

## Peer-Managed Interactivity in Distance Education

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### Introduction

Can we not find some parity between concepts like (a) *interactivity* in the distance mode education, and (b) *interaction* in the face-to-face mode education? What has our literature to say about the role of peer-interaction in the face-to-face classrooms versus peer interactivity in distance learning, distance teaching, and distance teacher education? How does teacher-learner interactivity help in identifying and satisfying (a) learning needs of the distance learners, (b) course writing needs of authors, (c) pedagogical needs of distance pedagogues, (d) delivery needs of presenters, (e) software developing and management needs of system organisers, (f) and guidance needs of the counsellors for organising self-help groups?

In the literature around, we find various concepts and terms like collaborative learning, co-operative teaming, peer-peer learning, partnership learning, learning by networking, lateral learning, horizontal learning through interactivity, and so on. Some friends have argued that as a result of enhanced levels of interactivity: (a) teacher-learner interactivity, and (b) peer-peer interactivity, the quality of distance education outcomes will improve. They say that interactivity stimulates and sustains higher levels of attention and hence higher levels of learning. Interactivity provides satisfaction by inducing processes of active participation and creation. The enhanced level of alertness of learners, coupled with freedom to interact can become a good source of corrective feedback to many of us. It helps in deciding the pace of the on-going presentations, and provides subsequent guidelines for delivery-pace. Subject vagueness and language ambiguity in presentations, if any, can be identified and suitably corrected. Difficulty of terms and their simplification can be worked out. Feedback about nature, level, and subject relevance of the lessons can be helpful for all of us including the ones who are engaged in the art of lesson presentations.

There are new promises for distance education pedagogy for harnessing the widespread utilization of open systems. Interactivity could be of enormous help in boosting the intellectual resource base of the inquisitive minds of the open education students. It will become a boon to the teaching and research institutions that are aiming to provide quality-open education. It can become a powerful research tool for tracking and collecting vast quantities of pedagogical information that otherwise distance education

researchers can never reach. Capacity of distance education to gather "open-source information", becomes basic sources of theory building in distance education. Interactivity can dramatically expand our research base and will improve the quality of our presentations.

However, there are a few others who believe that provision of instant interactivity can detract the presenters as well as the co-learners. It can interrupt the flow of ideas of the presenters. Such interruptions can reduce and sometimes diminish concentration of co-learners. It can become a time-waster for the learners especially that of the fast learners. These fast learners complain that instant on-line participation by slow learners unnecessarily drags the delivery pace. In fact, many a times interactivity can be harmful and it can act as a noise in the process of concept formation. There are others who do not agree with such a flimsy criticism.

There is another group of persons who demand that we should find answers to the issue of interactivity. This group agrees that the master-media presentations including broadcast lectures need not be 'in-between'. But they profess that the learners must find mechanism of satisfying their queries. The learners may not interact with the main presenter. Let there be some type of alternate arrangements for providing interaction with peers of their choice. They agree with the contention that interaction with unknown peers creates situations of natural environment, and life-like experiences. Interactivity with known peers learning in homogeneous groupings, will help in developing self-confidence, and then even self esteem. It will help in opening new channels of communications. Interactivity within heterogeneous groups is useful for developing challenge-facing competency for some, cooperative-kindliness for others. It may also help in allied academic skills.

Dialogue and structuring are essential dimensions of Interactivity. As a simple iconic model, interactivity can be considered in terms of input variables, process variables and product variables. Some of the input variables or elements of interactivity are: (a) Partners of interactivity- learners, authors, presenters, media-persons, (b) Symbolic interaction- written and other mechanisms, (c) Voice interactions- telephone, and radio, (d) Images- video, television, (e) Settings- face-to-face-small groups; face-to-face- individuals, and other forms of open learning. I need not write any more in this direction. One can also think of process functions of interactivity. The output characteristics of interactivity too can be written.

We are interested to understand interactivity in terms of no-interactivity, low-interactivity, and high-interactivity approaches. Otto Peters in the book of Desmond Keegan (1993) has described the educational settings, the role of teachers, the functions of media, and activities of the learners. It gives a tabular presentation. I extended that table and added the third block representing high levels of interactivity.

