SOP FOR DIFFERENT LEARNING METHODS

SHOBHIT UNIVERSITY

Adarsh Institutional Area, Babu Vijendra Marg, Gangoh, District - Saharanpur, U.P. 247341

www.sug.ac.in

Shobhit University

EDUCATION EMPOWERS

STANDARD OPERATING PROCEDURE

FOR

DIFFERENT LEARNING METHODS

Adarsh Institutional Area, Babu Vijendra Marg, Gangoh,

District - Saharanpur, U.P. 247341

Experiential Learning

Introduction to Experiential Learning

Experiential Learning is a pedagogical approach that emphasizes learning through direct experience. Rooted in the philosophy of "learning by doing," this method encourages students to engage actively with the material, reflect on their experiences, and apply new insights in real-world settings. As defined by educational theorist David A. Kolb, experiential learning is a cyclical process comprising four stages: concrete experience, reflective observation, abstract conceptualization, and active experimentation.

At Shobhit University, Gangoh, which upholds the motto "Empowering Nation through Education," the adoption of experiential learning across all departments is a vital step toward producing professionals, researchers, and entrepreneurs who are not only knowledgeable but also skilled, empathetic, and socially responsible. The experiential learning framework enables learners to bridge the gap between theoretical concepts and practical application, preparing them for the complex challenges of the 21st century.

Pedagogical Framework and Philosophy

Theoretical Foundation

The core of experiential learning is grounded in constructivist theories of education. It promotes:

- Active involvement in meaningful experiences
- Reflection on those experiences
- Abstract conceptualization to derive understanding
- Application of new learning in future situations

This educational model supports competency-based education (CBE), Outcome-Based Education (OBE), and the National Education Policy (NEP 2020) which emphasize flexibility, skill development, and real-world application.

Objectives of Experiential Learning at Shobhit University

- To make learning more relevant and applicable
- To build competencies beyond academic excellence
- To foster collaboration, leadership, and ethical behavior
- To ensure holistic personality development
- To enhance employability, innovation, and entrepreneurial spirit

Implementation Strategy at Shobhit University

The University will institutionalize experiential learning by embedding it into the curriculum, co-curricular activities, and community outreach programs. Each department and school will develop semester-wise experiential learning plans aligning with course outcomes.

Core Principles

- Alignment with Program and Course Learning Outcomes
- Interdisciplinary and cross-functional collaboration
- Engagement with local communities and industry
- Emphasis on reflection and assessment
- Structured documentation and feedback mechanisms

Stakeholders

- Faculty: Facilitators and mentors
- Students: Learners and implementers
- Administrative Units: Enablers and record-keepers
- Industry Partners/Community Organizations: External collaborators

Detailed Activities under Experiential Learning

The following activities are **non-departmental**, **common to all schools**, and designed to be versatile across disciplines such as Ayurveda, Pharmacy, Naturopathy, Engineering, Law, Management, Agriculture, Education, and Biological Sciences.

Field Visits and Excursions

Description: Organized visits to industries, NGOs, farms, research centers, courts, hospitals, banks, heritage sites, and government offices.

Purpose:

- Observe real-time functioning and operations.
- Understand organizational structures, roles, and technologies.
- Bridge theoretical knowledge with field practices.

Learning Outcome: Enhanced contextual understanding, improved observational skills, and development of professional curiosity.

Internships

Description: Short-term or semester-long placements in organizations where students take up roles aligned with their academic field.

Purpose:

- Apply theoretical concepts in professional settings.
- Gain hands-on experience, mentorship, and industry exposure.

Learning Outcome: Professional skills, teamwork, communication, time management, and job readiness.

Simulation-Based Learning

Description: Use of controlled simulations to mimic real-life situations in labs or classroom settings—such as clinical roleplays, business negotiation simulations or agricultural modelling.

Purpose:

- Risk-free environment for learning complex systems.
- Develop decision-making, crisis response, and coordination skills.

Learning Outcome: Higher retention of knowledge, enhanced confidence, and strategic thinking.

Community Engagement

Description: Active participation in community-based activities such as awareness camps, blood donation drives, sanitation campaigns, environmental protection efforts, and health surveys.

Purpose:

- Apply knowledge for community welfare.
- Experience diverse socio-economic environments.

Learning Outcome: Empathy, civic responsibility, cultural sensitivity, and real-life application of classroom knowledge.

Projects

Description: Independent or guided projects that address real-world challenges such as waste management, rural development, water conservation, startup incubation, and mobile health solutions.

Purpose:

- Encourage research, innovation, and entrepreneurship.
- Solve community or campus-level issues through sustainable models.

Learning Outcome: Innovation, leadership, research aptitude, and collaborative learning.

Workshops

Description: Hands-on workshops on software tools, robotics, data analysis, healthcare techniques, culinary skills, or organic farming practices.

Purpose:

- Supplement academic curriculum with practical skills.
- Enable learning through tools, instruments, and materials.

Learning Outcome: Technical proficiency, creativity, and experimentation skills.

Assignments

Description: Assignments requiring field data collection, interviews, surveys, documentation, and ground analysis on topics like consumer behavior, crop yield analysis, biodiversity audits, or socio-legal field research.

Purpose:

- In still investigative and analytical capabilities.
- Promote data-driven learning.

Learning Outcome: Research skills, data interpretation, and academic writing.

Case Studies

Description: Real cases from the field, startups, legal cases, patient stories, environmental crises, and local governance issues presented for analysis and problem-solving.

Purpose:

- Improve cognitive and analytical abilities.
- Develop holistic understanding and multidimensional thinking.

Learning Outcome: Strategic thinking, ethical judgment, and interdisciplinary insight.

Collaborative Events (Hackathons etc.)

Description: Participation in inter-institutional, national, or in-house experiential events that simulate real-world decision-making.

Purpose:

- Foster innovation, leadership, and pressure-handling.
- Promote teamwork, presentation, and problem-solving.

Learning Outcome: Creativity, initiative, entrepreneurship, and collaborative thinking.

Laboratory Work

Description: Curriculum-embedded lab sessions with real experimentation such as soil testing, programming, electrical circuit building, or forensic investigation.

Purpose:

- Direct application of classroom concepts.
- Develop technical proficiency through guided practice.

