

## Surprise Test as an Informal Formative Assessment Tool for Improving Student Performance

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**Abstract:** Since Anatomy is a volatile subject, for retention it requires repeated reading. As a result of its volatility, about a quarter of our students fail in the first attempt in the final examinations at the end of the first year. Various methods like internal assessment (mandatory), Problem based learning (PBL), Self directed Learning (SDL) etc. have been tried but they have failed to make an impact on their performance. To assess the effectiveness of Surprise test as an informal formative assessment method which will help improve the pass percentage in Anatomy during the Final examinations. The objectives were to correlate the performance of students in the first internal assessment in both theory & practical with that of the surprise test. Improving student performance using "Surprise test" as an Informal formative assessment method, after a particular region of the human anatomy is taught was being tried. After completion of the study of a region, surprise tests were conducted after informing them in advance, followed by internal assessment test (theory & practical). Results of both (surprise test & internal assessment) were compared. Feedback about the Surprise tests was taken from the students in the form of a questionnaire with three closed ended & two open ended questions. After the first internal assessment there was a marked improvement in performance in the theory while there was a slight improvement in the practical marks.

**Key words:** Surprise test, Informal assessment, internal assessment, student performance

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### I. Introduction:

Since Anatomy is a volatile subject, for retention it requires repeated reading. As a result of its volatility, about a quarter of our students fail in the first attempt in the final examinations at the end of the first year.

Various methods like internal assessment (mandatory), Problem based learning (PBL), Self directed Learning (SDL) etc. have been tried but they have failed to make an impact on their performance. Improving student performance using "Surprise test" as an Informal formative assessment method, after a particular region of the human anatomy is taught, is being tried.

### II. Objective:

**A.** To assess the effectiveness of Surprise test as an informal formative assessment method which will help improve the pass percentage in Anatomy during the Final examinations.

**B.** To correlate the performance of students in the first internal assessment in both theory & practical with that of the surprise test.

### III. Methodology:

The study was done at Department of Anatomy, DR B R Ambedkar Medical College, Bengaluru. The staff members of the dept. were sensitized about the study. After completion of the study of a region, surprise tests were conducted after informing them in advance, first dissection practical & later theory. This was done after completion of teaching of both upper limb & lower limb respectively. This was followed by internal assessment test (theory & practical). The results of both surprise tests (upper limb & lower limb) were combined & average of the two calculated since the internal assessment was for both upper & lower limbs together. The students were grouped as (1) below average (<50%), (2) average (50-65%), & (3) above average (>65%) based on their performance. Results of both (surprise test & internal assessment) were compared. Feedback about the Surprise tests was taken from the students in the form of a questionnaire with three closed ended & two open ended questions. The open ended questions were (1) What was the good aspect of the Surprise test? & (2) What I didn't like about the Surprise test. Statistical analysis of the results was done.

#### IV. Observations:

After the first internal assessment there was a marked improvement in performance in the theory while there was a slight improvement in the practical marks. The results are as follows.

Comparison of performance of students in Surprise test and First Internal Assessment

TEST	SCORE	SURPRISE TEST NUMBER (%)	INTERNAL ASSESSMENT NUMBER (%)	Z SCORE	P VALUE
THEORY	< AVERAGE	61	12	7.3579	<0.001
	AVERAGE	24	32	1.2787	>0.05
	>AVERAGE	08	49	6.5209	<0.001
PRACTICAL	< AVERAGE	28	5	4.4145	<0.001
	AVERAGE	19	21	0.3569	>0.05
	>AVERAGE	46	67	3.153	<0.001

**Inference:** there is a significant increase in proportion of students scoring above average scores in the first internal assessment in both theory and practical assessment examinations and significant reduction in poor performers.

Feedback questionnaire with responses

SL NO	QUESTION	STRONGLY AGREE	AGREE	UNCERTAIN	DISAGREE	STRONGLY DISAGREE
1	SURPRISE TESTS ARE HELPFUL	5	51	5	14	6
2	SURPRISE TESTS IMPROVE INTERNAL ASSESSMENT PERFORMANCE	15	34	21	8	4
3	I NEED MORE SUCH SURPRISE TESTS IN FUTURE	9	22	30	10	12
4	WHAT WAS THE GOOD ASPECT OF THE SURPRISE TEST?	THE TEST MADE THEM REALIZE THEIR STATE OF PREPAREDNESS; MOTIVATED THEM; HELPED THEM IDENTIFY THEIR WEAK AREAS; GAVE THEM AN IDEA ABOUT THE NATURE OF QUESTIONS ASKED; MADE THEM STUDY ANATOMY DAILY, ETC ETC				
5	WHAT I DIDN'T LIKE ABOUT THE SURPRISE TEST	SURPRISE ELEMENT; THEY WANTED PRIOR INTIMATION; DIDN'T WANT THE TEST AT ALL.				

#### V. Discussion

Informal assessments can provide teachers with a wealth of useful information that will help guide their instruction on a daily basis. **Strengths:** (A). Does not require planning & is inexpensive; (B). they are less stressful for students because they often do not realize they are undergoing an assessment; (C). we can receive data immediately and then plan accordingly, unlike formal assessment which is time consuming. If a student finds testing stressful and does not perform to the best of their ability on a written, formal assessment, an informal assessment may give you the most accurate measure of a student's true ability. e.g. interviews, observations and rating scales, oral discussion or question/answer period, etc. **Weaknesses:** One weakness of an informal assessment is any hidden prejudices or stereotypes within the person administering the assessment that can influence judgment.

#### VI. Conclusion

To paint a true and accurate picture of our students, we need to use both types; Formal assessments, to assess the overall achievement of the student; an informal assessment to help drive instruction on a daily basis. Familiarity with both and adapting them to meet the ever-changing needs of our students is always welcome.

#### References

- [1]. A guide to informal assessments, [www.brighthubeducation.com](http://www.brighthubeducation.com)
- [2]. Formal vs. Informal Assessments; Here, an overview of the two general categories of assessments By [Brenda Weaver](#)

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