity living in a mechanical purposeless universe. This model of human

reality is a product of the old cosmology: the scientific industrial era that now weighs heavily on the planet. The drive to live in harmony with the natural world and its rhythms is primal innate. Suppression of that drive is just as disorienting and damaging as suppression of other human needs. Eco psychology embraces the goals of gender equity (equality between women and men; masculine and feminine), racial equity (equality for races), and “cultural justice” (honoring and learning from ancient cultures and indigenous peoples of the world).

\*\*\*\*\*