

INSTITUTIONAL BEST PRACTICE

KEY INDICATOR- Best Practice – 02

Student-Centric Methods: Experiential learning, Participative learning and Problem solving methodologies in Teaching Learning and Evaluation



CENTRAL UNIVERSITY OF HIMACHAL PRADESH

DHARAMSHALA

KANGRA

Title of Practice: Student-Centric Methods: Experiential learning, Participative learning and Problem solving methodologies in Teaching Learning and Evaluation

1. Objectives of the Practice:

To provide students with opportunities to learn through direct field lab, hands on experiences and experimental based learning, rather than just through passive observation or the absorption of information. To encourage students to acquire higher order learning skills based on creative and critical thinking. To bridge the gap between industry, academia and communities through collaborative and team work so as to address real time problems with creative and innovative solutions.

The Context:

The traditional method of rote learning and lectures is no longer sufficient to prepare students for success at the workplace. Student-centric methodologies put students at the center of the learning process, encouraging them to take ownership of their own education and develop the skills they need to succeed in the real world. Student-Centric Methodologies such as experiential learning, participatory learning, and problem-solving are the new norms in the academics. All the departments of university employ Student-centric methodologies in teaching, learning and evaluation so as to equip students with the 21st century skills such as critical thinking, problem solving, decision making, ICT skills, communication, and working in collaboration with internal & external stakeholders with an attitude of service to society. The methodology helps students become industry ready, employable and responsible citizen to address the local to global issues. The University has a student teacher ratio of 1:10 to make possible implementation of activity based learning.

Most of the departments run by the university follow field oriented curriculum. Being situated in the Himalayan region, the university is blessed to have wonderful natural lab for biodiversity, environmental impact assessment, climate changes, possibility of developing silica chips, developing tools for energy resources and low light pollution sites which can be used for the establishment of 1 meter telescope for establishment of astronomical lab, hence the focus is on experiential learning rather than observational practices.

2. The Practice:

In the current scenario, there has been a gradual shift in the world of academics from old traditional teacher centric learning techniques to the modern student centric techniques. Learning is dependent upon the pedagogies that teachers 'decide to choose' and the University is cognizant of the need to encourage teachers to select wisely keeping in mind the learning outcomes and requirements of the stakeholders. Teachers are trained to be competent with a variety of pedagogical tools and choose according to the subject matter to be taught, discipline requirements, and diverse learning needs of the students (highlighted during the recent COVID-19 crisis).

Different Pedagogy practices being used in Central University of Himachal Pradesh:

- **Teaching through films** is one of the extensively used pedagogy in the Department of Media, as well as Journalism and Mass communication of Central University of Himachal Pradesh. It also uses Facebook page as a class room where students upload small video clips of news reading and other activities done by them for open public scrutiny so as to gain confidence to become fearless and responsible media persons.

Various simulation activities such as role plays are frequently practiced in MBA and MBATT programs of university. A Service-Learning activity involving students working on real-world projects in partnership with community organizations with focus on learning through practical engagement with the community is a common part of the curriculum. The departments of Social Works, Physical and Material Sciences, Environmental Sciences, Life Sciences, Management etc. have achieved greater heights in this field. Field works and field trips are designed to provide students with first-hand experience to a particular place, culture, or situation. They provide an opportunity for students to observe and experience phenomena, to interact with people from diverse backgrounds, and to apply their learning to real-world situations. Project-Based Learning involving students working in teams on a project addressing real-world problems is part of curriculum of majority programs in the University.

- **Blended learning** combining in-class education as well as online learning sessions helps in strengthening 21st century skills which majorly includes critical thinking, creativity, collaboration, and communication in the classroom while securing personalized as well as individual learning progression online. During Covid-19 times this form of learning came as a norm for all and to facilitate the same the digital pads were given to teachers in the University.
- **Flipped classroom where** students are assigned pre-classroom study material, like article, video lecture or a link to MOOCs etc followed by discussion on the same in the class room is a phenomenon

in the university. Department of library sciences and mathematical sciences, social sciences, new Media and Journalism and Mass communication have excelled well in this field.

