A study on comparison of part-time, full-time and week-end postgraduate engineering education

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In a context of mass post graduation, increasing diversity of the student population, globalization and increased competition between universities are exacerbated. All students know that higher education study is about questioning, challenging, debating and creating knowledge as well as being about exploring and coming to know what is already known. “Education must be conceived as a continuing reconstruction of experience: . . . the process and goal of education is one and the same thing”. Pressures of undertaking, coping with the requirements of postgraduate work and the students should be asked to perform real-world tasks which demonstrate meaningful application of essential knowledge and skills. The faculty should be able to assist the post graduates both in their academy and in improving their research capabilities which would help them improve their standard of teaching. It's time to think about the higher education which would make a nation stronger in academy and research field.

Key words: post graduate learning, teaching experince

1. Introduction:

Part time engineering program envisages a group of fresh graduates with a little industrial and allied in house working knowledge to whom the part time program is highly useful. Since the part timers entering again after a few years of lapse often results in classrooms management problems. Another salient feature is that they forget certain fundamentals of mathematics and other basic sciences. Such of those students normally require extra input from the teachers beyond the class rooms. Nutshell coaching methodology is vastly helpful to the students. They are also given formulae compilations from physics, chemistry and mathematics and engineering equations in a printout structure which they highly find beneficial.

2. Collegiate course:

The gap between schooling and reentry into the collegiate course would normally result in diminished knowledge quotient. To overcome such lacunae, they need to be taught in a step by step wise in a spread one time span. This would greatly help assimilation of knowledge.

The psychological isolation in a few cases results when the part timers and regulars are combined in a class. The homogeneity is lost because the part timers comprehension of theoretical problems is slow because they are not tuned to the specific learning process. To overcome this setback when a specific class is conducted, the part timers showed significant absorption level which is
measured with a random technical concept containing 350 words. Their grasping was low. But they have the functioning knowledge of the specified machine tool.

3. Part time courses:

If the part time courses in the universities are introduced with a commitment objective, a better utilization of industry to the society would prevail and would also bring in an augmented growth potential in all the productions and service sectors. A new society would emerge which will build the economy of the nation in a multidimensional way.

4. Week End Courses:

The effectiveness of the weekend program in technical education has sparsely showed significant impact. The learner centeredness is as conceived in the curriculum does not reach the learner. Even if it reaches, the desired effect is not forthcoming. Rather it can be an orientation program at advanced level of input to the graduates. So that the advancement in knowledge can reach the weak and learners who in turn would focus on their existing field of job.

5. Post graduate Program:

Normal practice has been at the postgraduate program, universities and colleges lay stress upon pure textualised knowledge. Instead, they should make part timers more problems oriented real time situation application of technology. This concept greatly would help the part time postgraduates. Mandatory provisions in law needs to be industrial houses to sponsor graduates to post graduate Programs from their industries footing to educational expenses of the sponsored candidates. Such of these candidates should at the sponsored industries work for a minimum of stipulated years.

6. Industrial Knowledge:

Assimilated industrial knowledge better utilized in all its practical aspects with application oriented skill development. Part time courses also fulfill a social commitment in the sphere of higher education reaching out to every deserving individual who due to pressing reasons could not join the mainstream of collegiate course on a regular basis. To such of these candidates, part time opens up a new avenue to equip themselves academically.

In the case of week end program, significance is given to thrust areas so that the individual absorbs the operative portions of theoretical aspects of chosen technical tools and machinery. Even this rudimentary knowledge helps a good deal to the weekend program participant learners.

7. Technical Education:

The well envisaged part time and weekend program in technical education has been a result established academic exercise in India, especially Tamil Nadu which is in down south. Beneficiaries are a good number of industrial workers who entered the industries with basic technical education and these programs help them acquire better knowledge and elevation of cadre in the organization.
8. Skill Based Teacher Learning Interaction:

It has been established that teachers drawn from technically oriented manufacturing industries disseminate technical knowledge to the learners in a classroom situation in an in-depth way because of the knowledge in practical applications of technical skills in the varieties of manufacturing or other machine tool applications. The learners get better exposure from such technically oriented teachers. This has been effectively established in the mechanical engineering classroom where of the sixty students ranked such teachers as “excellent”. Since the functioning of the machines were explained to the students in a graphic drawing presentation as well as linguistic interpretations. Uniformly such teachers were assessed by the students as excellent during all the four years of the course work.

In turn these students at viva-voce examinations presented a good knowledge in the working of machines. In the job market they were also success full. This micro level data at the class room level in a specific technical institute where the intake level of the students were average and twenty five percent were less average. The scale here is average- fifty five to sixty five, less average fifty to fifty eight. Whereas states average itself was fifty to sixty five at the entry point in to the technical institutions specifically regional in the Indian context.

9. Data obtained and Analysis:

- Lesson plan
- Drawing sketches of the machines
- Interpretation
- Duration
- Definition
- Good, excellent, average (total students 60)

10. Inferences:

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