There is a phenomenal difference, as regard to the teaching methodology adopted at the urban and the rural area colleges. However, bright and talented student may be from rural back ground even. But there is huge dearth of the digitization in the rural areas and lesser developed countries. Today’s students need new skills to compete and successful in the future. Education should be combination of practical, intellectual, and social skills. What does this mean for rural classrooms and how can it be achieved. Rural colleges are not able to hire the best resources, since the best teacher’s aim is to move towards the city. If city is provided everywhere, then there will be no rural area. This is possible by forming university clusters (UC). The University cluster is a group of renowned and accredited universities coming together to bridge this dearth. The UC will deliver the live lectures and allow the students’ from remote areas to actively participate in the classroom. This paper tries to present a plan of action of providing a better live classroom teaching and learning system from the city to the rural and the lesser developed countries. This paper titled “University Clusters using ICT for teaching and learning” provides a true concept of opening live digital classroom windows for rural colleges, where resources are not available, thus reducing the digital divide. This is different from pod casting a lecture or distance learning and eLearning. The live lecture can be streamed through digital equipment to another classroom. The rural students can collaborate with their peers and critiques, be assessed, collect information, acquire different techniques in assessment and learning process. This system will benefit rural students and teachers and develop socio economic status. This will also will increase the degree of confidence of the Rural students and teachers. Thus bringing about the concept of ‘Train the Trainee’ in reality. An educational university cloud for each cluster will be built remote infrastructure facilities (RIF) for the above program. The users may be informed, about the available lecture schedules, through the RIF service. RIF with an educational cloud can be set by the universities under one cluster. This paper talks a little more about University clusters and the methodology to be adopted as well as some extended features like, tutorial classes, library grids, remote laboratory login, research and development.

**Keywords**: Lesser developed countries, Digital divide, Digital learning, education, eLearning, ICT, library grids, Live Classroom Windows, RIF, Rural, University Clusters and Urban,