ಸರ್ವ ಶಿಕ್ಷಣ ಅಭಿಯಾನ ಕರ್ನಾಟಕ 2004 ರಲ್ಲಿ ಆರ್ ಐ ಇ ಮೈಸೂರು ಇವರ ಸಹಭಾಗಿತ್ವದಲ್ಲಿ ತಯಾರಿಸಿದ ತರಬೇತಿ ಸಾಹಿತ್ಯ.

Lab Area Concept: An analysis

Objectives: At the end of reading this module, the reader would be able to;
(1) understand the clarity of the concept of Lab area in the DIET context.
(2) understand the attributes / characteristics of Lab area.
(3) analyse the misconceptions that exist about Lab area
(4) accept the need to have a lab area
(5) distinguish different functions of the lab area, and
(6) understand issues concerning planning of a lab area.

Concept of Lab Area: We may recall that in DIET guidelines book produced by MHRD, during 1989, there is a mention about the term lab area. Perhaps, it has not been elaborated and discussed for wider benefit at any other place excepting a couple of attempts on this issues in some training / orientation programmes.

What is a lab Area?

"A Lab Area is an area chosen by a DIET within its jurisdiction to experiment, study and conduct research with the objective of becoming more professional in its working towards the improvement of the quality of elementary education."

Explanation of different terms used: Different terms used in the above definition needs to be understood in the DIET context as follows.

(1) An area: is used to demarcate a geographic boundary of a district, which covers every thing there that relates to education in general, and elementary education in particular.

(2) Jurisdiction: is used to indicate the geoghaphi boundary in which a DIET operates.

(3) Experiment: is used as a field experiment. By field experiment, what is meant is a systematic activity of studying changes in social setting, one can see objectively, as a result of the manipulation of certain variables. Here, a school or teacher training institutes is used as field laboratories. In field experiment, an idea is tested and its results are verified. It can be a pre –implementation activity. It includes all tryouts and innovations too.

For example: (a) experimenting on the ease of difficulty of using grades in a school context.

(b) Trying an alternate model of internship, or practice teaching in a DIET.

(4) Study: is used as an activity of trying to understand meaning out of existing situation/ information/ data. It is different from experiment that here nothing is

manipulated. The status is studied. After anything is implemented one may like to see how that is working.

For example: (a) Impact of mid day meal scheme on enrollment, quality of pupil participation and their achievement.

(b) Preparedness of D.Ed students to a new challenging internship task.

© Evaluation of the worthwhile ness of new textbooks introduced.

(5) Research: is an activity of generating new knowledge. Any activity undertaken systematically which can generate new knowledge in educational context are all researches. A research may have an experimental possibility built into it. Experiment by itself does not become research. In an experiment, it is attempted to study a cause and effect relationship. Building a new theory /model based on tested conjectures, there by generating a new knowledge is the task of research. There are very thin demarcating lines between studies and researches. Studies use secondary source of information mostly, while researches use primary source mostly.

For example: (a) Comparative study of different methods of teaching in a particular context.

(b) Assessing the systemic preparedness in the introduction of English from class 1.

(6) Professional: A teacher is a professional and he has the moral responsibilities of working towards all round development of the personality of his students. Therefore, a teacher provides plenty of learning opportunities and thereby enables students to grow to their full potential. S/He does not take teaching as a job, but it is a profession. Therefore, their responsibilities are professional in nature.

(7) Improvement of quality elementary education: refers to all those processes covering activities and initiatives undertaken by which provision of access, better enrollment, higher retention of students in schools, arrest of drop out, wastage and stagnation, improving better standards of transaction and functioning, higher rate of learning as well as higher levels of attainments are achieved at elementary level in a district.

With the above explanation of the definition, it becomes clear that in the DIET context, a lab area is a chosen part of a district, which a DIET can recognize and adopt in order to work intensely investing its human and material resources and undertake activities by which new things are tested, innovations are tried out, new relationships are established, and new knowledge is created. Putting together all these activities certainly empowers a DIET in becoming more professional. Therefore, understanding different issues and concerns of Lab area becomes necessary for all the faculty of DIET.