There can be media that does not provide any interactivity during the presentation stage. In order to create motivation for the learners, the instructional design and the media may allow some level of interactivity ranging from no interactivity, to low interactivity, to-more interactivity. One can even think of various levels and types of interactivity at the stage of analysis and critical development of conceptual framework. One can even

go a step ahead while using various levels of interactivity on the stage of application of the available learning outcomes.

### **Interactivity, Dialogue, and Structure**

There can be three broad levels of categorising interactivity. (see Table 1). The first level is “no-interactivity”, the second level is low interactivity, and the third level is high-interactivity. The first group called “no interactivity” represents three possibilities, like, self study guide, audio broadcast, and video broadcast. The low-interactivity consist of mechanism like correspondence-assignment lessons, Audio conferencing, video conferencing and computer conferencing. The third, namely, high-interactivity group can consist of a large number of interactivity mechanism. So of the mechanism are part of peer. The first type of mechanism is: Peer group interactivity where some of the participating groups are active- interactive with resource with other peers The second type of mechanism is: Passive-Peer participating groups representing participant who are Observing the process of interactivity but they themselves do not participate in it. The third type of interactivity is learner participation in the process of interacting with course author. The fourth mechanism of interactivity is possible when subject expert and other mentors encourage interactivity with the assigned learners. The fifth type of interactivity could be the interactivity with experts available from any side, work situation, and any other study sides. Recently, I was hearing a lecture of one of the expert teacher educators from Bhutan. He explained the findings of one of the experiments where interesting concept of interactivity was used. His model is called on-the-site mobile training program for in-service teachers. The model includes local area peer-interactivity. The participants are asked to register in person, a residential school (study centre) with a view to finalise other members of peer-interactivity groups, right in the beginning of the training session. The idea of using a residential school is to provide adequate opportunity to know each other that too in the early stages of the training program. The importance of learning from “peer-interactivity” is explicit in the scheme of school complexes, and also school clusters.

### **Interactivity Models**

There is a general expectation that if organised properly, the peer-interactivity could be useful in clarifying academic doubts, psychologically helpful in developing general understanding of the learners, sociologically satisfying for the distance learners, economically cheaper in terms of money and efforts, organizationally flexible in approach, convenient to operate by peers, and acceptable to many users. The distance education organizers may like to take peer-interactivity in a much more serious manner. The following table provides an overview for arranging interactivity of various types and different levels. (see Table 2).

I was trying to express various models of interactivity by using a figural representation. It was becoming difficult to draw all types of the models on the computer . I drew a sample set of four popular models of interactivity. The first model may be referred to as

'No-interactivity model'. The second model is like a Face-to-Face classroom setting. It provides for resource-learner interactivity, and also peer-peer interactivity. The third model represents decentralised self-managed peer-peer interactivity. The fourth model is Coordinated-decentralized Interactivity where the participating peer groups and observing peer groups are arranging the coordinated-decentralized interactivity. These are given below.

**Table:1 Interactivity, dialogue, structure and instructions**

MEDIA AND AGENTS	Media With (No-Interactivity) No Dialogue and High Structures				
	Presentation	Motivation	Analytic/Critical Development	Application and Evaluation	Learner Support
Self-study guide	x	x	x	x	--
Audio recordings/broadcast	xx	xx	x	x	--
Video recordings/broadcast	xxx	xxx	x	x	--
	Media with (Low Interactivity) Dialogue Structured				
	Presentation	Motivation	Analytic/Critical Development	Application and Evaluation	Learner Support
Correspondence	xx	xx	xxx	xxx	xx
Video conference	xx	xx	xx	xx	x
Audio conference	xx	xx	xx	xx	xxx
PC conference	xx	xx	xxx	xxx	xxx
	Face-to-Face (High-Interactivity) Dialogue and Vertical Interactivity				
	Presentation	Motivation	Analytic/Critical Development	Application and Evaluation	Learner Support
Peer Groups Active-Passive Participation	*	"	*	*	*
Counsellors, Course Authors	*	"	*	*	*
Mentors, Subject Experts	*	*	"	*	*
Personality Experts Others	*	"	*	*	*