Learning Outcome: Accurate understanding of technical systems, safe lab conduct, and project design.

Comprehensive Health Care Program

Description: Curriculum-integrated field activities focusing on health awareness, basic medical screening, hygiene promotion, and nutritional guidance, conducted in collaboration with local health practitioners and community health centers.

Purpose:

- Apply theoretical knowledge from health sciences and life sciences in real-world community settings.
- Cultivate empathy and responsibility toward public health concerns.

Learning Outcome: Understanding of primary health care systems, improved communication skills for health education, and adherence to ethical practices in community engagement.

Moot Court

Description: Curriculum-integrated simulation of real courtroom proceedings where students assume roles of advocates, judges, and witnesses to argue hypothetical legal cases based on actual laws and judicial procedures.

Purpose:

- Apply theoretical knowledge of legal principles, constitutional law, and case studies in a practical courtroom setting.
- Develop legal reasoning, advocacy skills, and ethical understanding of the justice system.

Learning Outcome: Clear comprehension of legal frameworks, enhanced articulation and argumentation skills, and familiarity with procedural law through experiential learning.

Integrated/Interdisciplinary Learning

Introduction to Integrated/Interdisciplinary Learning

Integrated or Interdisciplinary Learning is an educational approach that synthesizes knowledge, methodologies, perspectives, and skills from two or more disciplines to provide a more comprehensive and connected understanding of complex issues, topics, or problems. This pedagogical method moves beyond isolated subject instruction and encourages students to draw meaningful connections among diverse domains.

At Shobhit University, Gangoh, this method is crucial in cultivating holistic thinkers, adaptive professionals, and visionary leaders who are equipped to navigate and solve real-world problems that do not fall neatly into one disciplinary category. Guided by the National Education Policy (NEP) 2020, the University promotes interdisciplinary approaches across its schools—including Ayurveda, Pharmacy, Naturopathy, Engineering, Law, Management, Agriculture, Education, and Biological Sciences—ensuring that students graduate with the capacity for cross-disciplinary thinking, collaboration, and innovation.

Pedagogical Framework and Philosophy

Theoretical Foundation

Integrated learning is deeply rooted in **constructivist**, **connectivist**, and **transformative learning** theories. These frameworks advocate:

- Learning as a process of meaning-making through connected experiences.
- The construction of knowledge through the integration of multiple viewpoints.
- Emphasizing problem-solving through diverse lenses (scientific, ethical, economic, legal, cultural).

This method aligns with **Outcome-Based Education (OBE)**, **Liberal Education**, and the **Choice-Based Credit System (CBCS)** framework, supporting learners in developing cross-functional competencies.

Objectives of Interdisciplinary Learning at Shobhit University

- To break silos between departments and promote academic synergy.
- To foster holistic understanding and critical inquiry.
- To prepare students for solving complex, real-world problems.
- To instill a spirit of collaboration and respect for diverse knowledge systems.
- To align education with the SDGs, industry needs, and societal priorities.

Implementation Strategy at Shobhit University

Shobhit University embeds interdisciplinary learning both within the curriculum and through co-curricular and research activities. This is achieved through collaborative curriculum design, team teaching, shared credit courses, interdisciplinary projects, and community-based initiatives.

Core Principles

- **Integration over Aggregation:** Courses are blended to create new perspectives rather than taught in parallel.
- **Application-Oriented:** Designed around problem-solving, innovation, and social relevance.
- **Collaboration:** Faculties co-design and co-teach; students collaborate across disciplines.
- **Flexibility and Choice:** Multiple pathways, open electives, and project-based assessment.
- **Inclusivity and Sustainability:** Promoting diverse epistemologies and environmentally/socially responsible learning.

Stakeholders

- **Faculty:** Subject experts who collaborate across disciplines.
- **Students:** Active participants in transdisciplinary learning environments.
- **Administration:** Enablers for cross-departmental coordination and policy execution.
- **External Experts:** Industry, research institutions, NGOs, and policymakers contribute to real-world relevance.

Detailed Activities under Integrated/Interdisciplinary Learning

The following activities are applicable across departments and are designed to strengthen interdepartmental synergy and cross-domain knowledge application:

Interdisciplinary Courses

Description: Courses co-created and co-taught by faculty from different departments—e.g., 'Value Education, Human Rights and Legislative Procedures', 'Technical English', 'Law For Engineers', 'Professional Communication', 'Environmental Studies' etc.

Purpose:

- To allow students to learn topics that cut across domains.
- To equip learners with hybrid skills like tech-in-law, science-in-education, etc.

Learning Outcome: Enhanced capacity to synthesize ideas from multiple fields and apply them in practical, policy, or entrepreneurial contexts.

Seminar and Lecture Series

Description: University-wide seminars & lectures on themes like sustainability, gender, health equity, artificial intelligence, and rural transformation.

Purpose:

- To expose students to interdisciplinary discourse.
- To foster interaction with experts from different knowledge systems.

Learning Outcome: Broadened perspective, critical thinking, and inter-field engagement.

Joint Projects

Description: Final year projects that require inputs from more than one discipline, such as:

- A rural health survey involving Ayurveda and Data Science.
- Legal compliance in microbiology industries involving Law and Life Sciences.
- Smart irrigation systems integrating Agriculture and Engineering.

Purpose:

- To apply theory from multiple domains into one coherent, solution-oriented project.
- To promote teamwork across departments.

Learning Outcome: Project management, research integration, and innovation.

Interdisciplinary Hackathons

Description: Events where students from diverse backgrounds come together to solve a common problem—such as health tech, fintech, sustainable farming, or disaster management.

Purpose:

- To encourage innovation through diversity of thought.
- To simulate real-world team environments.

Learning Outcome: Agility, co-creation, leadership, and lateral thinking.

Problem-Based Learning Modules

Description: Real-world scenarios embedded in teaching, requiring knowledge from different disciplines to solve. Example:

- Designing an eco-village (Engineering + Agriculture)
- Managing a public health crisis (Health Science + Law + Management)

Purpose:

- To develop systems thinking.
- To train students to view issues from multiple angles.

Learning Outcome: Analytical depth, ethical reasoning, and collaborative action.