Every DIET has many different functions to perform based on its concerns. There are many functions, which as DIET faculty you have to implement through out the district. It could be in-service teacher training programmes, implementation of certain schemes of the state government, etc. These activities do not become the activities of a lab area, as they are to be implemented uniformly thoroughout. If you want to test their usefulness, effectiveness etc on a sample basis it can be a lab area activity. It is also important to know that it is not

necessary that at a time there have to be only one lab area. On the contrary, there can be different lab areas for different concerns

A lab area is an area, which is not necessarily confined only to DIETs, or its context but also any professional body, which may need to try out its own activities, programmes and innovations in order to test their efficacy, suggest certain changes based on tested realities could adopt it. In this sense, it is not only important to know the concept of lab area, but also interesting to know. This could be perhaps, understood better if it is seen from its attributes and characteristics.

Attributes and Characteristics of a Lab area

Some of the attributes and characteristics of a lab area in the DIET context could possibly include the following.

(1) *A chosen piece of a district:* A lab area is a chosen piece of a district, which is chosen by a DIET by design based on certain criteria.

(2) *Used for field experimentation:* This chosen piece of target area is used for field experimentation. Experiments are done in a reality situation, which may lead to professional development of DIET faculty as well as enable a district in working better towards quality elementary education.

(3) *Different lab areas can also co-exist:* It is also appropriate to say that there can be different lab areas focusing on different concerns. Certain pockets can focus on formal elementary education, certain pockets on adult education, certain pockets on non-formal education etc. The point that is attempted to be made here is that it is not always necessary that there must be only one lab area at a given point of time. Yet, logistically speaking, it would be all right if a particular geographic piece is chosen as a lab area.

(4) *Lab institutions are a part of a lab area:* A lab area is an area, which will have a lab school, a lab NFE center or a lab adult education center, etc. It only means that a lab area is bigger than lab institutions. For example, if Mysore DIET chooses Nanjanagud, as its lab area, all the formal schools, NFE centers, Adult education centers, community all will become a part of Lab area. All institutions which have a bearing on elementary level education become a part of that lab area.

(5) *Can be a part of annual plan:* A lab area planning can be a part of annual planning. It implies that planning programmes by DIETs can ideally focus on Lab area plans too.

(6) *Lab area activities are non routine activities:* Activities that are undertaken in a lab area are those, which try to test some thing new and the outcome of which can enhance professional insights of DIET faculty, or provide suggestions to the educational planners, managers, administrators and organizers, or can also help a district education implementation authorities in suggesting new ways of doing things based on tried out modes. Therefore, they are not routine activities which any DIET does.

(7) *Activities are planned by DIET faculty themselves*: DIET faculty has many responsibilities and functions, which are common to all DIETs. Many of them are entrusted by higher ups. They

do not form the part of lab area activities. Lab area activities are those activities, which are planned by DIET itself.

(8) *Members of DIET have a role in it:* Indeed, faculty member of DIET have their roles in planning and execution of lab area of a district as they have to plan. From this viewpoint collective wisdom and work needs to be ensured in order to have good lab area plans. This point needs to be appreciated by all DIET faculty members.

(9) *Resources of DIET converge on lab area:* The DIET will have to converge its resources, lend support in working on lab area activities. Though there are different branches, their respective contributions will have to converge. Therefore, there is a need to develop a healthy coordination within and between different branches of DIET and they all will have to work as one team.

(10) C*annot go beyond its legitimate DIET jurisdiction:* While planning a lab area, the DIET cannot go beyond its district boundary. With in the district boundary, it can select any pocket, on its own pre-determined criteria and priority and select as its lab area.

Misconceptions about Lab Area

One can visualize certain possible misconceptions, which may obscure the clarity of the concept of lab area. In this light, it is perhaps necessary to discuss a few possible misconceptions about lab area. They can be explained in DIET context as follows.

(1) *Lab area planning is prepared by higher ups / state department:* Lab area planning is a micro-level planning that will have to be done locally, by DIET faculty, based on the identified priorities. Therefore it is a misconception to think that Lab area planning is done/prepared by higher ups or state department.

