# Quiz Activity

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### **What is a Quiz?**

A quiz is a flexible, interactive and efficient assessment activity designed to test student knowledge, skills or comprehension on a specific topic. A quiz is much shorter than an exam, having a limited number of questions that do not take much time to answer. It has little impact on the final course grade, because it usually has a low weight of 5–10%. Several types of questions can be asked in a quiz, including multiple-choice, true/false, matching, or even short-answer questions. A quiz can be graded rapidly, sometimes even during class with students. A quiz can be administered in paper form, online or even with certain software apps.

### **Quiz Benefits**

* Dynamic experience that allows for active engagement of students
* Rapidly completed and graded, often with immediate feedback
* Motivating, since it can be administered in a fun or competitive way
* Flexible, since it can be adapted to almost any field or context
* Formative or summative assessment
* Can be adapted to different levels
* Offers measurable results to identify gaps and areas which need improvement
* Valued by students as a learning tool (see Raftery (2023) text)

### **Quiz Objectives**

The objectives of a quiz are as follows (variable depending on its context and use).

|  |  |
| --- | --- |
| Assess knowledge | Make learning fun and engaging |
| Reinforce learning | Validate skills |
| Identify gaps | Stimulate critical reflection |
| Motivate participants | Encourage revision |
| Track progress | Facilitate information retention |

### **Why Does a Quiz Encourage Academic Integrity?**

Here are some reasons why a quiz can encourage academic integrity:

* Regular and constant evaluation, which reduces the temptation to cheat by making assessments more frequent and less concentrated into one critical moment
* Diversity of questions, which makes cheating more difficult
* Personalized or random questions for each student
* Immediate feedback that allows students to see where they were mistaken and correct their errors, which encourages them to adopt an honest and proactive learning approach (see Woldai, Henne, Fersch, Kamath Barkur et Schacht (2023) text)
* Reduction of pressure, since regular quizzes spread workload and assessments over a longer period
* Focus on understanding, since well-designed quizzes are designed to test comprehension and ability to apply concepts
* Self-assessment and self-teaching by students, who develop better awareness of their own progress and gaps

### **Why is artificial Intelligence Less Helpful During a Quiz?**

* Limited time, which forces students to work quickly, thereby reducing time available to consult external sources or collaborate with others
* Absence of AI contextual comprehension, which requires students to modify any AI-generated text
* Time gap between assessments, especially when there is a series of quizzes in which each builds on preceding quizzes, since students using AI will not have learned quiz content
* Rusinovich et Rusinovich (2024) suggest integrating study of quiz content before allowing students to take the quiz
* Chahna (2023) suggests using images, videos or charts in the questions, which will make using artificial intelligence more difficult.

### **Generic Examples of Quiz Questions that Encourage Reflection**

Questions are divided into two phases: the first where the correct answer is requested, and the second where the correct response must be justified.

Examples of questions:

In Chemistry: Which gas is primarily responsible for the greenhouse effect?

a) Oxygen

b) Methane

c) **Carbon dioxide**

d) Nitrogen

Why is this gas primarily responsible for the greenhouse effect?

In Biology: What is the main function of red blood cells?
a) Produce antibodies
b) **Carry oxygen**
c) Fight infection
d) Regulate body temperature
What would be the consequences of altering this function?

In Art: Who painted The Starry Night?

a) Salvador Dalí

b) **Vincent van Gogh**

c) Claude Monet

d) Pablo Picasso

How is this work representative of the unique style of this artist?

In Education: What is the main goal of differentiated instruction?

a) Assess students in an identical way

b) **Adapt teaching to individual student needs**

c) Enhance learning by repetition

d) Use a single type of teaching method

How does differentiated instruction contribute to improving learning?

In Nursing: What is the first step in the nursing process?

a) Diagnosis

b) Planning

c) Assessment

d) **Data collection**

Explain why this step is crucial in the nursing process and how it influences the other steps.

### **How to Grade a Quiz**

In the previous sample questions, students receive 0.25 points for the correct answer and 0.75 points for justifying the correct answer. This way of grading answers encourages understanding of a concept or phenomenon, rather than just encouraging memorization of the correct answer without understanding.

### **Resources**

Chahna, G. (2023). On ChatGPT: what promise remains for multiple choice assessment? *Journal of Learning Development in Higher Education* (27). doi: 10.47408/jldhe.vi27.1009Repéré à <http://dx.doi.org/10.47408/jldhe.vi27.1009>

Raftery, D. (2023). Will ChatGPT pass the online quizzes? Adapting an assessment strategy in the age of generative AI. *Irish Journal of Technology Enhanced Learning, 7*. <http://dx.doi.org/10.22554/ijtel.v7i1.114>

Rusinovich, Y. and Rusinovich, V. (2024). Prevention of Artificial Intelligence (AI) Misuse in Online Medical Education. *ML in Health Science, 1*(1). doi: <https://doi.org/10.62487/8ny3zh09>

Woldai, B., Henne, S., Fersch, M.-L., Kamath Barkur, S. et Schacht, S. (2023). *A Qualitative Evaluation of an AI-Supported Quiz Application to Assess Learning Progress.* Communication presented at The Paris Conference on Education 2023 IAFOR, Paris. Repéré à <https://papers.iafor.org/wp-content/uploads/papers/pce2023/PCE2023_70567.pdf>