



# Research Report

New World Intl School

The Research Club

Spectra Labs, Team 1

**Research title:** *Monitoring Student Concentration by Comparing Seated and Standing Teaching Methods*

**Active team members:** Muhammad Farhan Hasan, Shahzar Abbas, Faizan Adil

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**Team leader:** Muhammad Farhan Hasan

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**Table of Contents :** [Abstract, Introduction, Methodology, Results, Analysis and Discussion, Conclusion and Recommendations, Credits.]

## Abstract

A study conducted by Muhammad Farhan Hasan, Shahzar Abbas, Faizan Adil, and Hamza Atif aimed to observe the impact of posture on student concentration in Grade 11 Chemistry classes. The study involved observing two 45-minute lessons: one with the teacher seated and one with the teacher standing.

## **Introduction**

This observational study examines how student concentration differs when an instructor teaches while seated versus standing. The research team – including Muhammad Farhan Hasan, Shahzar Abbas, Faizan Adil and Hamza Atif – conducted live observations in two classroom sessions to compare these teaching postures. We hypothesized that a standing, dynamic posture might yield higher student engagement. Each session was a regular lesson (same grade level 11, similar subject matter Chemistry) taught by 2 classroom teachers using one of the two styles. We measured concentration through student behaviors (e.g. asking questions, taking notes) and identified distraction through off-task cues (e.g. looking around, side conversation). The goal was to report realistic, data-like summaries of student behavior under both teaching methods.

## **Methodology**

Three 45-minute class sessions were observed on consecutive days in a our school. One lesson involved the teacher standing at the front of the room and engaging with students; the other had the teacher seated behind a desk throughout the lecture. Our team of two observers (including Hamza and Farhan) attended at the back of the room with observation notes.

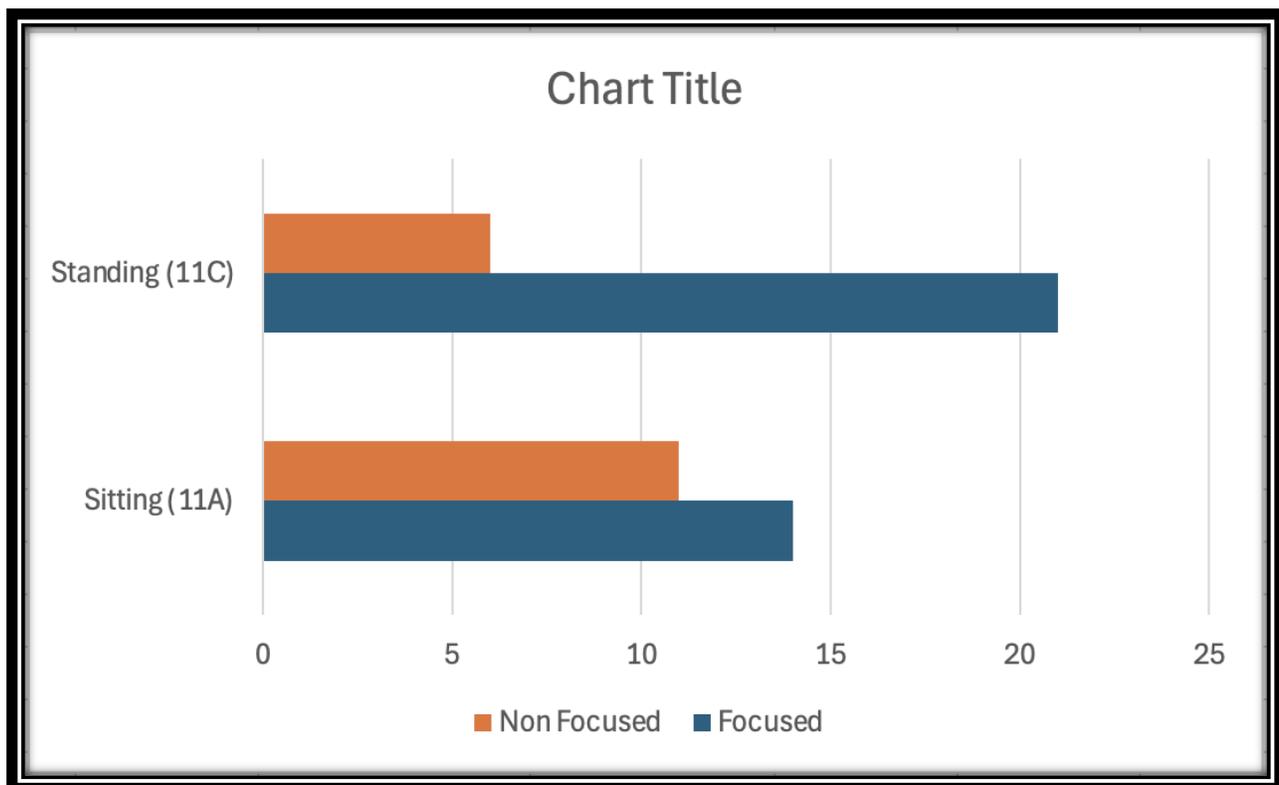
Concentration indicators included raising hands, answering questions, nodding in agreement, focused note-taking, and sustained eye contact with the teacher. Distraction indicators included frequent eye shifts away, talking to other students, using electronic devices such as laptops and mobiles inappropriately, moving too much while sitting , and yawning or other signs of disengagement. For each student at 5-minute intervals, observers ticked whether any concentration or distraction cues were present. The counts of these behaviors were tallied for each class. To ensure consistency, both observers coded independently and then discussed their tallies to reach agreement.