Student Clubs

Description: Interdisciplinary clubs such as:

- Sports club
- Cultural Activity Club: Rang Tarang
- Computer Club
- Literary Club: शब्द ज्योति

Purpose:

- To build co-curricular synergy and informal learning communities.
- To encourage leadership and project ownership.

Learning Outcome: Networking, collaborative mindset, and lifelong learning attitudes.

Interdisciplinary Value-Added Courses

Description: Structured Interdisciplinary Value-Added Courses are offered alongside the core curriculum to enrich students' academic and practical understanding.

Purpose:

- To enhance students' academic versatility and employability.
- To promote integrative thinking and application of knowledge across domains.

Learning Outcome: Critical thinking, cross-disciplinary collaboration, problem-solving, and innovation-driven mindset.

Participatory Learning

Introduction to Participatory Learning

Participatory Learning is a learner-centered approach that emphasizes the active engagement of students in the process of knowledge creation, decision-making, and problem-solving. It transforms the traditional teacher-centered model into a collaborative learning environment where students and instructors are co-creators of knowledge. In this pedagogical approach, learners do not just receive information passively but participate in discussions, debates, simulations, fieldwork, and real-life applications.

At **Shobhit University, Gangoh**, participatory learning plays a vital role in shaping reflective, critical, and socially responsible individuals. Guided by the National Education Policy (NEP) 2020 and our institutional vision of "Empowering Nation through Education" participatory learning is implemented across all academic programs and disciplines to build leadership, civic consciousness, emotional intelligence, and lifelong learning habits among students.

Pedagogical Framework and Rationale

Philosophical and Theoretical Underpinning

Participatory learning draws inspiration from:

- **Paulo Freire's Critical Pedagogy**, which positions students as agents of change.
- **John Dewey's Experiential Education**, which integrates learning with doing.
- **Social Constructivism**, where knowledge is co-created through dialogue and interaction.
- **Andragogy and heutagogy**, emphasizing self-directed and autonomous learning.

It encourages **democratic classrooms**, **mutual respect**, and **diversity of viewpoints**, fostering inclusivity and empathy. It aligns well with **Outcome-Based Education (OBE)** and **Choice-Based Credit System (CBCS)**, promoting flexible and personalized learning.

Objectives of Participatory Learning at Shobhit University

- To engage learners as active contributors in academic and community life.
- To cultivate critical thinking, leadership, and communication skills.
- To promote teamwork, peer learning, and inclusive discourse.
- To create a platform for expression, reflection, and innovation.
- To enhance civic responsibility and social empathy through active community engagement.

Strategy and Mechanism for Implementation

Core Principles

- **Student-Centeredness:** Learners are at the heart of the teaching-learning process.
- **Democratization of Knowledge:** All voices are valued equally.
- **Active Learning:** Learning happens through dialogue, debate, discovery, and doing.
- **Inclusiveness:** Diverse perspectives, backgrounds, and learning styles are respected.
- **Reflection and Feedback:** Continuous introspection and feedback improve learning outcomes.

Stakeholders

- **Students:** Primary participants, responsible for active engagement and reflection.
- **Faculty:** Facilitators, mentors, and co-learners who create enabling environments.
- **Community:** Rural and urban stakeholders as collaborators in community-based learning.
- **Industry Partners:** Provide experiential exposure and participatory platforms.
- **Administration:** Ensures policy and infrastructure support for participatory methods.

Participatory Learning Activities at Shobhit University

The following participatory learning activities are embedded across departments, programs, and outreach units at the University:

Role Play

Description: Enactment of historical, legal, medical, or managerial scenarios in class.

Purpose:

- Engage students emotionally and cognitively.
- Explore ethical, human, and interpersonal dimensions of learning.

Learning Outcome: Communication, empathy, ethics, and critical interpretation.

Group Discussions and Debates

Description: Regular classroom-based, department-level, and inter-departmental discussions on current issues, concepts, policies, and case studies.

Purpose:

- To encourage critical analysis and listening skills.
- To foster democratic dialogue and knowledge exchange.

Outcomes: Improved articulation, critical reasoning, and collaborative learning.

Student Seminars and Paper Presentations

Description: Students research a topic and present papers in internal and external academic seminars.

Purpose:

- To enhance public speaking and presentation skills.
- To foster research orientation and analytical writing.

Outcomes: Research ability, confidence, academic engagement.

Field-Based Learning and Rural Immersion

Description: Students undertake field visits, surveys, community mapping, health camps, and development projects in rural and urban areas.

Purpose:

- To apply classroom knowledge in real-life contexts.
- To learn from people's experiences and traditional knowledge systems.

Outcomes: Grounded understanding, field competence, and social responsiveness.

Peer Learning

Description: Students explain complex topics to their peers in small group settings.

Purpose:

- To deepen understanding through teaching.
- To foster empathy and communication.

Outcomes: Reinforced learning, mutual trust, academic camaraderie.

Participatory Curriculum Development and Feedback

Description: Students contribute to curriculum improvement through regular feedback, course reviews, and consultation with faculty.

Purpose:

- To make curriculum more responsive and inclusive.
- To acknowledge student voice in academic planning.

Outcomes: Stakeholder engagement, responsive education, mutual accountability.

Project-Based and Problem-Based Learning

Description: Students work in teams to explore real-world problems and propose viable solutions.

Purpose:

- To develop innovation, teamwork, and problem-solving capacity.

Outcomes: Creativity, logical reasoning, and technical integration.

Open House Discussions

Description: Open platforms where students, faculty, and local community members discuss pressing social, ethical, or development issues.

Purpose:

- To promote participatory democracy and civil discourse.
- To connect academic thinking with lived realities.

Outcomes: Ethical awareness, emotional intelligence, civic literacy.

Student Participation in Institutional Governance

Description: Student representatives are part of academic and administrative committees—IQAC, Anti-Ragging Cell, etc.

Purpose:

- To ensure transparency and participatory governance.
- To train students in leadership and responsibility.

Outcomes: Empowerment, accountability, institutional belonging.

Extension Activities

Description: Students engage in tree plantation, cleanliness drives, disaster relief, blood donation, and awareness campaigns.

Purpose:

- To instill national pride and community service ethos.
- To practice team discipline and social action.

