Table 5.5.1 B:I Innovative Practices

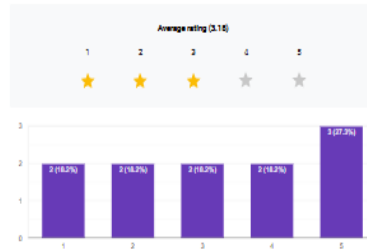| SN	Name of the Faculty	Subject	Innovative Practice
1.	Prof. P.R. Pohare	IWT	Designing Quizzes

The work available for peer review and critique

- The Google Form link has been provided on the college website, along with the list of innovative teaching practices.
- Academic peers can access the link to review and provide feedback on the techniques used.
- The feedback collected was analyzed, and necessary improvements were incorporated accordingly.

- **Responses samples**

11 responses

Average rating (3.18)

	1	2	3	4	5
	⭐	⭐	⭐	⭐	⭐

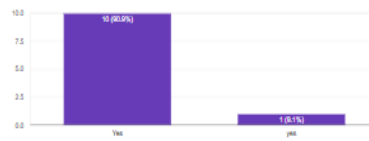Bar chart:
- 1: 2 (18.2%)
- 2: 2 (18.2%)
- 3: 2 (18.2%)
- 4: 2 (18.2%)
- 5: 3 (27.3%)

Comments & Suggestions

Are the quiz helpful and aligned with the learning objectives?

Copy chart

11 responses

- Yes: 10 (90.9%)
- yes: 1 (9.1%)

Did the quiz effectively reinforce theoretical concepts, or do you feel it lacked sufficient practical application and real-world scenarios?

Copy chart

11 responses

- No: 2 (18.2%)
- No , it is helpful to us: 1 (9.1%)
- Yes: 1 (9.1%)
- Yes: 6 (54.5%)
- web tech: 1 (9.1%)
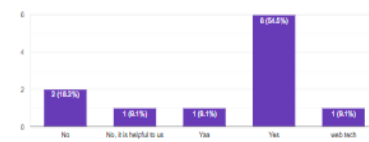
Are the engaging ,challenging and well-balanced in terms of difficulty (easy, moderate, hard)?

Copy chart

11 responses

- Moderate: 7 (63.6%)
- Yes: 3 (27.3%)
- no: 1 (9.1%)

Peer Review and Critiques of Innovative Teaching Methods is tabulated in table 5.5.1-c
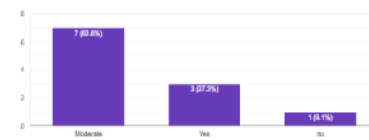
Subject	Teaching Method	Peer Review Feedback	Actions taken/Planed
Web Technology	Quizz	Engaging, but requires more variety in question types (MCQs, coding challenges, etc.)	● Incorporate coding-based quizzes along with MCQs.
		Effective for reinforcing concepts but lacks practical application.	● Include scenario-based questions to test practical skills.
		Quizzes are helpful but need better alignment with course objectives.	● Map quizzes to specific learning outcomes.
		Feedback is immediate but lacks detailed explanations.	● Add explanations for correct and incorrect answers.

● **Action Taken /Planned Samples**

1. Conceptual Clarity (25%)	2. Depth & Difficulty Balance (25%)
● Developed quizzes focusing on fundamental concepts of each topic to ensure a solid foundational understanding. ● Implemented pre-lecture quizzes to gauge prior knowledge and identify areas requiring emphasis. ● Utilized visual aids and interactive diagrams in quiz questions to enhance comprehension. ● Introduce real-time feedback systems that provide explanations for incorrect answers. ● Integrate gamified quizzes with immediate scoring and progress tracking to enhance engagement.	● Developed quizzes focusing on fundamental concepts of each topic to ensure a solid foundational understanding. ● Implemented pre-lecture quizzes to gauge prior knowledge and identify areas requiring emphasis. ● Utilized visual aids and interactive diagrams in quiz questions to enhance comprehension. ● Introduce real-time feedback systems that provide explanations for incorrect answers. ● Integrate gamified quizzes with immediate scoring and progress tracking to enhance engagement.

