

NOTE-TAKING: WHAT DO INTERNATIONAL STUDENTS REPORT ABOUT THEIR EXPERIENCES WITH CORNELL NOTES AND ITS IMPACT IN LESSONS?

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Introduction

In the 21st century, students learn in increasingly sophisticated digital environments while facing high academic expectations. Despite the growing digital dependence, educators continue to require effective note-taking. However, students are rarely explicitly taught how to take notes, what to record, or how to use those records for self-guided learning. This is especially true in international schools where learners navigate varied curricula and work with teachers from diverse global backgrounds. Often, teachers themselves never received formal note-taking instruction, developing their methods independently. The Cornell Notes system—with its clear division of the page into key sections—offers a versatile framework that suits almost every learner, whether using pen and paper or digital tablets.

Background of the Problem

Universal American School (UAS) is a private international school in Dubai offering IB/American curricula to roughly 1300 students from PreK to Grade 12. Although some teachers had experience with various note-taking systems embedded in their lessons, there was no consistent, school-wide approach to recording lesson content or research findings. Amid a holistic school-improvement program, the whole-school librarian identified an opportunity to introduce a systematic note-taking strategy using Cornell Notes. In collaboration with school leadership, the librarian spearheaded a plan to provide upper-elementary and secondary students with adaptable, transdisciplinary, lifelong note-taking skills.

Literature Review

Research dating back to the 1980s shows that note-taking greatly benefits content retention, revision, test performance, and synthesis of learning. While technological advancements have introduced new ways of recording information, studies (Fried, 2008; Schneider, 2018) confirm that the physical act of writing remains a powerful learning tool. The Cornell Notes method, developed in the 1950s, divides the page into specific sections that help learners record main ideas, identify cues, and craft summaries. Hendel (2024) and Pauk & Owens (2014) note that this active-learning strategy strengthens the synthesis of information by organizing content effectively.

Further, research has demonstrated that structured note-taking benefits learners of all abilities, with significant cognitive gains—better memory, improved retention, and enhanced test performance—compared to passive study methods (Jean E. Faber et al., 2000; Stacy & Cain, 2015). Several studies (Donohoo, 2010; Chang & Ku, 2014) indicate that students who struggle academically benefit most from explicit note-taking instruction. In providing a framework that clearly delineates what to record, note-taking helps learners focus on essential information (Kobayashi, 2006).

However, while the literature overwhelmingly supports note-taking, most studies target specific student groups or use meta-analytical designs rather than address the unique challenges of international schools. International learners are often plurilingual, multinational, and exposed to multiple curricula, yet few studies document the systematic rollout of note-taking practices in such environments. This gap highlights the necessity of action research in international school settings.

Methods

An action research project was conducted to evaluate student perceptions and usage of the Cornell Notes system across different grade levels. The research focused on answering three primary questions:

1. Do students know how to take notes?
2. Do students know what to write down?
3. Can students independently apply note-taking skills across various subjects?

Intervention and Lesson Design

The librarian designed three differentiated lessons on the Cornell Notes system tailored to different grade levels. These lessons were first delivered to students in grades 4 – 8 during the first two months of the academic year as part of IB PYP units or within a middle school academic support class. In February, similar lessons were adapted and delivered to IB and AP students in grades 11 – 12. For middle and high school, an adapted Cornell Notes graphic organizer was printed in all exercise books to support note-taking in every subject, while elementary students were taught how to draw the organizer in their notebooks.

Data Collection and Participants

Between 248 and 322 students (ages 9 – 17) participated in the study. Data were gathered using qualitative Likert-scale questionnaires administered twice: once before any formal note-taking instruction and again six months later to measure changes in perceived note-taking ability, confidence, and understanding of key content. Questions focused on what students recorded and how effectively they used Cornell Notes across subjects.

Data Analysis

A comparative before/after analysis was conducted using self-reported student data. Although data collection was ongoing at the time of analysis, the initial findings provided a benchmark for students' note-taking competencies and guided further refinement of the system.