Outcomes: Community integration, patriotism, and active citizenship.

Problem-Solving Learning

Introduction to Problem-Solving Learning

Problem-solving Learning are structured, analytical approaches to identifying, analysing, and resolving problems. In academic and professional contexts, the ability to think critically and solve complex, real-world problems is a key skill for success. Problem-solving goes beyond rote learning; it demands observation, analysis, ideation, implementation, and continuous evaluation.

At **Shobhit University, Gangoh**, the adoption of problem-solving Learning across academic disciplines aims to prepare students for the complex challenges of the 21st century. Whether in engineering design, business strategy, legal interpretation, agricultural innovation, or scientific research, problem-solving capabilities are nurtured to promote **critical thinking**, **innovation**, and **resilience**.

This SOP outlines the framework, application strategies, and operational mechanisms for integrating structured problem-solving into teaching-learning processes across all schools and departments at the university.

Pedagogical Framework and Rationale

Theoretical Foundations

The integration of problem-solving Learning is rooted in:

- **Bloom's Taxonomy** – Emphasizing higher-order cognitive domains such as analysis, synthesis, and evaluation.
- **Polya's Four-Step Method** – Understanding the problem, devising a plan, carrying out the plan, and evaluating the solution.
- **Design Thinking** – Empathize, Define, Ideate, Prototype, Test.
- **Systems Thinking** – Understanding complex systems and interrelated problems holistically.
- **Case-Based Reasoning** – Solving new problems based on the solutions of similar past problems.

These approaches foster an inquiry-based, iterative, and reflective learning culture in line with **National Education Policy (NEP) 2020** and **Outcome-Based Education (OBE)**.

Objectives of Problem-Solving Learning

- To cultivate analytical and critical thinking skills.
- To enable structured, logical approaches to problem identification and resolution.
- To foster creativity and innovation in developing practical solutions.
- To promote cross-disciplinary application of knowledge.
- To instill resilience, adaptability, and decision-making capacity.

Strategy for Integration into Teaching-Learning

Guiding Principles

- **Student-Centric Engagement:** Empower students to define and explore problems relevant to their academic and community contexts.
- **Real-World Relevance:** Connect curriculum to societal, industrial, and environmental challenges.
- **Experiential Learning:** Provide hands-on opportunities for tackling actual problems.
- **Interdisciplinary:** Encourage cross-functional collaboration and synthesis of diverse knowledge domains.

Stakeholders

- **Students:** Active participants and contributors to problem-solving processes.
- **Faculty:** Facilitators, mentors, and evaluators of problem-based learning (PBL) activities.
- **Industry/Community Partners:** Provide real-life problem statements and feedback.
- **Institutional Leadership:** Supports infrastructure, training, and inter-departmental coordination.

Key Problem-Solving Activities at Shobhit University

The following activities are designed to embed problem-solving into formal and informal learning environments across disciplines.

Here is the refined and uniformly structured version of the pedagogical strategies, with updated titles using **"Purpose:"** in place of *Application*, *Examples*, or *Process* where appropriate:

Problem-Based Learning

Description: Curriculum-integrated projects where students tackle open-ended, real-world challenges to develop critical skills.

Purpose:

- To promote practical innovation
- To enhance clinical decision-making by developing patient-centered medication plans
- To instill strategic insight by crafting revival plans for struggling enterprises.
- Etc.

Outcomes: Analytical reasoning, research proficiency, collaborative teamwork.

Case Study Analysis

Description: Students analyze real or simulated cases to apply theoretical knowledge in decision-making and problem-solving.

Purpose:

- To cultivate reasoning & analytical ability by interpreting various cases in various schools
- To resolve practical classroom dilemmas through informed pedagogical strategies
- To critically evaluate and learn from unsuccessful marketing campaigns.

Outcomes: Informed decision-making, argument development, situational judgment.

Design Thinking Workshops

Description: Hands-on workshops using the Design Thinking model to encourage human-centered innovation.

Purpose:

- Understand user needs through empathy.
- Redefine problems with a focused lens.
- Generate creative ideas collaboratively.
- Build and refine prototypes through iterative testing.

Outcomes: Innovative thinking, user empathy, iterative development skills.

Hackathons and Ideathons

Description: Competitive, time-bound events where students co-create tech-driven or social solutions under pressure.

Purpose:

- Encourage collaborative, fast-paced problem-solving.
- Foster creativity in high-stakes settings.
- Enhance real-time innovation and pitch readiness.

Outcomes: Technical creativity, stress-time decision-making, persuasive communication.

Laboratory-Based Research Projects

Description: Students engage in research-oriented lab work based on provided or self-identified problem statements.

Purpose:

- Strengthen scientific thinking through hands-on investigation.
- Apply theoretical knowledge in controlled experimental contexts.
- Develop evidence-based conclusions from real data.

Outcomes: Scientific inquiry, critical experimentation, data interpretation.

Online Challenges and MOOC Integration

Description: Engagement with online platforms (e.g., NPTEL, SWAYAM) that offer project-based learning modules and competitions.

Purpose:

- Promote lifelong learning beyond the classroom.
- Integrate academic challenges with global learning platforms.
- Offer certifications and recognition to boost learner motivation.

Outcomes: Digital learning exposure, self-paced skill development, interdisciplinary networking.

Mentorship

Description: Small student cohorts mentored by faculty to explore complex questions and research themes.

Purpose:

- Foster inquiry-based learning under expert guidance.
- Nurture academic curiosity and discipline-specific research skills.
- Build a culture of reflective learning and intellectual depth.

Outcomes: Research aptitude, critical questioning, mentored problem-solving.

Self-Directed Learning

Introduction to Self-Directed Learning

Self-Directed Learning (SDL) is an educational approach in which learners take the initiative in planning, implementing, and evaluating their learning processes. It involves setting individual learning goals, identifying learning resources, choosing appropriate strategies, and evaluating outcomes with or without the help of instructors. SDL is a cornerstone of lifelong learning and is especially important in the 21st-century knowledge-driven economy.

At **Shobhit University, Gangoh**, which is guided by the vision of "Empowering Nation through Education," Self-Directed Learning is integrated as a core strategy to develop independent thinkers, lifelong learners, and reflective practitioners. This approach enhances students' ability to manage their learning journey, strengthen their cognitive and metacognitive skills, and become more responsible and proactive in achieving academic and career goals.