(2) *Lab area should be physically attached to DIET:* The lab area is not an area, which is physically attached to the wall of a DIET. The adoption of a piece of district is done only functionally and not structurally. As the DIET has a responsibility for the entire district, lab area can be chosen belonging to any part of the district. Therefore, it is a misconception to think that a lab area should be physically attached to DIET.

(3) *There cannot be more than one lab area:* There can be more than one lab area at a time. Looking at the responsibilities of the DIET, on priority basis different localities or pockets of a district can be considered as a lab area for different concerns. For instance, a DIET might be studying the effectives of certain incentive schemes on enrolment and participation in schooling process of tribal children in one pocket, while they might be studying a different model of practice teaching/internship in another pocket, or they might be interested in undertaking a research study to see the systemic preparedness for the introduction of English in urban areas. A DIET can afford to have 3 lab areas at a time too. Therefore, there can be different lab areas at a time. Each faculty can choose a lab area and work there on some chosen topic.

(4) *It is difficult to understand the concept and processes of lab area:* This misconception can be questioned by all of us if we intend to be professionals in our endeavor to serve the cause of relevant school education. Therefore, it is left to us whether we want to retain this apprehension or through it.

(5) *Only DIET faculty has to work for Lab area:* The concept of a lab area is not confined only to DIET but all professionals and professional institutions can have their lab areas. For example, Mysore Medical College has K.R. hospital as its lab hospital. Theory is taught in the college and real cases are seen and discussed in hospital.

(6) *It has nothing to do with DIET's annual plan and programmes and it is an additional burden to DIETs:* It is erroneous to say that the lab area concept has nothing to do with DIETs annual plans. Lab area concept is a boon to DIETs in their annual plans and in their programmes. Therefore, it is not an additional burden rather; it is a strategy to work systematically and meaningfully.

(7) *Its planning is the responsibility of only P&M branch and not the entire DIET:* The P&M branch of DIET is not the only branch responsible for planning lab area, but it may be made the coordinating branch of DIET. DIET as a whole has to generate basic data about the district seeking the cooperation of all members of DIET and involving the sub district functionaries. Based on the data, all the branches will have to provide necessary inputs in formulation of lab area planning of the district for identifying different roles of different branches and different faculty members.

(10) *Identification of lab area is time consuming*: It is indeed a misconception to think that identification of a lab area is time consuming. All DIETs have demographic details of the district. Educational indicators are also available. The nature of the activity and its demand will enable a DIET to identify lab area. Therefore, it is not time consuming.

(11) *Lab area activity is expensive*: It is a misconception to think that lab area activity is expensive. It is a miniature activity undertaken systematically as an institutional activity. In fact these activities need to grow more and more.

(12) *Specialized training is necessary to understand the term and implement:* No. There is no need for any specialized training in order to understand and implement lab area concept, Simple one time training would be all right. Once, one gets clarity of the concept, one can continue to plan and implement.

Objectives of Lab Area

Any lab area in the DIET context will have the following objectives. Acceptance of the Lab area concept enables a DIET;

(a) Faculty to conduct experiments, carry out researches and studies thereby enhancing its professional competence, and
(b) To work towards qualitative improvement of school education in the district based on their own experiments, studies or researches.

From this viewpoint, in a lab area, if any activity of DIET needs to be understood whether it could be considered a fit activity under lab area, one can ask herself / himself whether the activity satisfies any one of the objectives. If the answer is yes, then it can be an activity, which can be accepted as a fit activity under a lab area.

Functions of a lab Area

Any lab area can serve two distinct functions, enabling functions and facilitating functions. Enabling functions are those functions, which enable a DIET to become more professional in their perspectives and practice. Facilitating functions are those, which facilitate a district to achieve quality elementary education in the district.

Therefore, acceptance and adoption of lab area concept not only facilitate a DIET to grow professionally, it also enables a district to provide quality elementary education. Thus, it serves twin purposes, i.e., professional development of the institute, and educational development of the district, both based on experiments, studies and researches.