Results

The self-reported data revealed measurable improvements in student attitudes and behaviours regarding note-taking:

- **Note-Taking Competency:** Prior to the intervention, students' self-assessed competence was moderate (see **Figure 1**). Six months later, overall competency increased by approximately (4%), and their confidence in note-taking rose by about (7%) (see **Figure 2**). Additionally, fewer students expressed uncertainty about how to take notes.
- **Content Selection:** Students initially experienced difficulties determining what to record during lectures (see **Figure 3**). Post-instruction, there was a (6%) improvement in students knowing what to write down (see **Figure 4**), with a (9%) boost in those feeling highly confident about their note-taking decisions (see **Figure 5**). Anecdotally, increased in-class participation—a rise in note-based questions—was observed, which helped students capture lesson details more accurately.
- **Cross-Subject Application:** Despite overall gains, many students reported using Cornell Notes “most of the time” rather than consistently across all subjects (see **Figure 6**). Some learners admitted that they struggled to apply the method in fast-paced classes and in subjects such as Math and Physical Education. While the system's structured approach improved organization and recall, many reported that they deployed the technique in only about half of their classes.

Figure 1
October Benchmark for student-reported note-taking competency

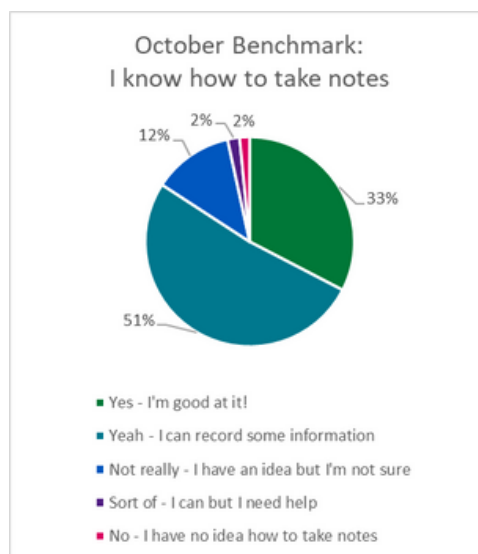


Figure 2
May update for student-reported note-taking competency:

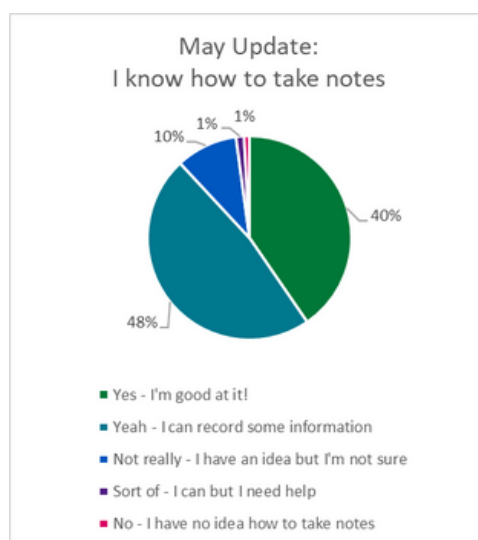


Figure 2
October Benchmark: Students' self-reporting of knowing what they should write down

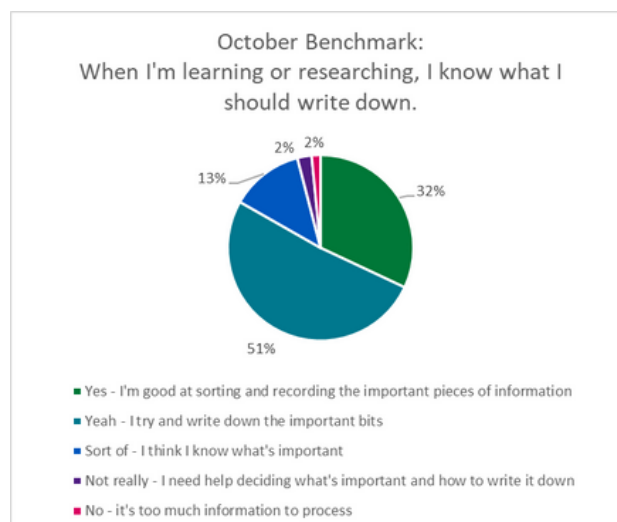


Figure 4
May Update for students' self-reporting of knowing what they should write down

