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Knowledge Based Decision Support System For Standardization in Professional Education

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ABSTRACT

Professional Education is a Global Issue, every country in each continent is striving hard to earn as much professional growth possible. Particularly, in India the professional education has taken grip in last 10 odd years. But being a young fellow in to this new setting, there is a requirement of a standardization process to emerge in Global scenario.

Professional courses have come up to be a very trendy choice in the present times, with students' opting for various courses of their inclination, as they want to find out a specific career path early in life. These courses are provided in various streams medicine, engineering, management, law, mass media, hospitality etc. Various institutions are providing such courses under many universities. But there seems to be an imparity lying between their conduct. The output is not same but varies distinctively. This paper is all about the study of the varying nature of such courses and provides a way to cater for such problems and to equalize the standards being followed across the multiple institutions so as to come to a point of setting protocols thus the varying goals and objectives converge to a focal point of matching final output.

Keywords: *Professional course, Education, Protocols, Standardization, Global standards*

1. INTRODUCTION

A Knowledge based Decision Support System is an Education Management Information System (not necessarily computer system) to provide information and documentation services that collect, stores, and processes, analyzes and disseminates information for educational planning and management. Purposes of EMIS are to co-ordinate and further improve dispersed efforts in the acquisition, processing, storage, transmission, analysis, repackaging, dissemination and use of educational management information.

The combination of the Internet enabling speed and access, the maturation of artificial intelligence techniques and the advances in mobile technologies have led to sophisticated aids to support decision making under risky and uncertain conditions [1].

Information-based decision making in the management of the education system has as its goal increased access, efficiency, effectiveness, equity, and quality of education through effective systems of monitoring and evaluation, budgeting and planning, policy research and analysis [2].

A KBDSS(EMIS) should do the following:

1. Improve efficiency in collection, processing, storage, dissemination, analysis and supply of educational management information.
2. Streamline the collection and processing of education data.
3. Enhance the process of transforming data into information.
4. Smooth the flow and speed of relevant information to users.
5. Facilitate and promote the use of relevant information by various institutions and individuals at all levels for more effective educational planning, implementation and management.
6. Integrate, link and streamline relevant information resources.

7. Effective and maximum use of IT technology to facilitate and enhance (not overburden) in processing, storage, analysis, and information dissemination.
8. Setup information standards and data quality assurance.
9. Minimum amount of data collection.
10. Maximum amount of information sharing and dissemination.

Various literatures are putting across the view that, Disparity is lying in our education system in various aspects. These aspects vary from gender biasness, to rural and urban system biasness, monetary factors and various other issues. But strictly speaking, most of the work has been in the school education and elementary education. Every Govt. is worried more about elementary education and the professional level of education has not been touched by the stakeholders, though it should also be a matter of concern because professional education helps in building the nation.

According to Dhir Jhingran & Deepa Sankar [6], the challenge of development work in the social sector in India today is one of bridging huge disparities across regions of the country, gender and social groups. Unless national and state policies specifically target resources to address these disparities, achieving higher level outcomes in an inclusive manner, which is the real goal for human development in education and health, will be a distant dream.

Disparity is a single word that defines the education system in colleges and universities providing professional courses.

Disparity lies in

- Admission Processes
- Fee Structures
- Course Contents
- Examination Systems and Patterns
- Results

Garbage-In-Garbage-Out is a famous phrase and the same is applicable in different academic as well as non academic domains. The following table shows some of the possible combinations of quality of students, course contents, results and final placements of the students. There may be some more mixes (combinations) and some more prudent points to be incorporated, like the involvement (role) of fee structures.

INPUT	PROCESSING	INTERMEDIATE OUTPUT	FINAL OUTPUT
Good Students	Good Course Contents	Average Results	Very Good Placements
Good Students	Average Course Contents	Good Results	Good Placements
Average Students	Good Course Contents	Poor Results	Good Placements for remaining
Average Students	Average Course Contents	Good Results	Average Placements
Average Students	Average Course Contents	Average Results	Average Placements

The table above shows that how much disparities are lying in the education system beginning with the process of admission and continuing till the end. The above written phrase (Garbage In Garbage Out) follows. Hence there is a strict requirement of streamlining the processes so as to make the process more acceptable from a global point of view.