(A) Enabling functions: as explained above are those functions, which enable a DIET to become more professional, as the lab area planning and implementation requires systematic and methodical approaches and professional perspectives. Some of the possible suggestive functions can be listed as follows. Adoption of lab area by a DIET can;

(a) encourage try out of experiments and innovative ideas in a practical situation in lab schools, lab NFE centres or Lab Adult Education centers and community.
(b) enable DIET faculty to demonstrate how certain ideas theorized can work in actual situations.
(c) educate DIET faculty by exposing them to real problems that exist in the field and provide a reality orientation. This in turn can tune a DIET faculty to see problems of education realistically. Thus, it serves as a direct experience provider. This reality orientation coupled with ideals that are studied in theory can give an insight in understanding situations and handle them better.
(e) enable DIET faculty to be methodical, systematic and reality driven in planning programmes based on priorities. Thus, it sharpens the professional perspectives.

(b) Facilitating functions: As explained above, these functions facilitate a district to provide quality elementary education based on tryouts, experiments, studies and researches, thereby working towards achieving the objectives of UEE. These functions though not exhaustive, can be listed as follows. The outcomes of Lab area activities, which are based on experiments/ studies/ researches, will be capable of ;

(1) suggesting alternative ways to facilitate schools to provide access to all children who are in the age group of 6 to 14.
(2) suggesting practical ways to provide alternative education to all those who have missed formal education.
(3) proposing different models to facilitate enrollment of all children in the district irrespective of caste, sex, disability, language and religion based on its own try out.
(4) proposing different strategies to retain students in schools and complete at least elementary level.
(5) advocating school education system to provide quality education using different tips.
(6) influencing the school education system to provide elementary education to students, which is rooted in their own culture thereby making schooling enjoyable and relevant through some suggested methods.

(7) motivating schools to ensure that minimum levels are achieved by all learners at different levels of schooling, by suggesting certain improved teaching-learning techniques.

Identification of a Lab area

Lab area identification is important as all other activities are to be undertaken there. There may be different considerations for identification of different lab areas based on the function they serve in terms of concerns.

The following considerations under professional development of DIETs relate to **conducting researches, doing experiments and undertaking studies.**

(1) A pocket of a district close by to DIET as well as potential area where research and experiments can be conducted conveniently by DIET faculty.
(2) A pocket, where certain variations are desirably needed to be studied.
(3) A pocket chosen, which is the requirement of the research/experimental work. (Ex. If certain institutions like multi-grade schools, tribal schools, minority schools, NFE Centres, EGS centers etc are to be studied, the area must have them.) So the research concern has to decide.
(4) Trying innovative ideas require an institution, which can match the context of innovation where it needs to be tried out. For example, if a DIET faculty wants to try out an innovation in an NFE center, an NFE center must exist in that lab area.
(5) With regard to the pre-service activities, a DIET has to reflect on improving its internship styles/practice teaching styles and work towards betterment and making it relevant. So objective evaluation and critical reflection becomes a necessity here.

The following considerations under educational development of a district relate to **conducting researches, doing experiments and undertaking studies.**

(1) In order to identify a lab area for research, look for basic data about access, enrollment, retention, drop out, wastage, stagnation, quality and achievement and identify that pocket which is very pale. **Here, distance cannot be a barrier**.
(2) Evaluation of textbooks, school effectiveness, testing innovations and such require that lab area which can truly represent all variations of the district. **Here, again distance cannot be a barrier.**

How to plan a Lab Area activity?

Planning is an activity, which requires a systematic understanding of goals to be reached, optimum utilization of the resources that are available including human and material, and considering the time targets that are to be honored. Interplay of these three can enable one to plan well. Therefore, What are the goals that are to be achieved for which we want to plan?, What area the available resources with which we can achieve the goals? and Within what time frame that needs to be achieved? are the questions, which are to be asked and addressed.

For planning of those activities, which relate to professional development of DIET faculty, it requires self-reflective process while, working for facilitating quality elementary education to the district requires inquiry- analytic- and remedial process.