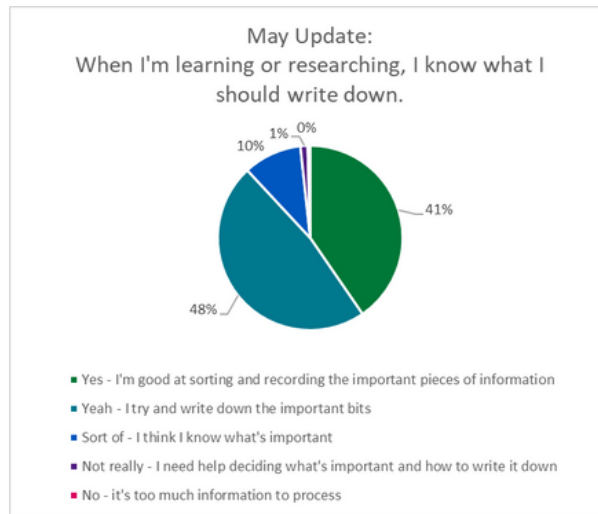
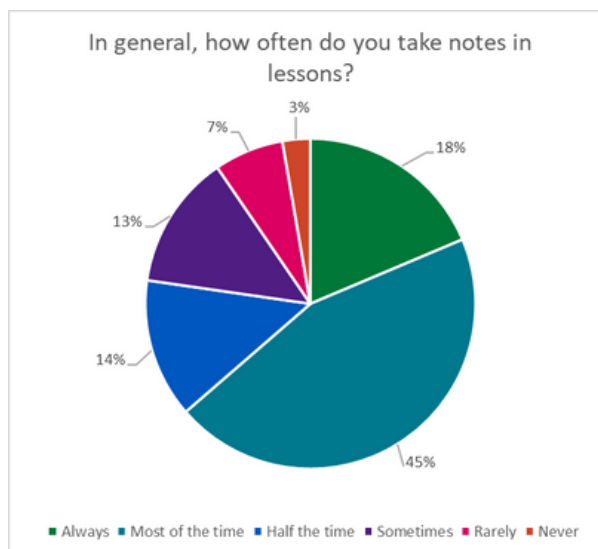


Figure 5
Students' May self-reporting on their note-taking improvement



Figure 6
Students' May self-reporting on their use of Cornell Notes in class



Discussion and Reflections

The Cornell Notes approach provided a clear framework, enabling students to organize key words, main ideas, and summaries effectively. Many students expressed that the layout enhanced their ability to review and recall content, resulting in improved participation and independent use across subjects. The structured format not only boosted confidence but also contributed to better class engagement and focus.

Nevertheless, some challenges emerged:

- **Time Constraints:** Several students found the method too time-consuming, particularly in classes where the pace was rapid.
- **Rigid Format:** The structure was difficult to adapt in subjects like Math and Physical Education.
- **Graphic Organizer Issues:** A misprint in the graphic organizer inadvertently shifted the “summary” section into the “cue” area, reducing available space for synthesizing information.
- **Vocabulary Emphasis:** In a push to improve vocabulary, the cue section was adapted to include lesson-specific terms, which may have diminished its original active-learning function.

An unexpected observation was that academically weaker students showed less improvement than anticipated. While literature (e.g., Donohoo, 2010) often suggests that lower-performing students benefit the most from structured note-taking, this study revealed a discrepancy that warrants further investigation into the correlation between academic achievement and note-taking efficacy.

Conclusion

The systematic implementation of the Cornell Notes system at UAS was a strategic component of a broader school-improvement initiative aimed at enhancing academic support skills. The action research project demonstrated that a consistent note-taking method can yield measurable benefits, including improved organization, increased note-taking confidence, and enhanced content retention across multiple subjects.

Though the majority of students reported positive outcomes, challenges such as time constraints, difficulties in adapting the format to certain subjects, and errors in the organizing tool indicate that further refinement is necessary. Future research should focus on how to better tailor the Cornell Notes system to accommodate rapid-paced subjects and the needs of academically struggling students. Adjustments to the graphic organizer—ensuring ample space for summaries and maintaining the active-learning role of the cue section—are recommended.

Overall, the findings support the extensive literature on the benefits of structured note-taking. They also highlight the need for adaptability in teaching note-taking strategies, especially in dynamic environments like international schools where students' backgrounds and experiences are diverse.

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