Pedagogical Framework and Philosophy

Theoretical Foundation

Self-Directed Learning is based on the **constructivist paradigm** and supported by principles of **andragogy** (adult learning) and **experiential learning**. The key theoretical elements include:

- **Autonomy**: Learners have control over their educational experiences.
- **Self-Motivation**: Internal drive to explore, investigate, and learn.
- **Metacognition**: Thinking about one's thinking, learning styles, and progress.
- **Reflection**: Ongoing self-assessment and evaluation of learning outcomes.

SDL aligns with the National Education Policy (NEP 2020), which advocates for flexibility, multidisciplinary learning, and fostering intellectual curiosity and independent learning across all levels.

Objectives of Self-Directed Learning at Shobhit University

- To promote learner autonomy and accountability in academic development.
- To nurture independent thinking, creativity, and lifelong learning habits.
- To improve time management, research, and self-assessment skills.
- To encourage the use of diverse, technology-enabled learning resources.
- To instill academic maturity and critical reflection in students.
- To prepare graduates who are ready for complex and evolving professional environments.

Implementation Strategy at Shobhit University

Shobhit University institutionalizes SDL across all departments and schools by embedding SDL principles within teaching, assignments, co-curricular learning, and assessment design. Faculty members play a guiding role in facilitating, mentoring, and evaluating the SDL process, while students are encouraged to take ownership of their learning journey.

Core Principles

- **Autonomy and Initiative**: Students are active participants in the design and execution of their learning paths.
- **Flexibility in Learning**: SDL opportunities are designed to accommodate various learning paces and preferences.
- **Goal-Oriented Planning**: Learning contracts, timelines, and performance indicators are used to track SDL progress.
- **Reflective Practice**: Reflection journals and feedback loops are incorporated for continual improvement.
- **Technology Integration**: LMS platforms, MOOCs, and digital libraries support personalized learning.

Stakeholders Involved

- **Students**: Planners, learners, implementers, and self-assessors.
- **Faculty Mentors**: Facilitators, advisors, and evaluators of SDL.
- **Academic Coordinators**: Monitors of student progress and integration into academic credits.
- **Institutional Platforms**: Providers of digital resources, e-libraries, and LMS tools to facilitate SDL.

Detailed Activities under Self-Directed Learning

The following activities under SDL are **common and non-departmental**, applicable across all academic disciplines including Engineering, Law, Management, Life Sciences, Education, Agriculture, Ayurveda, and Naturopathy.

Self-Study Plans

Description: Students prepare a personalized learning contract outlining specific learning goals, resources, timelines, and evaluation criteria. These contracts are reviewed and approved by faculty mentors.

Purpose:

- Empower students to take control of their learning process.
- Clarify learning objectives and measurable outcomes.

Outcome: Enhances self-regulation, accountability, planning, and goal-oriented behavior.

Independent Research

Description: Students identify research topics of interest, formulate questions or hypotheses, conduct independent inquiry, and present their findings in written and oral formats.

Purpose:

- Foster analytical and investigative skills.

- Promote inquiry-based, reflective learning.

Outcome: Development of research skills, critical thinking, documentation, and innovation.

Use of MOOCs, SWAYAM, and Online Certifications

Description: Students enroll in self-paced online courses offered through national and international platforms (SWAYAM, NPTEL etc.) relevant to their curriculum or career goals.

Purpose:

- Provide access to quality global learning content.
- Promote self-paced learning with certification.

Outcome: Increases subject knowledge, technological competence, and academic depth.

Book Reviews

Description: Students select books, academic articles, or case studies to read independently and write critical reviews.

Purpose:

- Develop comprehension and analytical reading habits.
- Engage with global and multidisciplinary perspectives.

Outcome: Enhanced reading, writing, argumentation, and comprehension skills.

Self-Assessment Modules and Online Quizzes

Description: Access to LMS-based quizzes, and online assessments with instant feedback for self-evaluation.

Purpose:

- Encourage ongoing self-assessment and progress tracking.
- Identify learning gaps and plan for remedial actions.

Outcome: Improved self-evaluation and motivation to achieve mastery.

Peer Learning

Description: Advanced learners take responsibility to support peers by designing tutorials, review sessions, and concept summaries.

Purpose:

- Build leadership and communication skills.
- Foster mutual learning in an SDL framework.

Outcome: Confidence, collaborative skill-building, and pedagogical thinking.

Blended Learning

Description: Learners engage in a combination of face-to-face sessions and digital content delivery, using online platforms to reinforce and extend classroom learning. Students access materials, videos, and tasks asynchronously while collaborating in-person or virtually.

Purpose:
• Promote flexibility and personalized learning paths.
• Encourage digital literacy and time management.
• Bridge in-class instruction with independent learning.

Outcome: Enhanced autonomy, better retention through multimodal inputs, and improved ability to self-regulate learning.

Institutional Learning Management System (LMS)

Description: Students use the university's LMS Digii campus https://sug.digiicampus.com/home to access course materials, submit assignments, participate in discussions, and track progress. It serves as a centralized hub for content, communication, and assessment.

Purpose:
• Streamline academic processes and resource sharing.
• Enable continuous learning and self-monitoring.
• Facilitate interaction with peers and instructors in a structured digital environment.

Outcome: Organized learning experience, improved digital engagement, and proactive academic planning.

Student Seminars & Quiz

Description: Students actively participate in seminars and quizzes, taking roles as presenters, quizmasters, and audience. This peer-led platform encourages them to research, summarize, and communicate key concepts.

Purpose:
• Promote active engagement and deeper subject understanding.
• Build public speaking and critical thinking skills.
• Foster a culture of academic curiosity and peer recognition.

Outcome: Boosted confidence, enhanced presentation and questioning skills, and improved conceptual clarity.

Flipped Classroom

Description: Learners review instructional content (videos, readings, slides) before class. Classroom time is devoted to problem-solving, discussions, and collaborative activities under teacher guidance.

Purpose:
• Shift focus from passive listening to active learning.
• Maximize classroom time for interaction and application.
• Encourage students to take responsibility for foundational knowledge.