For providing **Experiential learning** experiences to the students, **the Central University of Himachal Pradesh offers** Industrial Visits, Field Work, On-the Job Internships, Educational tours and Projects which are considered best methods to give students an opportunity to experience the real corporate world. Therefore, majority departments of Central University of Himachal Pradesh use these learning methods in one form or the other.

Following table gives summary of student centric methods adopted by central University of Himachal Pradesh.

Sr. No	Mode	Tools	Some Examples from CUHP
		Internship/summer internships	Social Work, MBA (TT), & MBA, History- and Sciences departments during summer vacations as a compulsory part of the curriculum
1	Pedagogy	Field Visits/Industrial Visits/Educational Tours/	Department of Environmental Sciences, Plant Sciences, Animal Sciences, MBA, Travel and Tourism History, Department of social work as a compulsory part of the curriculum
		Blended Learning:	All departments of the University School of Physical & Material Sciences, School of Life Sciences, School of Earth & Environmental Sciences, Humanities , languages departments, Managements departments, education, New media and Journalism and mass communication,

		Flipped classroom: Use of videolecture or MOOCS (SWAYAM)	School of Physical & Material Sciences, School of Life Sciences, School of Earth & Environmental Sciences, School of Mathematics, Computer & Information Sciences, School of Humanities & Languages, School of Social Sciences, School of Education, School of Business & Management Studies
		Practical laboratory work, research work, seminars and conferences/problem solving	Faculty of Sciences (Environmental Sciences, Plant Sciences, Animal Sciences, Physics, Chemical Sciences, Library sciences, Mathematical Sciences, computer Sciences etc.
2	Assessment	The internal assessment in CUHP include Viva, class quiz, presentation, group discussion, case studies, field visit and reports, group assignments	By all Departments of CUHP as a compulsory part of the curriculum
3.	Course Curriculum	In addition to PhD and M.Phil., the Majority PG programs here have a compulsory research-based course on project/internship for 200 marks	All Departments of CUHP
4.	Beyond the class room learning	Organizing & participation in Co-Curricular as well as Extra Curricular Activities, Cultural Fests etc.	All Departments of CUHP

3. Evidence of Success:

Academic performances:

- Introduction of student centric methodologies in the university has led to an incremental growth in the academic performance of the students with pass percentage of 88.5% in 2021-22 making them all employable and responsible citizen, not just of the country but also the globe, to address the local to global issues.
- It has also increased the number of students qualifying in the various competitive examinations including JRF/NET and other state and national level examinations. There has been a rise from 48 (2017-18) to 146 (2021-22). Overall personality development of the students has led to increase in the number of placements from

164 in 2017 to 304 in 2022. Student progression to higher education has shown a steep rise in the last five years from 5 % in 2016 to 33.15 % in 2022.

- Our students have brought laurels in the internal arena too by registering their names in the international Universities/research institutions. Few examples include, Mr Sunandan Mohant, a student from environmental Sciences who has been awarded fellowship by South Carolina University, USA; Mr Gagan Deep from CBB is working in an MNC in Australia; Nitika Devi of physical sciences has been awarded fellowship in research by Taiwan Government.
- The performance of students' trained in 21st century skills courtesy student centric methodology and the perfect research eco-system in the campus led to significant linkages and collaborations with ace institutions of the country such as **Baba**
- **Atomic research center Mumbai** with installation of radon emission equipment for earthquake precursor studies at Shahpur campus and **Indian Institute of Remote Sensing Institute, Dehradun** with installation of two GPS units in the periphery of CUHP campus at Nurpur and Jia. These tie-ups have rendered students a unique opportunity to work with the experts in state of the art labs of the country.
- Apart from regular learning course curriculum framework, the students of various Departments are also the part of various funded research projects in terms of working as JRF's, SRF's, Research Associates etc. in various intra/inter University funded research projects. The University today has research projects worth 9.2 Crores, which itself bears testimony to the fact.

