



Climatic Interpretation and Perception of Farmers Based on the Experiential Learning Cycle (ELC)

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Received: May 30, 2018; **Published:** August 11, 2018

Abstract

Experiential learning is the process of learning through experience, and is more specifically defined as “learning through reflection on doing”. Experiential learning is different from that of the formal rote learning or didactic learning, in which learner plays a comparatively passive role. Experiential learning is a broader philosophy of education which considers the individual learning process. As such, compared to formal learning, experiential learning is concerned with more concrete issues related to the learner and the learning context. Here in our study we will try to categorize the farmer’s observation and perception on changing monsoon patterns on the basis of customization of non-formal learning (like ELC). We will do this kind of patterning by using Kolb’s ELC model. The four elements of this model that are concrete experience, reflective observation, abstract conceptualization and active experimentation would be the key to understand that how farmers are generalizing monsoon changing pattern with the help of their own experience, perception and mindsets that they are rearing generation after generation. This study would try to extrapolate how farmers are combining the monsoon dynamics with that of the indigenous technological knowledge (like Khonar Bachan). To do this kind of study we need to do trend analysis, pattern analysis, grid analysis and also extrapolation and interpolation of farmers’ knowledge. The study will also include impact of Kurt Lewin model on farmers’ learning process.

Keywords: Didactic Learning; Monsoon Dynamics; Indigenous Technological Knowledge; Kolb’s Model; Kurt Lewin’s Model

Introduction

“We will learn no matter what! Learning is as natural as rest or play. With or without books, inspiring trainers or classrooms, we will manage to learn. Educators can, however make a difference in what people learn and how well they learn it. If we know why we are learning and if the reason fits our needs as we perceive them, we will learn quickly and deeply”...Malcom Knowles, Educator.

There are three main theories in adult education, those are PRA model, Kurt Lewin Model and Kolb’s ELC Model. Though these three models are independent and self-sufficient, still we can find out interrelationship among these by analyzing these models carefully. This paper divided into two halves. In the first half we would try to co-relate these three models and in the second half the climate change impact on farmers will be discussed following the ELC model.

Kolb’s ELC Model, a general discussion

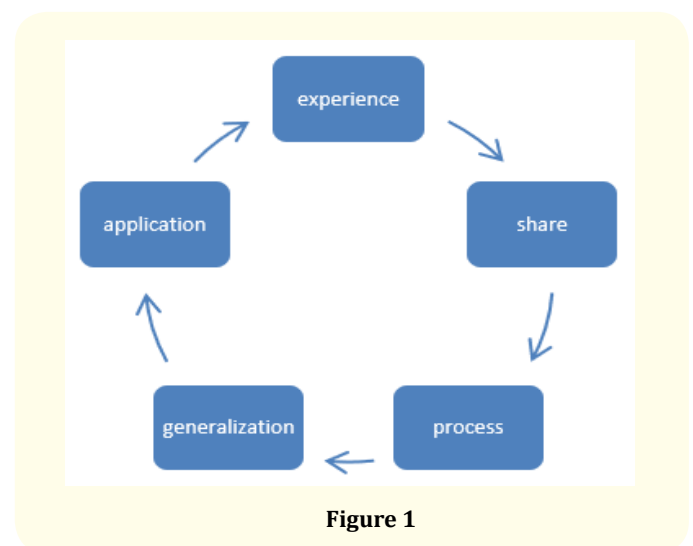


Figure 1

Elaboration of the steps

Do

Experience (Doing)

Experience phase of the ELC cycle is considered a process by which a farmer is exposed to a set of stimuli or solitary stimulus in the form of innovative ideas, new technologies or new ambience consisting of skill generating centre, market and supply chain, stressful experiences.

The followings are the salient features of the experience phase of the Kolbe's ELC model:

- The leader describes the activity before telling or showing how to do it. Encourage youth to ask questions such as, "What do you expect to see?" The facilitator or teacher is focusing the learner's attention or setting the stage for the learning experience.
- The youth experience the activity, or "Do it". Except for basic instructions, the youth "do" before being told or shown how.
- Doing questions: How is it working? What else might you try? What might make it easier?

Reflect

Sharing and Processing

The reflect part of ELC cycle generally portray the intuitive learning of the farmers. It is the reflection of what farmers have learn, when they are exposed to new informations or redeem the classical knowledge in terms of the present perspectives.

The following are the intervention points to usher the reflective learning of the farmers who run in the incessantly under the process of technology socialization:

- Share what happened and why?
- The leader develops questions that they will ask the students about their experience and their reaction to it.
- Youth share the results, reactions, and observations publicly.
- Sharing questions: What did you do? What happened? What was the most difficult? What was the easiest?