At this point, it is worthwhile to list out certain activities, which can be considered under lab area. They could include;

(a) Trying the alternate models of pre-service training programme. Ex. NCERT is trying how far two year B.Ed programme is better than one year B.Ed programme, through its lab institutions, the Regional Institutes of Education, located at Ajmer, Bhopal, Bhubaneswar and Mysore.
(b) A study of Systemic preparedness in the introduction of English at Class I level.
(c) All innovative ideas proposed by DIET faculty could be tried out see how far they might be effective. If these are found useful in the lab area, they could be recommended for wider implementation.
(d) Any DIET could study how far their district is ready to accept and implement trimester system.
(e) Studying what training and clarity can persuade school system to switch over to grading easily.
(f) Try out of strategies, which can persuade migratory population to continue education.
(g) Trying out different methods by which community could be made to demand quality education from schools with their active collaboration.

While, planning activities under lab area, different activities require different styles, depending upon the nature of the activity. Let us try to plan a couple of activities as follows.

Activity 1

Systemic Preparedness for the introduction of English at class I level

Lab Area: A representative area of a district.

(A) *Goal:* To study the preparedness of the system for the introduction of English at class I level.

(B) *Resources:* The resources available are elementary schools, teachers teaching elementary classes, Teaching learning materials, parents of children, SDMCs of different schools, PTAs, BEO, BRC, CRC, some NGOs and community members.

(C) *Time target:* As a DIET is located at a district, I must be able to decide the time a need to complete this activity. For this different activities are to be spelt out along with the approximate time required to accomplish.

The above is the term of reference for planning of the above activity. To plan the above activity, we may follow the following steps.

Sl.No.	Sub Activity	Resources required	Time required	Remarks
1	Listing the attributes of the system and planning	DIET faculty	1 week	

	the activity			
2	Identification of tools required	DIET faculty and some technical support	1 week	
3	Searching for available tools	DIET coordinator	5 days	
4	Planning a workshop on development of tools	DIET faculty	2 days	
5	Workshop on development and finalisation of materials	DIET faculty, some teachers	2 days	
6	Field work, involving assessing competence of teachers to use English and teach for class I, assessment of teaching learning materials, knowing the views of SDMCs on their willingness and views of introduction of English at class I level, etc.	DIET team	8 days	
7	Scoring and analysis	DIET team	10 days	
8	Report writing	DIET coordinator	10 days	
	TOTAL		51 working days	

The above activity requires 51 working days or nearly 2 months. The output of this quick study could inform and influence the district authorities to feed to policy making.

Activity 2

Training schoolteachers and administrators to switch over to grading in schools.

Lab Area: A representative area of a district.

(a) *Goal:* To train schoolteachers and administrators to switch over to grading in schools.

(b) *Resources:* The resources available are elementary schools teachers and Head masters.

© *Time target:* As a DIET located at the district, I must be able to decide the time a need to complete this activity. For this different activities are to be spelt out along with the approximate time required to accomplish.

The above is the term of reference for planning of the above activity. To plan the above activity, we may follow the following steps.

Sl.No.	Sub Activity	Resources required	Time required	Remarks
1	Collect materials on need and importance of grading	Booklets, etc	5 days	
2	Initial discussion with teachers across, on issues about evaluation in general and problems and inadequacies in specific.	DIET team, school teachers and Head masters	12 days	
3	Assessment of training needs based on feedback received	DIET team	4 days	
4	Planning for a training programme	DIET team	2 days	
5	Training programme	DIET team	4 days	
6	Assessing the effectiveness of training programme	DIET team	2 days	
7	Report writing	DIET coordinator	10 days	
8	TOTAL		39 working days	

The above activity requires 39 working days. The output of this training programme could inform and influence the schoolteachers to develop their preparedness to shift to grading.

Criteria for prioritization of a Lab area

While, selecting a lab area, one has to keep the following points in mind and these points can be considered as points for prioritization.

(1) **Urgency:** A lab area has to be based on the urgency of need to put to test in a lab area.