Entrepreneurship/placement development (just few are listed)

Many students of the university are running their startups in and around Himachal Pradesh. The ventures include mushroom culturing centers and apiculture to name a few. Our students have been placed successfully in the banks, corporates, e-commerce (Amazon), consultancies, IT sector, and academicians in the school, colleges and universities. Our students are doing well in the field of journalism too with names such as Dainik Jagran, Amar Ujala, Divya Himachal, Jagran New media, social media, India TV etc. Keeping service to nation first as the top priority our students are doing strikingly well as the social workers also by associating with NGOs such as Samrath, Sarthak, EWOK etc. Many students have joined military and paramilitary forces as officers and JCOs. This attitude for service to community and nation and globe comes to

our students due to our student centric pedagogy and environment which promotes health and wellness through Yoga center.

Numbers of extension activities have been undertaken by the University as part of field work and internships. In pursuance of same it has led to upliftment of 10 villages adopted by the University around the campus and made them sustainable to develop their own ventures. Some of the extension activities being run by university have been showcased in the links below.

Center for entrepreneurship and innovation	Central University of Himachal Pradesh (cuhimachal.ac.in)
Ek Bharat Shresth Bharat activity	Central University of Himachal Pradesh (cuhimachal.ac.in)
Video links	Central University of Himachal Pradesh (cuhimachal.ac.in)
Incubator center	Central University of Himachal Pradesh (cuhimachal.ac.in)
Extension under Unnat Bharat Abhiyan	Central University of Himachal Pradesh (cuhimachal.ac.in)
Deptt. Of Visual Arts developed traditional potteries by organizing a workshop in collaboration with Khadi gramaudyog	3_1_5 art_gallery.pdf (cuhimachal.ac.in)

Problems Encountered and Resources Required:

Seeking permissions to visit industries, concerns on safety of the students who are getting involved in real time projects delays the project duration.

Inviting Industrialist and experts is a major challenge as there are limited flights from Delhi and no direct flights from any other major industrial city thus.

Resources Required

- Collaborations and linkages with industry, community and government bodies.
- Needs more advanced instruments for high end research and equipments for hands-on training.

Evidences of practice being performed for providing experiential learning



Field-oriented teaching beyond campus:



Insect Sampling By MSc. Students



Visit to Pond (Wetland) on Environmental Day



Field visit to aware students about rock type & geological features.



One to one field teaching to students by professor with direct knowledge using instrument for site characterization in the field (left) university campus ground(right)

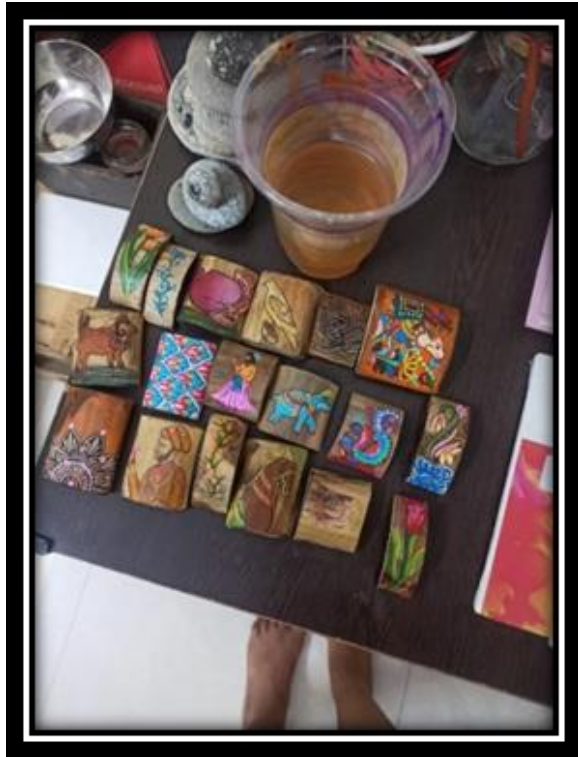
Instrumental Training in the Field:



Learning of students in the on seismic methods – a direct teaching (left) Student working in the field on different GPS system learning surveying techniques (right)

Promoting Villagers to prepare Traditional local bamboo products and their Marketing:





Ecofriendly products made by students of CUHP to promote traditional knowledge for marketing.