Apply

Generalize and Apply

It is an extrapolation of in house experience and learning to get it referred and matched with exteriorities to validate the learning experience. The application follows generalization to generate empirical evidences of the learnt and earned knowledge.

The following are the battery of quarries to calibrate the process of generalization as well as application in terms of its relevance and efficacy:

- Generalize is the "So What".
- Leaders will develop questions that will ask students/farmers how the experience related to their own lives.
- Youth generalize to connect the experience to real-world examples. These prompt the learners to consider how what was learned can be used in other situations.
- Apply is the "Now What".
- The leader develops questions that ask the students how they could use what they learned in similar or different situations.
- The youth apply what was learned and practice.
- Applying questions: What is another situation in which this skill can be used? How will the issues raised by this activity be useful in the future? How will you act differently in the future as a result of this activity?

Value addition to the kolb'selc model with farmers' field experience

When the farmers are exposed to new informations or to new technologies, what the first thing they do is to share this new stimuli with their family, friends, neighbors and with the other farmers. Then after sharing of their new experience with them, the farmers can overcome the initial hesitation. Then after a deep thinking and processing is done within their minds. They reconcile both things that is the new stimuli and their potentiality to adopt this on practical ground. Ultimately, if all this phases direct the farmers to a right and desirable direction, they apply the new experience.

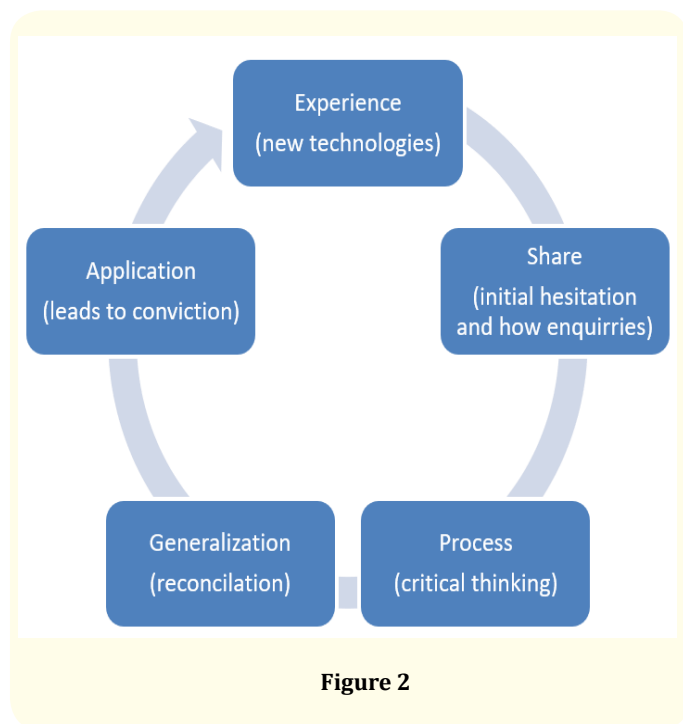


Figure 2

Skills needed by facilitators of Experiential Learning

- Focus-get the attention of the group.
- Observation-pay attention not only to what the youth are doing but also to how they are doing it.
- Questioning-each step of the model calls for different types of questions.
- Support and Feedback-it is important to interact positively and believably with the learners.
- Debriefing-make sure that all the important opportunities for learning are pursued.

Participatory rural appraisal (PRA)

PRA is an approach, which comprises of a number of technologies or aids employed for analyzing information with the participation of village people. PRA is one of the tools of surveying that helps outsiders to understand about a village in depth by using various techniques which often produce interesting and authentic information about the village. The process of understanding the agro-eco system and the social organizations can only be successful with the total involvement of the village people and the officials concerned.

Principles of PRA

PRA is the participatory method of data generation and based on interactive learning process taking place between external actor (facilitator), generally the expert and the insider is the farmer; the mentor of traditional knowledge and wisdom.

- Active participation of rural people for self-critical analysis.
- Reversal of learning: Learning from rural people directly on the site and face to face.
- Broad, complete and accurate analysis of local situation and rural people.
- Learning rapidly and progressively with conscious exploration.
- Use of secondary data for comparison.
- Catalyst role of PRA expert team.
- Off-setting biases by taking the concerns and priorities of women and poor people.
- Optimizing trade-offs: Relating the costs of learning to the useful truth information.