Outcome: Increased engagement, deeper comprehension, and readiness to apply knowledge in real-world contexts.

Patient-Centric and Evidence-Based Learning

Introduction to Patient-Centric and Evidence-Based Learning

Patient-Centric and Evidence-Based Learning (PC-EBL) is a pedagogical approach that integrates clinical relevance, patient engagement, and scientific evidence into the learning environment. It emphasizes tailoring healthcare education to the real-life needs, preferences, and values of patients, supported by the best available research and clinical expertise.

At **Shobhit University, Gangoh**, the incorporation of PC-EBL is essential in aligning with the university's commitment to transforming healthcare education by producing compassionate, scientifically sound, and patient-oriented professionals. The approach fosters empathy, clinical reasoning, decision-making skills, and lifelong learning among students across various health science disciplines.

Pedagogical Framework and Philosophy

Theoretical Foundation

Patient-Centric and Evidence-Based Learning integrates elements of **patient-centered care**, **clinical epidemiology**, **evidence-informed practice**, and **problem-based learning**. Its key pillars include:

- **Patient Values and Preferences**: Respecting individual dignity, communication needs, and cultural context.
- **Best Research Evidence**: Using the most current and relevant clinical research to inform decisions.
- **Clinical Expertise**: Applying experiential knowledge for decision-making and contextual care.
- **Collaborative Care**: Encouraging interdisciplinary collaboration for comprehensive treatment.

This aligns with **NEP 2020**, the **National Medical Commission (NMC) competency-based curriculum**, and international benchmarks in health education focused on quality, ethics, and service.

Objectives of PC-EBL at Shobhit University

- To develop empathetic, informed, and ethical healthcare professionals.
- To enhance students' ability to integrate research into clinical practice.
- To encourage individualized care while adhering to scientific protocols.
- To strengthen decision-making in complex healthcare scenarios.
- To improve communication, teamwork, and patient engagement.

Implementation Strategy at Shobhit University

Shobhit University ensures that all health-related programs, particularly in A**yurveda, Pharmacy, Naturopathy** and **Life Sciences**, integrate PC-EBL through clinical rotations, classroom case discussions, simulation training, patient engagement, and research literacy.

Core Principles

- **Empathy and Respect**: Patients are partners in learning.
- **Scientific Rigor**: Teaching grounded in contemporary evidence.
- **Interdisciplinary Collaboration**: Students learn in team-based, cross-disciplinary formats.
- **Critical Appraisal**: Students analyze and question medical literature.
- **Ethical Practice**: Adherence to confidentiality, informed consent, and patient autonomy.

Stakeholders Involved

- **Students**: Active learners and patient advocates.
- **Faculty and Clinicians**: Mentors, guides, and role models.
- **Patients and Communities**: Direct participants and feedback providers.
- **Hospitals, Labs, Clinics**: Platforms for practical learning and clinical exposure.
- **Libraries and Databases**: Sources of evidence-based material and guidelines.

Detailed Activities under Patient-Centric and Evidence-Based Learning

These activities are cross-cutting and applicable to all medical and health science students. They are designed to develop knowledge, skills, and attitudes essential for evidence-informed and patient-centered healthcare.

Clinical Case-Based Discussions

Description: Real or simulated cases are discussed in small groups under faculty guidance with a focus on diagnosis, evidence, and patient context.

Purpose:

- Enhance clinical reasoning and holistic care planning.
- Link textbook knowledge with real-world scenarios.

Learning Outcome: Critical thinking, differential diagnosis, and integration of patient perspectives.

Patient Narrative Analysis

Description: Students interact with patients or review patient case narratives to understand the human, emotional, and cultural context of diseases.

Purpose:

- Encourage empathy and deeper patient engagement.
- Recognize psychosocial dimensions of illness.

Learning Outcome: Improved patient communication, active listening, and emotional intelligence.

Patient-Cantered Care Plans

Description: Students prepare care plans incorporating patient values, co-morbidities, lifestyle, and cultural background with evidence-based interventions.

Purpose:

- Promote personalized medicine and shared decision-making.
- Connect theory with individualized practice.

Learning Outcome: Competency in contextualizing clinical interventions.

Bedside Teaching and Clinical Rounds

Description: Faculty-led bedside teaching in hospital wards focusing on patient interaction, ethical practice, and real-time evidence application.

Purpose:

- Provide exposure to patient behavior, history-taking, and physical exams.
- Emphasize dignity, consent, and empathy.

Learning Outcome: Applied clinical skills and patient rapport-building.

Simulation-Based Learning

Description: Use of mannequins, standardized patients, and virtual simulators for practicing clinical scenarios before patient interaction.

Purpose:

- Enhance clinical competence and decision-making in safe environments.
- Reduce medical errors.

Learning Outcome: Preparedness, confidence, and technical fluency.

Community-Based Patient Engagement

Description: Field visits and camps where students engage with patients in real community settings to understand health beliefs and barriers.

Purpose:

- Expand understanding of social determinants of health.
- Practice respectful interaction with diverse populations.

Learning Outcome: Cultural competence, adaptability, and public health orientation.

Prescription and Drug Evaluation Exercises

Description: Students prepare evidence-informed prescriptions, compare treatment guidelines, and understand drug interactions.

Purpose:

- Promote rational drug use and reduce medical errors.
- Connect pharmacology with patient-specific needs.

Learning Outcome: Safe prescribing habits and pharmacological acumen.

Project-Based Learning

Introduction to Project-Based Learning

Project-Based Learning (PjBL) is an active, student-centered instructional strategy that encourages learners to acquire deep knowledge and applied skills by investigating and responding to complex, real-world questions, challenges, or problems through extended projects.

At **Shobhit University, Gangoh**, PjBL is adopted across academic disciplines to promote experiential learning, interdisciplinary collaboration, and outcome-oriented education. The approach is particularly effective in developing 21st-century competencies such as problem-solving, innovation, teamwork, and self-regulation—essential for professional success in dynamic and complex work environments.

Pedagogical Framework and Philosophy

Theoretical Foundation

Project-Based Learning draws on **constructivist learning theory**, **experiential learning**, and **problem-based inquiry**. It is designed to create a meaningful learning context that:

- Places students in the role of active researchers or problem solvers.
- Involves real-world issues and tasks.
- Culminates in tangible deliverables such as models, presentations, papers, or solutions.
- Fosters long-term retention, critical thinking, and collaboration.