The work reproduced and developed further by other scholar:

Title of the work	Faculty Conducting the Original Work	Name of the faculty producing/developing the Work	Actions for Reproduction/Development
Quiz	Ms. P. R. Pohare	Ms. B. S. Nawale	● Creating centralized quiz repositories for easy access and adaptation. ● Implementing adaptive quizzes that adjust difficulty based on learner performance.

Statement of clear goals, use of appropriate methods, significance of results, effective Presentation and reflective critique

The innovative practices followed for the subject Operating System is as follows :

(Samples of Innovative practices)

- Department: Computer Science & Engineering
- Course Title & Course Code: **Introduction to Web technology** (1CS300VS)
- Class: First year Semester: First
- Name of the Course Teacher: **Ms Pooja R. Pohare**
- Title of the innovative practice: Quizz

1. Objectives/Goals of the practice:

- To promote deep understanding of core Web Technology concepts
- To enhance student engagement, attention, and active participation
- To reinforce learning through continuous, low-stakes assessments
- To make learning HTML, CSS, and JavaScript more fun and interactive
- To provide immediate feedback to strengthen concept retention
- To improve exam preparedness and self-confidence through regular quizzes

2. Use of Appropriate Methods

To achieve the stated goals, the following methods were employed:

- Unit-wise quizzes were developed, covering each topic from HTML, CSS, JavaScript, and responsive design.
- Live and timed quizzes using platforms like Quizizz and Google Forms made the sessions engaging and dynamic.
- Quiz questions included code-based puzzles, identify-the-error tasks, and drag-and-drop matching to simulate practical understanding.
- Topic-based quizzes were conducted after sub-topics like semantic HTML, CSS layout models, DOM manipulation, and media queries.
- Group quiz rounds and peer challenges encouraged collaborative and competitive learning.
- After each quiz, discussion sessions clarified misconceptions and explained answers to enhance understanding.

3. Significance of Results

The results of the Innovative Practice Quiz demonstrate:

- Students showed improved understanding of Web Technology topics such as:
1. HTML structure and tags
2. CSS layout techniques (Flexbox, Grid)
3. JavaScript basics and DOM manipulation
- Students became more confident in writing and understanding code due to repeated exposure to real-world coding scenarios in quizzes.
- Classroom participation increased, especially during team quizzes and game-based assessments.
- Students frequently accessed shared quiz links for revision, demonstrating increased ownership of learning.
- Internal assessment results improved, with a notable rise in quiz participation translating to better academic performance

4. Effective Presentation

The quiz was presented through a user-friendly and visually appealing interface that:

- Quizzes were directly mapped to Web Technology units, ensuring alignment with course outcomes.
- Use of color-coded scoreboards, timers added excitement and urgency.
- Progressive difficulty was maintained: easier questions at the start, followed by more challenging ones.
- Each quiz was followed by a brief summary to recap core concepts and provide references to learning materials.

5. Reflective Critique

While the Innovative Practice Quiz proved effective in promoting engagement and understanding, several areas for improvement were identified:

- Incorporating more collaborative features such as peer discussions and team-based quizzes.
- Refining the adaptive learning mechanism to better tailor questions to individual learning styles.
- Expanding the quiz to cover emerging topics in web technology.

The overall experience demonstrated the potential of innovative assessment methods to enhance learning outcomes in the Web Technology subject.

POs Mapped: PO1, PO2, PO5,PO9,PO10,and PO12

Evidences of Success

- Higher engagement during lectures, particularly during quiz-based recaps and challenges.
- Improved quiz and assessment scores, especially in topics like Flexbox, JavaScript logic, and DOM handling.
- Positive student feedback indicated that quizzes were helpful in understanding and retaining concepts.
- Quizzes became a revision go-to tool, with many students revisiting quizzes independently before tests.

Challenges Faced During Implementation

- Time limitations made it difficult to conduct deep discussions after every quiz round.
- Internet or platform issues sometimes disrupted live quiz flow or student access.
- A few students began to rely too much on quiz hints, requiring reminders to study foundational material as well.
- Creating quality, non-repetitive, and error-free questions across all units took significant preparation time.

Quiz Link:

https://docs.google.com/forms/d/17FKtirjAnFqT678l2WGfz_049hFY6qtCS5GWuIQaB1c/edit