Celebrating birthday of “Martyr Pankaj Badiyal” by students & faculties of CUHP as donating blood at campus



बलिदानी पंकज बढियाल जी
की स्मृति में

Blood Donation Camp

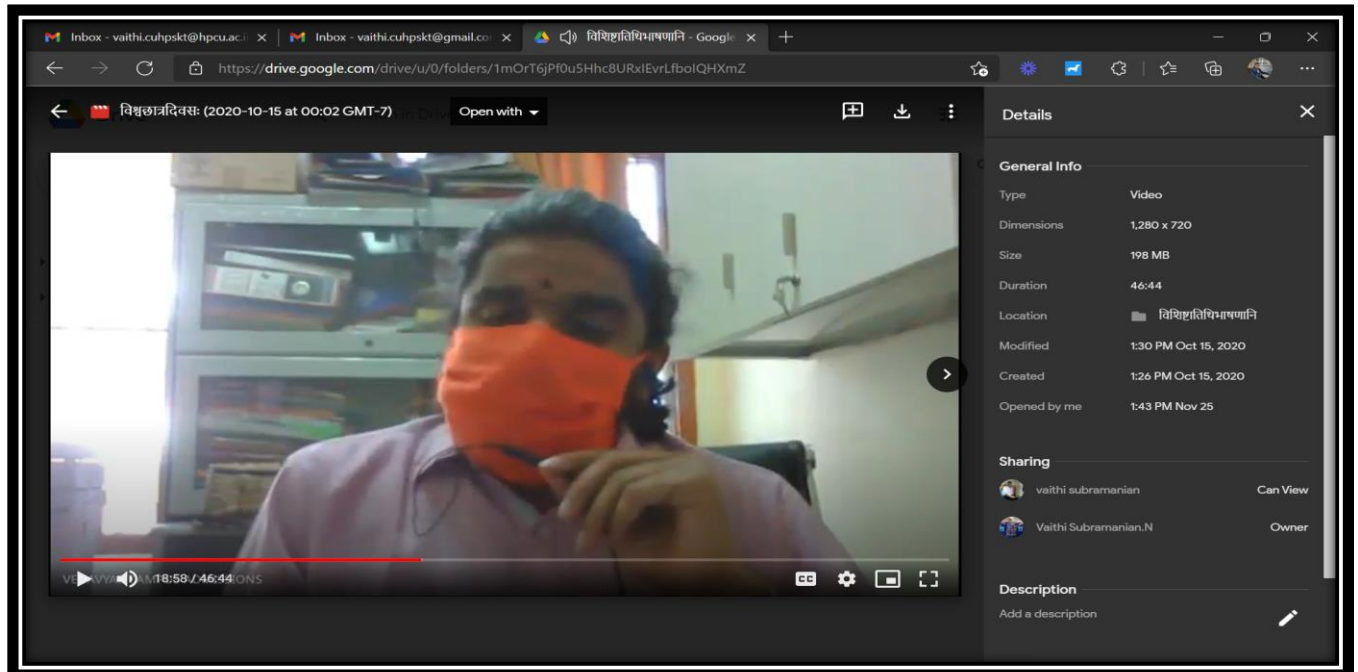
Organised by UBA, NSS UNIT DEHRA,
ABVP CUHP DEHRA UNIT, RRC

“एक वही जो देश के खातिर बलिदाव हो गया, हमारी चैन की वीद के खातिर गहरी वीद सो गया”
“जब तक सुरज चांद रहेगा, पंकज तेरा नाम रहेगा”

6th Dec. 2022 (सप्त सिंघु परिसर देहरा -II)