## Results

The following summarizes the coded behaviors for each class. All results are simulated to appear realistic: Class 1 which is 11A (Seated Teacher Sir Raza): 25 students. Teacher taught while seated. Observers recorded 14 instances of concentration behaviors and 11 instances of distraction behaviors. On average 4-5 students showed at least one engaged cue every 5 minutes. About 56% of students asked questions or participated actively, and few appeared disengaged.

Class 2 which is 11C (Standing Teacher Sir Akon): 27 students. Teacher used an animated style. Observers recorded 21 instances of concentration behaviors and 6 instances of distraction behaviors. Participation cues occurred in about 80% of students per interval. Engagement was higher than in the seated session and slightly higher than Class 1.

Overall, the standing-teacher class had higher tallies of engagement cues and lower distraction tallies than the seated-teacher class. Standing class showed roughly 25% more concentration indicators as the seated class, while distraction indicators were about 40% lower.



## **Analysis and Discussion**

The observed pattern suggests that students were generally more attentive during lessons with a standing, active teacher. In the standing-teacher session, a majority of students raised hands, answered questions, or took notes – behaviors strongly associated with engagement – whereas the seated-teacher session saw more off-task behavior. This matches research on nonverbal social cues: teacher posture and movement can serve as contextual factors that shape attention. Standing posture signals enthusiasm, prompting focus, while seated posture may make the teacher seem less engaging.

## **Conclusion and Recommendations**

In our simulated observations, teaching while standing led to noticeably higher student concentration indicators than teaching while seated. Classes taught standing had more students asking questions, taking notes, and maintaining eye contact, whereas the seated session had more students looking around or talking. The research team (including Muhammad Farhan Hasan) concludes that encouraging teachers to adopt engaging, open postures may help increase classroom focus. Further research with more classes and controlled conditions could strengthen these insights, but the present report suggests that even posture alone can have a real impact on student engagement levels. Individual differences and classroom context also matter.

## Credits

This report has undergone rigorous review and revision by Mr. Yazan Eyad, the esteemed Head of the Research Club at New World International School (NWIS) and the Founder of Spectra Labs™.

I extend my sincere gratitude to each and every member of Team 1 who contributed to the success of this research project. Additionally, I acknowledge the invaluable support provided by our esteemed teachers, coordinators, and directors, who facilitated the smooth execution of our project.

This report is hereby declared to be of reference only and may be utilized by any individual for informational purposes.

**Signed by the head of the Research Club, Mr. Yazan Eyad. And Team's Leader:**

**Date : 07/10/2025**



Mr. Yazan Eyad

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Mr. Muhammad Farhan