Evaluating Sustainability Literacy at Centurion University: A Holistic Approach

Centurion University is progressively integrating sustainability into its curricula, campus operations, and community outreach efforts, guided by national policies such as the National Education Policy (NEP) 2020 and the UN's Higher Education Sustainability Initiative (HESI). At Centurion University, sustainability literacy encompasses students' knowledge, skills, and attitudes toward environmental, social, and economic dimensions of sustainability, assessed through a blend of formal evaluations, experiential learning, and practical hands-on tools. The National Institutional Ranking Framework (NIRF) 2025 incorporates SDG metrics, placing greater emphasis on quantitative indicators related to green campus practices and student outcomes. Although precise literacy rates are typically maintained internally by institutions, surveys indicate that 60-70% of students in leading programs exhibit basic proficiency in SDG awareness, though challenges persist in areas like social equity.

Key Evaluation Methods across Centurion University campuses:

Centurion University evaluates students' ability to learn and retain key concepts of sustainability through several methods integrated into its academic framework and co-curricular activities:

- **Curriculum Integration**: SDG-aligned courses with exams and assignments testing concepts like climate action, Renewable energy, Gender Equality, Yoga (SDG 7, SDG 13).
- **Project-Based Learning:** Centurion emphasizes experiential learning, on Projects, internships, and field trips assessed via portfolios and peer review, where students work on real-world projects related to sustainability, such as renewable energy initiatives for sustainable agriculture practices.
- **Campus-Wide Surveys**: Annual assessments measuring knowledge gains, often linked to NIRF SDG reporting.

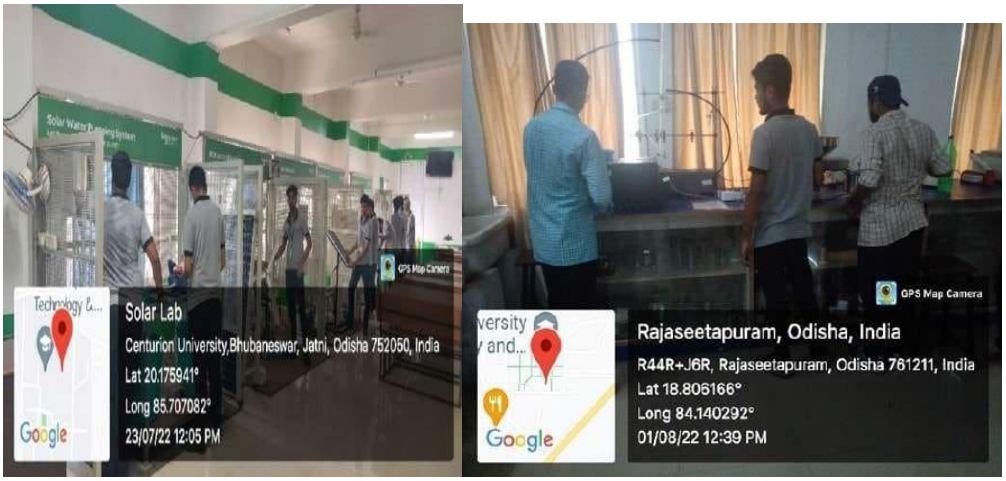


Fig. 1 Students working in Solar Lab and Food Processing Lab

- **Capstone and Research Projects:** For advanced students, capstone projects and research papers are vital in evaluating the long-term retention of sustainability concepts. These projects involve comprehensive research, problem identification, and offering innovative solutions related to sustainable development.

- **Community Engagement and Volunteering**: Through partnerships with NGOs and social enterprises, students participate in community projects that focus on sustainability. Their performance and reflection reports evaluate their ability to contribute to such projects and their understanding of sustainability in real-world applications.

- **Community Impact**: Volunteering evaluated through impact reports, fostering retention.