Contact For More Details :- 98059-84896, 78764-61027

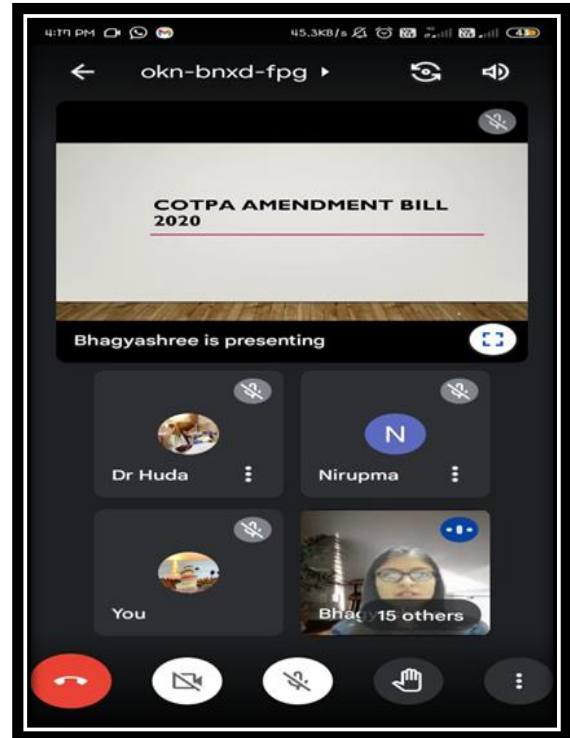
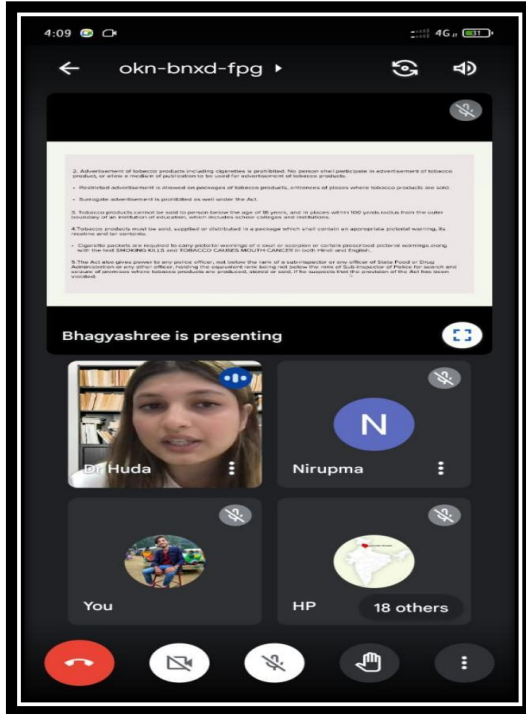
Blended mode of teaching Online Lectures/Webinars:



On the occasion of Dr. A.P.J Abdul Kalam's birthday, on the day of World Students' Day, 15.10.2020, a special lecture was organized in the Department of Sanskrit



Figure: National Webinar on Genealogy and History Writing in India



Bhagya Shree presenting on the COTPA amendment bill 2020

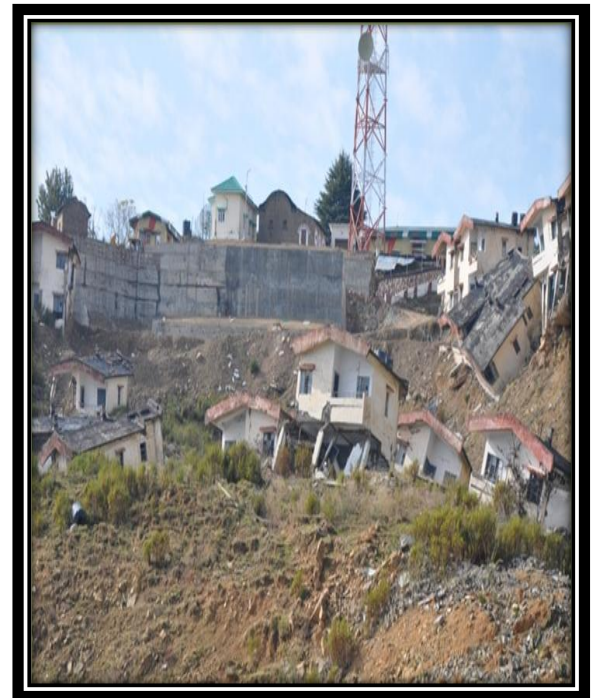
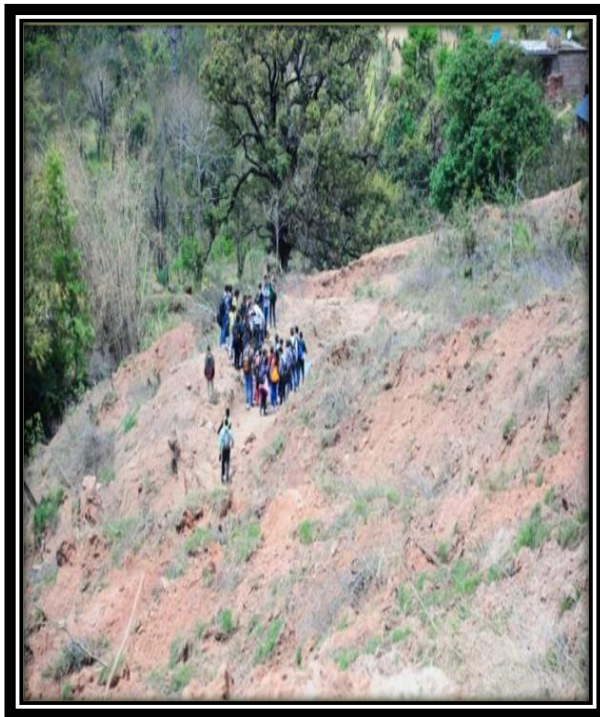