Kurt Lewin Theory: Lewin's three stage theory of change is commonly referred to as Unfreeze, Change, Freeze (or Refreeze). It is possible to take these stages to quite complicated levels but I don't believe this is necessary to be able to work with the theory. But be aware that the theory has been criticized for being too simplistic. The world has changed since the theory was originally presented in 1947, but the Kurt Lewin model is still extremely relevant. Many other modern change models are actually based on the Kurt Lewin model.

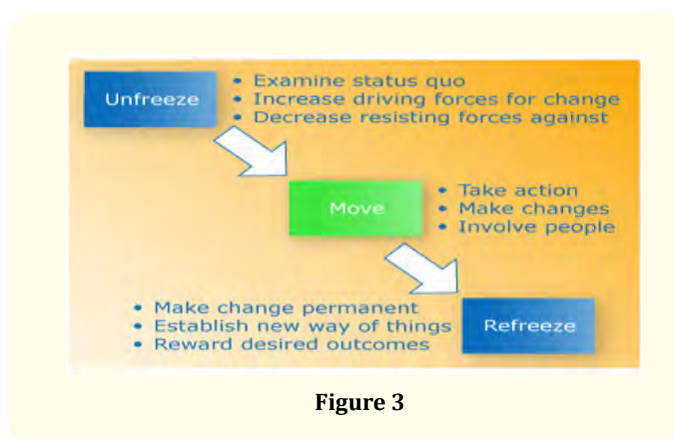


Figure 3

Relation between PRA, ELC and Kurt Lewin model

If we take ice breaking as PRA component, rapport building as ELC component and unfreezing, moving, refreezing of Kurt Lewin model, then we can establish their inter relation. If there is proper icebreaking then the general conservative nature and non co-operative psychology of people is broken. Thereafter unfreezing the orthodoxy, influencing the people to act desirably and locking this changed behavior and only if these steps have done properly, then proper rapport building with the people is possible.

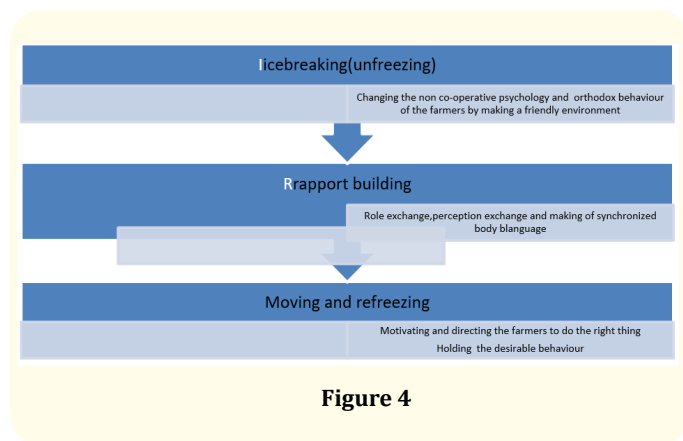


Figure 4

Phases of rapport building

The rapport building with rural people is a very important stage in overall programme planning. If the extension agent can build proper relationship with the rural people, then it would be very easy for them to disseminate new ideas to the farming community.

There are three phases of rapport building, that are:

1. **Role Exchange:** In this phase the extension agents should be both sympathal and empathal towards the rural people. He should put himself in the position of the farmers before recommending anything new to them.
2. **Perception Exchange:** The perception (the general thought of people about their surrounding environment) of the extension agents and that of the farming community should meet on a common platform, so that they can understand each other more accurately.
3. **Mutually synchronized body language:** The body language of the extension agent should be positive. He should be confident, not arrogant; polite not shy and elegant not dominating. The motto of the extension agent should express not to impress.