Fig 2. Participating @ Cyber Volunteer Program by Odisha Police

Fig 3. Participating in Free Dental Camp in association with HI-Tech

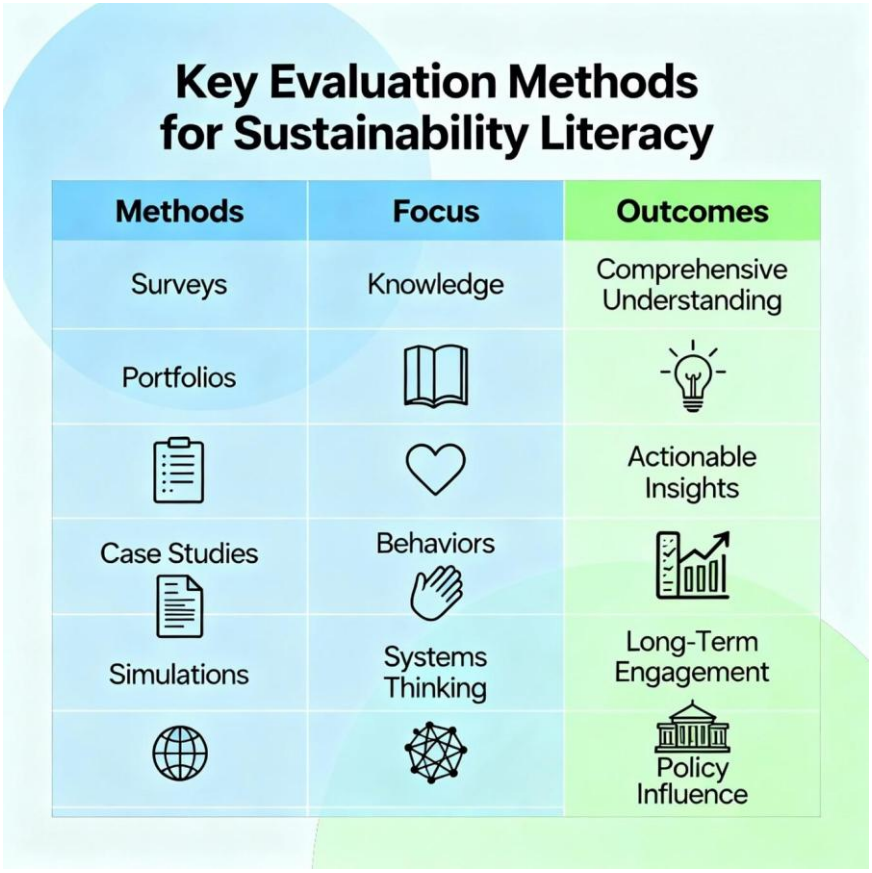
Workshops and Conferences: The university organizes workshops and sustainability conferences that allow students to present and discuss sustainability challenges and solutions. Participation in these forums and students' ability to engage with the material critically is another evaluation method.

Fig 4. Students Participating @ Big Idea Presentation

Fig 5. Participation @ Odisha wildlife Conclave - 2024

These multifaceted evaluations ensure that students not only learn sustainability principles but also retain and apply them effectively in their careers and communities.

Sustainability Literacy Methods, Measurement, and Outcomes



Key Evaluation Methods	Literacy Measurement Focus	Notable Data/Outcomes (2024)
Pre/post quizzes in sustainability elective Courses; capstone projects on renewable energy	Environmental impact (e.g., carbon footprint analysis); 55 % score.	75% student proficiency in SDG 7 and SDG 13; top in environmental study.
Interdisciplinary projects via Green Campus Initiative; reflection journals; NIRF-aligned surveys.	Social equity and governance; employability outcomes.	70% students report improved retention via projects.
Hackathons and labs on sustainable tech; rubrics for	Economic sustainability; knowledge exchange.	65% literacy gain post-courses as per examination results.

innovation; ERP-aligned assessments.		
Workshops and field audits; portfolio assessments; Google Sheet feedback analysis	Biodiversity and resource management.	Environmental analysis and student's involvement impact; 1,200+ students assessed annually.
Community outreach programs; exams on courses related to SDGs; peer-reviewed theses.	Climate resilience; interdisciplinary skills.	68% average literacy; strong in employability
Research theses on eco-innovation; pre-enrollment baselines;	Environmental education	80% PhD students demonstrate advanced literacy.
Green audits and certifications; quizzes in core courses; impact portfolios.	Campus operations and social impact.	Environmental impact analysis on sustainability; 72% student awareness via surveys.
Volunteering metrics; e-portfolios; NIRF SDG data collection.	Health & wellbeing; equality (areas for growth).	60% proficiency in knowledge exchange.
Engineering-focused simulations; annual literacy tests through questionaries' community feedback.	Technology for SDGs; urban sustainability.	65% retention through hands-on practice labs.

Notable Data Outcomes 2024