'x' = Unit of intensity of interactivity \* = Intensity levels, to be worked out

Table 2: Interactivity models

## Vertical-Interactivity

## Direct One Way Interaction

## Resource Centre Based Interaction

All India Directory of Learners

Regional, District, and Local Directory of Learners

Bulletin and Newspapers Information

## Need Based Interaction Operated Centrally

Unique Needs and Strengths of Learners

Small Peer Group Needs, Strengths, Difficulties

## Two Way Interaction Between Resource and Learners

Two Way Video Conferencing

One Way Video and Two way Audio

Two way Audio

Audio-Video-Print

## Horizontal-Interactivity

Active Participation of Peers

Passive Participation of Observing Peers

Flexi-Tasks Grouping for Learning, and Assignments

Flexi-Tasks Grouping for Formative and Summative

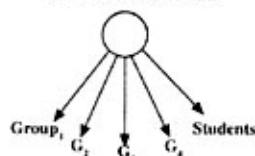
## Flexi-Multi Interactivity Through Mentors And Others

Center-Based Mentors

Work-Site-Mentors

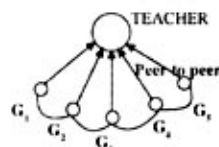
Self-Managed Volunteer-Mentors, Relevant Expert-Work Groups

Teacher Associations, Professional Groups, Others

First Model: No interactivity  
RESOURCE TEACHER

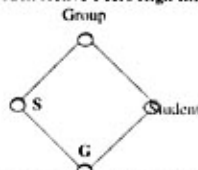
The first model may be referred as 'no interactivity model'. There is one way talk between resource and groups

Second Model: Vertical &amp; Horizontal Interactivity

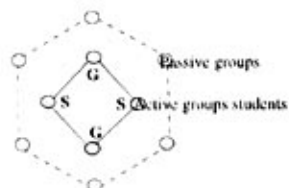


The second model is like a Face-to-Face classroom Setting. It provides for resource-learner interactivity, and also peer-peer interactivity.

Third Model: Active-Peers High Interactivity



The third model represents decentralised self-managed peer-peer interactivity

Fourth Model: High Active Peer Interactivity ( \_\_\_ )  
Passive Peer Interactivity ( \_\_\_ )

The fourth model is co-ordinated-decentralised Interactivity where the active participating peer groups and observing passive peer groups are shown in a co-ordinated-decentralized interactivity setting.

### Comments

While arranging diverse mechanism and processes of interactivity, one may like to consider some other points. These are: Creating Professional Linking-Structures, Subject and Personality-Based Grouping, Using and Organizing Learner-Databases, Willingness Seeking Mechanisms, Arranging Registration Through Residential Camps at the Beginning of the Program, Introducing Non-formal and Extended Contact Programs, Organizing Special Interest Groups, Arranging Cooperative Peer-Group Assignment, Encouraging and Conducting Cooperative Peer-Group Evaluation, Solving Grievances Quickly, and Searching for Suggestions From Users Including Learners, and so on. While handling interactivity we have to consider many other points like what type of responding- directive, guided discovery, non-directive responses- is used? How do we handle affective domain issues of human interaction?

We have to be cautious against over-conservatism and the fancy idea of parity with the mainstream education. In fact, it is other way round. The conservative system should appreciate and accept positive aspects of open distance education. Recently, I had read an interesting comment in a daily paper, saying that if Gutenberg were to invent the printing press today, many of us across the spectrum might be denouncing it as a dangerous plot against our existence. The country level seminar-mills would be spinning out theories on how the printing press could undermine the "sovereignty" of the developing world. And our administrators would be debating whether the new technology should be banned or kept under state control. May this not happen again and again in the area of distance education. The concept of enhancing peer-interactivity should be urgently attended. Who will bell the cat? Who will hold the flag?

### Reference

Keegan, Desmond (1993) *Principles of Distance Education*, London: Routledge.

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