



SHORT COMMUNICATION

SKILL GAP ANALYSIS IN LIFE SCIENCES SECTOR

*R. H. Parikh**

Gujarat Technological University, Ahmedabad, Gujarat, India

Life Sciences Sector Skill Development Council (LSSSDC) is an autonomous and not for profit organization with financial support from National Skill Development Corporation (NSDC). Life Sciences Sector comprises of industries in the areas of Pharmaceutical, Bio-Pharmaceuticals, Medical Devices and Contract Research. Life Science Sector required highly skilled personnel as it is connected with research and development. This sector relates with development, delivery and evaluation of life care products, which needs collaboration skills of academia, industry and government. If these issues are not addressed effectively, it may hamper the number of products in the market. The key objective of the LSSSDC is to create a robust and vibrant eco-system for quality education and skill development in the Life Sciences Sector in the country. LSSSDC works as an apex body in Life Sciences Sector for Skill Development Initiative in India. Three important missions of LSSSDC are:

- To carry out a functional and occupational mapping and to develop a catalogue of Industry Occupations/Job Roles in Life Sciences Sector.
- To develop and set National Occupational Standards for different job and its roles in the sector
- To develop and put in place an Assessment & Certification mechanism for Accreditation of Training Institutes/Trainees and Trainers

SKILL GAP STUDY

LSSSDC carried out skill gap study in 2014. Findings of the Skill Gap Report will be useful to stake holders of Educational Institutions in Life Sciences Sector in India. Important findings are:

- The industry is expected to employ 2.15 million people by 2024, with the highest gap in the manufacturing segment.
- The sector is expected to see a new job creation of 1.31 million between 2015

to 2024 with the highest job creation in the manufacturing sector.

- For junior and entry level positions, attributes such as technical proficiency in labs, manufacturing instruments, subject knowledge (basic and superior), high learning aptitude and thinking and questioning ability are the key skills needed.
- The research functions are seen to possess adequate Organic and Analytical Chemistry related skills, but face concerns in biology related skills which need to be addressed.
- The exposure of handling high end equipment and new technology is still a gap for research function job roles at entry level.
- Need is felt for skill and capability building in quality, intellectual property and regulatory aspects at all levels.
- For senior and middle level employees, inadequate industry experience, lack of appropriate communication and interpersonal skills, superior technical competence and research ability are key skill gaps.
- There is an enormous research in area of system biology and bioinformatics. However, it is observed that mathematical and computational skill required for the same is the major gap to the researchers.
- Translational medicine and clinical pharmacology skills which requires complex understanding to bridge the gap between bench and bedside is also lacking in researchers

- Drug metabolism and ADME, pharmacokinetics and pharmacodynamics and *in-vivo* sciences skill is also found as gap in top skills in 2008.

CONCLUSION

One of the major challenge that our nation faces is non -employability of large sections of the conventionally educated youths who possess little or no job skills. However, there is a huge need to identify the need of particular skills depending upon life sector and role of job. Training for all types of skills could not fill the gap in life sector. This also requires revolution in education. The diversified syllabus touching cross disciplinary areas with training can make researcher different. Re-moulding of curriculum as well as curriculum delivery based on the findings in skill gap report of LSSSDC shall help in minimizing the challenge in Life Sciences Sector. It is expected that if these skills are taken care at each facet for employee in Pharmaceutical Industry, it can change the output and lots of innovative products will in market. The activities and plan of action for skill enhancement by forecasting future need by academic and industry is the important tool to decrease the gap in life skill sector.

References:

1. lssdc.in
2. www.msde.gov.in