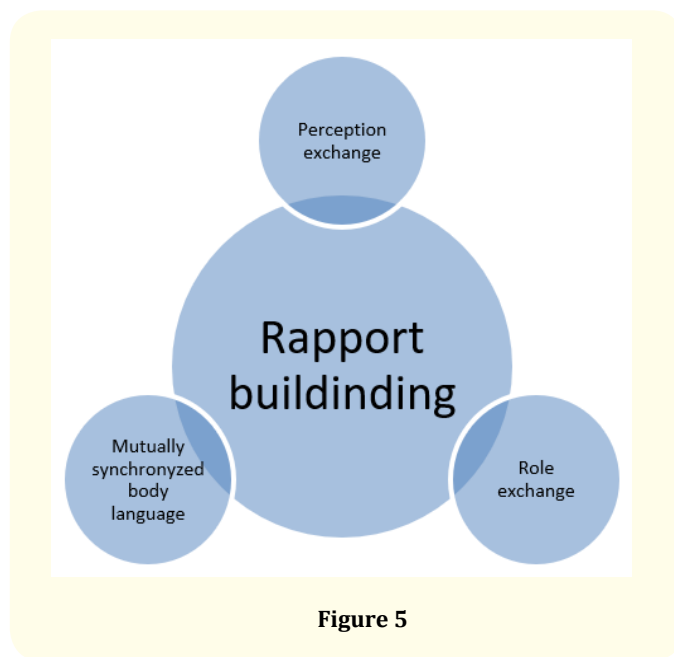


Figure 5

Rapport Building through Transaction Analysis

The three ego states according to the Transaction Analysis theory is child ego state, adult ego state and parent ego state. In this discussion we are concerned about adult ego state only.

We can refer the ego of extension agents as outsiders' ego and the ego of farming community as insiders' ego. Now if both their egos are passed through a proper transaction phase, then there can be mutual exchange of role, perception and attitude which leads to proper rapport building in between the rural mass and the extension agent [1].

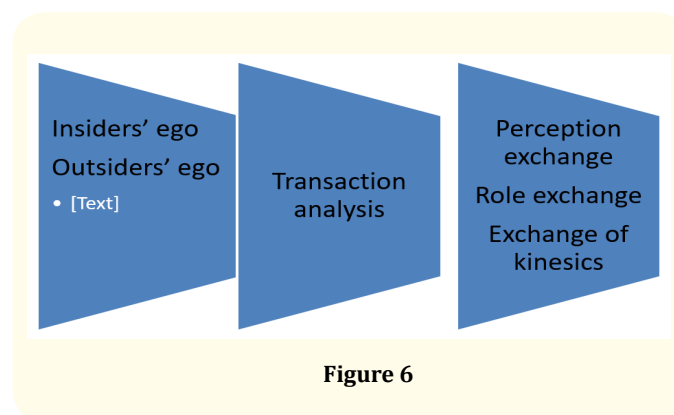


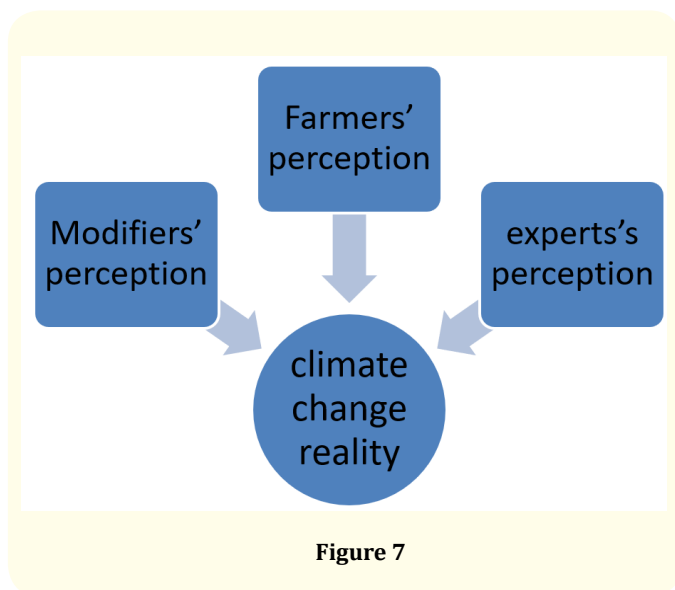
Figure 6

Climate change analysis based on ELC

Indian farming is basically based on a clandestine combination between modern technical knowledge generated by the research institutions and that of farmers’ indigenous technical knowledge (ITK). The sustainable farming systems as practiced here in India is supported by farmers’ observational and experiential mettle on farm practices, weather predictions, disease pest management and farm planning as well. These can be called natural competency on perception analysis [2-6].

Perception Analysis

- Farmers’ perception-based on ITK and present day experience.
- Experts’ perception- based on meteorological data.
- Modifiers’ or change agents’ perception- based on market analysis.



Mitigations and Adaptations against climate change

The remedy against climate change can be categorized under 3 broad heads, that are:

1. **Technology generation:** Generating need based and location specific technologies.
2. **Technology refinement:** Modifying the technologies according to farmers’ need and potentiality.
3. **Policy formulation:** Formulating policies that work as safe guard for the farmers against the negative impact of climate change.

Conclusion

- ELC can be extrapolated to farmers’ learning process.
- PRA needs to be integrated with ELC components.
- ELC can well be applied to down to earth Agricultural Extension programme and ITK analysis.
- A micro-level policy statement will be an imperative to usher ELC based technology socialization process.

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Volume 2 Issue 9 September 2018

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