(2) **Potentiality of the pocket**: The pocket we identify as a lab area need to be potential enough to cover those components for which we want to study / experiment / innovate / evaluate / study**.**

(3) **Manageable size:** Make sure that the selection of a lab area is such which a team of DIET/DIET can manage easily without making it a burden from the viewpoint of management of functions of a lab area.

(4) **Accessibility:** Easy accessibility is almost a requirement for identification of a lab area for testing teacher concerns. The reverse is true for educational development concerns of the district.

While following certain criteria for prioritization, make it a point to keep these also specially.

(a) Girls should be covered on the top priority irrespective of other factors.

(b) Include all the disabled, SC/STs and minorities on a top priority.

(c) Cover all rural children and try to attract migratory population.
(d) Identify larger chunks of un-served habitations and recommend providing schools and schooling there for formal, non-formal and adult learners.
(e) Identify those pockets where children will have to travel for more than three km, and recommend setting up of a school with in close proximity.
(f) Identify those difficult regions where reaching a school becomes difficult for both students and teachers and suggest plans, which are locally relevant, and workable based on the grassroots realities.
(g) Identify all those miscellaneous populations which have not hitherto benefited from education programmes and recommend/ enable them to have education.

Keeping in view the above, lab area planning needs to be done. The above guidelines are only suggestive of lab area planning and it is not prescriptive.

Execution of lab area plans

The execution of lab area activities can go on as per the plan. However, depending upon the nature of the activity, certain flexibility can also be built in. The main objective of using the lab area must not be defeated in the name of other things.

Documentation and dissemination of Lab area activities

As professionals DIET faculty need to be familiar with documentation of different activities. Different activities that are undertaken by DIET faculty in lab area need different kinds and styles of documentations. Therefore, it would be desirable to deal with them separately. Issues related to this would be discussed in the second tele-conference.

Sum up: The concept of lab area needs to be clear, only then all other things can be undertaken.

Questions

1. How can we explain the definition of a lab area?
2. What are the significant attributes/ characteristics of a lab area?
3. What according to you are the common misconceptions of a lab area? Why you think it so?
4. Why do you think you need a lab area in your DIET?
5. What are the objectives of a lab area?
6. How do you understand the functions of a lab area?
7. While planning a lab area, what are the points we have to keep in mind?

XXX

Documentation and dissemination of Lab area activities

(1) **Research:** Documentation of research reports in lab area cannot be different from researches of non-lab areas. Therefore, all research activities need to be documented alike. BUT, the dissemination of these findings has different meanings and implications for different personnel in education system. They can be as follows.

(a) Those researches undertaken in lab area on teacher concerns can through new light on the DIET faculty themselves and other teachers at school level. It needs wider dissemination through reports, presentations, and discussions. It thus feeds back to DIET faculty themselves and teachers at large in the district.

(b) Those researches, which have been undertaken to improve the quality of education in the district, or improve teacher conditions in schools, which may have some policy implications, should reach educational planners, administrators, policy makers and managers of school education. This is a professional responsibility of DIET faculty.

(2) **Experimentation:** DIET faculty can undertake a number of field experimentations in lab area. These tried out experiments need to be reported in simple style which practitioners as well as policy makers can understand and implement at their own levels. What is desirable in these documents is a systematic write up which can convince a reader about the seriousness and sincerity of the experimenter and the experiment itself. Different experiments may need different styles but the documentation has to keep the end users in mind.

(3) **Studies:** Include all those attempts, which have been made/conducted systematically based on secondary source of information. These studies are conducted based on available data in the field. With this a DIET faculty can attempt to relate many other factors, which might be responsible for the situation. Thus, these studies are potential enough to understand and analyze the situation. Status studies and qualitative studies based on facts and data can be good examples of 'studies'.

In terms of rigor and its usefulness, they are no less important than research studies. The documentation is a must and depending upon the concern of the study, they needs to be shared among professionals as well as policy makers to facilitate policy making which are rooted in empirical realities.

In the above backdrop, it is necessary that all our lab area activities need to be documented and disseminated.