Webinar on Hydro-meteorological Disaster in a Global Warming Scenario

Learning through Educational Tours Beyond Class room:



Students visited college of Fisheries and Malviya National Institute of technology, Jaipur where students visited instrumentation laboratories and learned the handling of these instruments

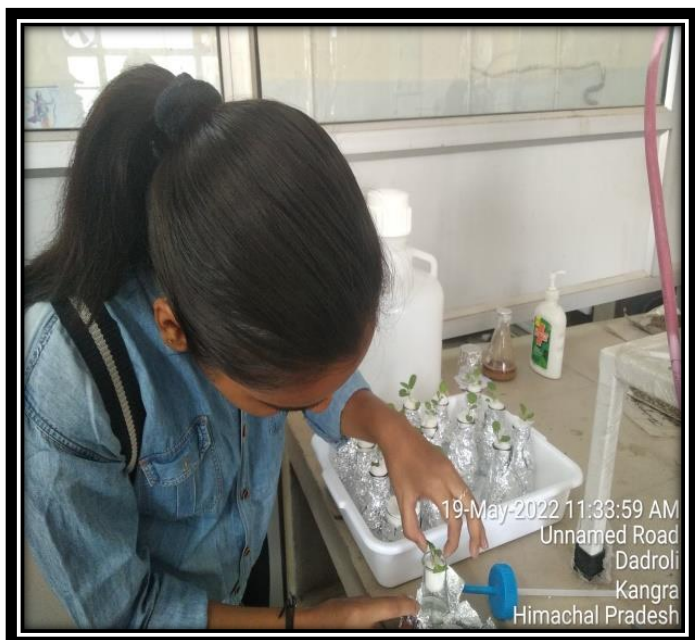


Students visit Tirha line Dharamshala to understand the reasons of landslide and land subsidence



Teaching through field training (left top) and teaching learning through education trip to different research lab (top right) and field area (below) provides practical knowledge beyond classroom.

Hand on Practice In Laboratory:





Learning through projects dissertation in groups.



Students working on various instruments and performing different studies at Central University of Himachal Pradesh

Education of students beyond class room through Workshops/Seminars/Conferences through studnets clubs



Vaidya Sushen Club, Department of Plant Science and Himalayan Life Science Society, Central University of Himachal Pradesh organized a workshop on “Hybrid Seed production of Vegetable crops”



Education through formation of departmental societies i.e. Himalayan Life Science Society invited eminent speakers for delivering lecture on “Diversity of Wild Edible Tubers” - an interactive teaching beyond classroom



Guest Lecture on Mushroom Cultivation a prospective entrepreneurship by Department of Plant Science, Central University of Himachal Pradesh



Interactive learning by the Department of Social Work to educate students through lectures and discussion with learned speakers.

Learning through practical training



Training Workshop conducted by Department of Environmental Sciences for Engaging Youth & Adolescents in Disaster Risk Management & Climate Change Adaptation



Training-Demo session on Cardio-Pulmonary Resuscitation (CPR) technique