At present, most academic systems use single computers or servers. This research is aimed at applying multi-agent knowledge-based approach to integrate idle computer resources in academic institutions. Also, it discovers a seamless information processing system across distributed, heterogeneous, dynamic, open organization that the user can access from any location. Besides giving advantages like effective retrieval and presentation of information, identifying user need, evaluation of user responses, and providing advisory, help and searching facilities, this results enable academic institutions having limited infrastructure can implement this system to access vast distributed resources by using this solution. Through knowledge-based multi-agent architecture, content is turned into something more than just a collection of data i.e. understanding the context, format, and significance of the data. Different agents providing additional facilities help applications and users to make better decisions about how to deal with the data. Grid architecture facilitates direct access to several resources like computers, software, data, I/O devices etc. Grid middleware services like security services, information monitoring and retrieval, information and content management offer expandable, scalable and sharable environment for data storage. The traditional solutions for academic system are generally based on client-server architecture or peer-to-peer architecture. On a conventional database grid, multiple data resources are placed across different regions. This leads to limitation of scalability, availability and storage capabilities. These software and hardware must be updated and expanded as their workload is increased. To avoid said limitations, connection can be established among computers used in any organizations for learning, teaching and resource management by combining their unused resources like storage space by imparting grid architecture and knowledge-based multiple agents. In education environment, institutions, colleges or schools may not have enough budgets to upgrade their resources like storage and processor capacities. This research results in generalized and flexible solutions applicable to all academic units. As the solution is proposed to be a web-based solution, it can be made available on-demand and used without any specific change.