As per the present situation, NCERT is responsible for making standards of education for school children, Fortunately, each and every school has to follow the same standards and there exists one board to conduct examinations and put forward the results so the final result is some how out of disparity in the sense that good student will get good grades and similarly average will get the average results.

But, in Professional courses, there are many universities, having there individual visions and missions; thus having individual goals, objectives and the final strategy to run their courses. This makes a significant impact on the final placements of their students. Such disparate authorities are controlled by different sort of emotions and

understandings; doing the same task in all distinctive manners thus producing divergent results and discrete placements.

2. AIM

There seems to be a great requirement of making and following standards in professional education environment. The aim is to produce an EDUCATION MANAGEMENT INFORMATION SYSTEM that will standardize the processes and do a fair-bit of efforts in minimizing these disparities.

Tasks to be taken care of are:

1. Analysis of Course contents for same course provided by different Universities.
2. Analysis of Quality of question papers set for same course by different Universities.
3. Analysis of results.
4. Analysis of Placements.
5. Fabricating a common policy and exercising the same.
6. Setting up a common standard of education considering the age of the student.
7. Pooling the Examination Process.

3. CHALLENGES

The development of such a process is challenging because this cannot be done by one person or one authority. Also it is time consuming activity. It is a huge task that requires lot of commitment from many authorities and individuals. Though this is not new and being worked upon by many agencies for decades at various levels. The work done so far has encountered many a problems such as:

1. Decision making is done at central level and therefore data is compiled and collected for central level.
2. This implies, there is little ownership and usage for local level. So, at local level, doing so is just another burden for the people who are doing it with least enthusiasm.
3. The result is substandard quality of data, incompleteness and delays. Finally the data is useless.
4. The effects are inadequate resources for capacity building and planning without information.

4. WHAT IS REQUIRED?

A network of one or more EMIS centers located in relevant agencies and at the central, regional and local levels. Each EMIS center should be equipped to perform the management information tasks especially processing and storage of data. All functions of an EMIS center do not necessarily have to be completely computerized. All information doesn't necessarily have to be under one authority or one place but exist in coherent manner and able to provide integrated information as user needs. The information has to be transparent in nature and significantly, great efforts are required to put personal emotions detached so that they do not put any affect on the correctness of the information. Again various authorities has to come forward leaving behind there personal motives and egos in general.

Reinforcement of education and management of university students is the fundamental requirement to carry out the guidelines for education and practice the education spirit [5].

Educational process should also take into account that knowledge, which graduates leaving universities have at present, becomes worthless very quickly. It is important to shape students' skill of self - learning and additional studying in the educational process. Helpful in this is undertaking activities serving to the reconstruction the students own motivation to gaining the knowledge and skills. Teachers should have the consciousness of the role, which they have to fulfill in the realization of this aim [3, 4].

5. GOING GLOBAL

There is a sincere intent of being counted at a better level when looked upon by the different agencies in the world. By going on the path we are currently on, it seems quietly difficult to be counted upon the better side of the picture. So, we need to change either the path or the way we are walking. As, we can not change the path, there is only possibility of changing the way by doing the standardization so as to come up to the Global mark.

India's emergence in global scenario depends heavily on the standardization process so that we are at par with the global process of producing a professional and a professional system that could be self sustained in nature.

6. CONCLUSION

EMIS is not a new concept, it is being world widely exercised for decades but fruits of this huge exercise is yet to ripe because this has to be handled with great deal of patience as this depends on not one but many-many agencies and individuals. Also, this is not merely a task but a big system comprising of various activities requiring great labor, enthusiasm and honesty to get to a stage of fruitfulness.

In the context of Professional Education, it requires a steep set of new kind of activities those are not the part of other levels. Especially in Indian context, every level has different objectives and so does the level in context i.e. professional level.

Here we require streamlining of activities, cohesive work environment, competition as well as coordination between various authorities and universities. We need to gather data, process data, understand information, disseminate and coordinate the information, process knowledge and finally utilize the knowledge to best of extant so as to upgrade the standard of professional education so as to raise the standard of humanity.

The implementation of an efficient university knowledge management system involves the development of several software tools that assist the decision making process for the three main activities of a university: teaching, research, and management [7, 8].

By making such a system, there is a clear possibility that we come across at par with the global standards and are able to convert much of our efforts to fruitful outcomes so that the Globe looks at us in a more sophisticated way.

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