Objectives of PjBL at Shobhit University

- To promote interdisciplinary application of theoretical knowledge through practical projects.
- To develop communication, leadership, and time management skills.
- To foster innovation, design thinking, and problem-solving abilities.
- To enable independent learning and collaborative engagement.
- To instill a sense of social responsibility through community-relevant projects.

Implementation Strategy at Shobhit University

PjBL is embedded across programs in **Engineering, Agriculture, Business Studies, Pharmacy, Law, Life Sciences, Naturopathy, Education, and Humanities**, and tailored to suit discipline-specific outcomes.

Core Principles

- **Student-Centered Learning**: Students lead project design, execution, and reflection.
- **Inquiry-Based Investigation**: Projects are driven by open-ended questions or challenges.
- **Interdisciplinary Integration**: Projects often span multiple subjects or domains.
- **Publicly Presented Products**: Outcomes are demonstrated, defended, or published.
- **Authentic Assessment**: Evaluation based on both process and product.

3.2 Stakeholders Involved

- **Students**: Initiators, planners, and executors of the projects.
- **Faculty Mentors**: Guides who facilitate and evaluate the learning process.
- **Industry Experts**: Provide real-world insights, sponsorship, or mentorship.
- **Community Organizations**: Collaborate for socially-relevant project themes.
- **Institutional Support Teams**: Provide labs, equipment, funds, and documentation platforms.

Detailed Activities under Project-Based Learning

Below are key activities conducted under Project-Based Learning across schools and departments.

Interdisciplinary Projects

Description: Students from different departments collaborate on common themes like climate resilience, smart agriculture, or e-health solutions.

Purpose:

- Promote knowledge integration across domains.
- Solve complex, multifactorial problems collaboratively.

Learning Outcome: Systems thinking, inter-professional coordination, innovation.

Capstone Projects (Final Year Projects)

Description: Comprehensive, semester-long projects in final year UG/PG programs to apply cumulative knowledge on real-life problems.

Purpose:

- Simulate industry or academic research settings.
- Build portfolios for employment or higher studies.

Learning Outcome: Research, design, implementation, evaluation skills.

Community Engagement Projects

Description: Field-based projects addressing local needs in agriculture, education, health, and sanitation in nearby villages.

Purpose:

- Link academic inquiry with social impact.
- Encourage civic engagement and empathy.

Learning Outcome: Grassroots exposure, solution-building, cultural sensitivity.

Start-Up and Entrepreneurial Projects

Description: Students conceive business plans, prototypes, or service models under institutional incubation and guidance.

Purpose:

- Promote entrepreneurship and innovation.
- Link theory to viable business practices.

Learning Outcome: Risk analysis, financial planning, and product development.

Research-Based Mini Projects

Description: Students undertake literature reviews, field surveys, lab experiments, or data analysis on selected topics.

Purpose:

- Foster research aptitude and curiosity.
- Encourage early exposure to scientific methods.

Learning Outcome: Data literacy, statistical interpretation, scholarly writing.

Project-Based Internships

Description: Internships structured around problem-solving or system-improvement tasks in real organizations, NGOs, or industries.

Purpose:

- Transition from theoretical to applied learning.
- Network with professionals and gain field insights.

Learning Outcome: Industry-readiness, professional etiquette, field exposure.

Environmental and Sustainability Projects

Description: Projects on renewable energy, waste management, biodiversity conservation, water harvesting, etc.

Purpose:

- Align with SDGs and environmental stewardship.
- Promote ethical responsibility and sustainability.

Learning Outcome: Eco-consciousness, systems innovation, green skills.

Education-Based Learning Projects

Description: B.Ed./M.Ed. students develop innovative teaching-learning modules and implement them in schools during internships.

Purpose:

- Innovate pedagogy in real classrooms.
- Assess and redesign teaching methodologies.

Learning Outcome: Pedagogical skills, curriculum development, reflective teaching.

Project Exhibitions and Symposia

Description: Institutional-level platforms for students to showcase projects, receive feedback, and foster peer learning.

Purpose:

- Encourage public presentation and peer engagement.
- Build academic and professional confidence.

Learning Outcome: Communication skills, peer learning, public engagement.

Role Play Learning

Introduction to Role Play Learning

Role Play is a dynamic, experiential learning strategy where students assume specific characters or roles in simulated real-life scenarios to explore complex situations, interpersonal interactions, or professional practices. This method facilitates deeper understanding by engaging learners cognitively, emotionally, and socially, promoting empathy, critical thinking, communication skills, and ethical reasoning.

At **Shobhit University, Gangoh**, role play is integrated across disciplines such as Law, Management, Nursing, Education, Social Sciences, and Humanities to bridge theory with practice. It allows students to rehearse professional behaviours, resolve conflicts, and analyse diverse perspectives in a safe, controlled environment.

Pedagogical Framework and Philosophy

Theoretical Foundation

Role play learning is grounded in **social constructivism** and **experiential learning theories**, emphasizing active participation and reflection. It draws from **psychodrama** and **simulation-based education**, where learners "live" the content, making abstract concepts tangible through enactment.

Objectives of Role Play Learning at Shobhit University

- To develop communication, negotiation, and interpersonal skills.
- To cultivate empathy and ethical sensitivity by experiencing multiple viewpoints.
- To enhance problem-solving abilities in social, legal, medical, or managerial contexts.
- To encourage collaborative learning and team dynamics.
- To prepare students for real-world professional challenges through rehearsal and feedback.

Implementation Strategy at Shobhit University

Role play is implemented as a critical component of experiential learning, embedded in curriculum modules, workshops, and co-curricular activities. Faculty are trained to design realistic scenarios that reflect discipline-specific challenges and socio-cultural contexts.

Core Principles

- **Authenticity**: Scenarios mirror real-life complexities relevant to the discipline.
- **Student-Centered**: Participants actively shape the enactment and outcomes.
- **Facilitated Reflection**: Debriefing sessions for learning insights and emotional processing.
- **Safe Environment**: Respectful, supportive atmosphere promoting risk-taking without fear.
- **Diversity and Inclusion**: Scenarios incorporate varied cultural, social, and ethical perspectives.

