**2.3.1 - Student centric methods, such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experiences**

All the CIs/OCC of HBNI adopt student-centric pedagogies that provide the student a memorable learning experience. HBNI being a research University, most of the students are required to adopt a participative, hands-on approach to learning. Discussion sessions further enhance the learning experience to help the students become independent researchers. The coursework for doctoral students, in most cases, involves credit seminars and annual reviews, which provide students the challenge of not only learning a subject but also developing their communication skills, and provide them opportunities to have discussions with peers and experts. Doctoral students are also encouraged to take up self-study courses and discuss their understanding with the mentor / doctoral committee on a regular basis.

The courses offered by HBNI invariably have tutorials and assignments that help students in problem-solving. The PG Diploma programs run in BARC Training Schools in various CIs include a mini-project of 2 months, ending with a presentation to an expert committee. A guide is associated with the mini-project to mentor the student to understand the critical components of the project and the approaches to handle a technical problem at hand. The end-semester viva voce exams assess the student’s ability for integration of knowledge of various subjects acquired during the semester.

Recently, HBNI has launched “HBNI Research Scholar Forum” in order to advance/promote academic links between the research scholars of HBNI and to provide them a platform to grow their skills in communication, management and organizational domains.

Webinars by HBNI students across all its CIs/OCC are conducted regularly under this forum.

The students of medical and health sciences are exposed to hands-on activities (Supervised Surgery, Radiation therapy treatment planning, Chemotherapy administration, etc.) and also management of side effects and sequelae of treatment. The students are also exposed to the management of medical emergencies in the operating room and clinics. In medical and health sciences programme of HBNI, the structured teaching programs also include discussions based on personal experiences of the teachers. Students are encouraged to participate in case discussions and debates in the wards and also in the day-to-day clinics. In para-medical specialties, the students are posted in rotation to various areas of learning to acquire experience and necessary skills.

HBNI strongly encourages “study tour” of its students to other research centres of DAE. The students of the PG diploma programs in nuclear science and technology, in particular, have a study tour built in as part of their curriculum, which provides a great deal of experiential learning. During such tours, students are exposed to unique research facilities available in the research centres, and encouraged to interact with scientists and students in the different environment.

HBNI provides financial assistance to Ph.D scholars for attending international conferences to present their work, interact with peers and experts and discuss their work to get further inputs. Such participation in conferences aids in participative learning of advanced subjects through discussions with experts. Students are also encouraged to participate in pre-synopsis viva voce and the final defence examination of other students, ask questions and learn from the discussions, in order to fine tune their own thesis and communication skills. Research scholars are also encouraged to organize technical meets to gain organizational experience, under the guidance of the experts.