Stakeholders

- **Students**: Active participants adopting roles.
- **Faculty Facilitators**: Scenario designers, moderators, and evaluators.
- **Peers**: Observers providing feedback.
- **Community and Industry Experts**: Occasionally involved for realism and evaluation.
- **Support Staff**: Assist with logistics, space, and resources.

Detailed Activities under Role Play Learning

The following activities are common across all departments and designed to foster professional skills, emotional intelligence, and ethical reasoning.

Mock Trials and Courtroom Simulations

Description: Law students simulate court proceedings including witness examination, argumentation, and judgment.

Purpose:

- Practice legal reasoning, advocacy, and procedural rules.
- Understand multiple perspectives—defence, prosecution, judge, jury.

Learning Outcome: Legal acumen, public speaking, ethical judgment.

Clinical Case Role Plays

Description: Nursing, medical, and paramedical students enact patient-care scenarios like diagnosis communication, counselling, or emergency response.

Purpose:

- Build clinical communication and empathy.
- Simulate high-pressure, ethical decision-making situations.

Learning Outcome: Patient-centered care, teamwork, ethical sensitivity.

Management Negotiation and Leadership Simulations

Description: Business students engage in role plays on conflict resolution, team leadership, or stakeholder negotiation.

Purpose:

- Develop persuasion, conflict management, and leadership skills.
- Experience corporate dynamics and decision consequences.

Learning Outcome: Negotiation tactics, emotional intelligence, strategic thinking.

Teacher-Student Classroom Scenarios

Description: Education students role play teacher-student interactions, classroom management, or parent-teacher meetings.

Purpose:

- Practice pedagogical approaches and classroom discipline.
- Understand learner diversity and behavioural challenges.

Learning Outcome: Classroom management, communication skills, empathy.

Social Work and Counselling Role Plays

Description: Students enact counselling sessions, community interventions, or conflict mediation.

Purpose:

- Build active listening, empathy, and problem-solving skills.
- Navigate complex social and psychological issues.

Learning Outcome: Counselling skills, cultural sensitivity, and ethical practice.

Feedback and Reflection Sessions

Description: Post-role plays debriefings where participants and observers discuss experiences, emotions, challenges, and lessons learned.

Purpose:

- Facilitate self-awareness and constructive critique.
- Reinforce behavioural change and cognitive learning.

Learning Outcome: Reflective practice, emotional intelligence, continuous improvement.

Humanities in Learning

Introduction to Humanities in Learning

The Humanities encompass disciplines that explore human culture, values, history, languages, philosophy, literature, ethics, and the arts. Humanities learning cultivates critical thinking, ethical reasoning, creativity, cultural awareness, and communication skills by examining the human experience in its diverse forms.

At **Shobhit University, Gangoh**, the integration of Humanities across all departments enhances students' holistic development, enabling them to appreciate societal complexities and contribute meaningfully as responsible citizens and professionals. Humanities education fosters empathy, intercultural understanding, and reflective inquiry—qualities essential in a globalized and rapidly evolving world.

Pedagogical Framework and Philosophy

Theoretical Foundation

Humanities learning is grounded in **interpretivism**, **critical theory**, and **constructivism**, emphasizing subjective understanding, cultural context, and the active construction of meaning. It promotes dialogic and reflective learning through analysis, discussion, and creative expression.

Objectives of Humanities in Learning at Shobhit University

- To develop critical and analytical thinking skills.
- To foster ethical awareness and moral reasoning.
- To enhance intercultural competence and global citizenship.
- To encourage creativity and aesthetic appreciation.
- To nurture communication, argumentation, and narrative skills.
- To build capacities for lifelong learning and social responsibility.

Implementation Strategy at Shobhit University

Humanities learning is embedded within the curriculum, co-curricular programs, and community engagements across disciplines, creating interdisciplinary linkages with sciences, management, law, health sciences, and technology.

Core Principles

- **Interdisciplinary**: Linking humanities with other fields for enriched perspectives.
- **Critical Engagement**: Encouraging questioning, debate, and diverse viewpoints.
- **Cultural Relevance**: Incorporating regional, national, and global cultural contexts.
- **Creative Expression**: Supporting arts, literature, drama, and media as learning tools.
- **Reflective Practice**: Promoting self-awareness and ethical deliberation.

Stakeholders

- **Students**: Active learners and creators of meaning.
- **Faculty**: Facilitators, mentors, and critical interlocutors.
- **Cultural Practitioners**: Artists, writers, and community leaders.
- **Administrative Units**: Organizers of events and resources.
- **Community and Industry Partners**: Collaborators in cultural and social projects.

Detailed Activities under Humanities in Learning

The following activities are common and versatile across departments, designed to cultivate humanistic values, creativity, and critical perspectives.

Debates

Description: Structured debates on ethical dilemmas, social issues, and cultural topics.

Purpose:

- Foster reasoning, public speaking, and respectful discourse.
- Explore multiple sides of complex issues.

Learning Outcome: Argumentation skills, empathy, and intellectual humility.

Creative Writing and Storytelling

Description: Writing poetry, short stories, essays, and personal narratives.

Purpose:

- Encourage creative expression and imagination.
- Explore personal and collective identities.

Learning Outcome: Communication skills, emotional intelligence, and cultural awareness.

Arts and Cultural Workshops

Description: Engagement in music, visual arts, theatre, dance, and crafts.

Purpose:

- Develop aesthetic appreciation and creative skills.
- Connect cultural heritage with contemporary expressions.

Learning Outcome: Creativity, cultural pride, and collaborative skills.

Yoga & Value Education

Description: Involves practice of yoga postures, breathing exercises, meditation, and discussions on core human values such as empathy, honesty, responsibility, and respect.

Purpose:

- Promote physical, mental, and emotional well-being.
- Instill ethical and moral values rooted in Indian tradition and universal human principles.
- Foster self-awareness, inner peace, and disciplined living.

Learning Outcome: Mindfulness, emotional balance, self-discipline, and a strong moral compass.


SHOBHIT UNIVERSITY
तेजस्वि नावधीतमस्तु