Assignment 4: Realtime Database

Part 1: Augmented Reality Case Study (15 points)

**Title:** Teaching and Learning with Mobile Technology: A Qualitative Explorative Study about the Introduction of Tablet Devices in Secondary Education

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**Question being analyzed:**

Usage of tablet devices in secondary education: The paper analyzes different perceptions of teachers regarding usage of tablet and mobile devices for teaching purposes and student’s perceptions of using them for learning purpose.

**Importance:**

This analysis will help identify the improvisation or deterioration of the education system with the use of mobile technology. This study is important as mobile technology can bring harmful effects on students if not used appropriately.

**Approach:**

* The first higher secondary school in Flanders which is a region of Belgium had implemented tablet devices for education in the classroom organization. A focused group study was conducted in this school based on certain predefined qualities to examine in depth the opinions of teachers and students regarding the introduction of tablet devices for teaching and learning purpose.
* Six focus group interviews of each ten participants were organized in which all the participants were random. The research interviews were conducted on 20 teachers and 40 students who had used tablet devices for teaching and learning purpose for at least a period of 6 months.
* An interview for 90 minutes was conducted by each group to ponder upon the user’s perspective of using the tablet devices for teaching and learning. The question were of four categories: introduction questions, questions concerning teaching practices, questions concerning learning practices and final concluding questions were targeted for the focus groups.

**Evaluations:**

The following two questions were used an evaluation criterion for the study.

**Consequences for teaching practices**

The need to reserve the computer lab or to copy additional work sheets is avoided using tablet devices. The teachers who use tablet devices for teaching feel that just like a book behind glass. All students feel that, apart from using applications such as PDF reader, some time is also spent on other learning applications. Using the mobile technology in a responsible way and not misuse it is a required skill in this modern world . The teachers believe that introducing tablet facilitates towards an active student-centered learning practice.

**The perceptions of teachers and students towards this change in learning practices**

Teachers and students appreciated the ease of use of tablet devices, also the speed of accessing different learning materials which is available through web, the ability to take pictures of blackboard or type in notes, and the reduction in the weight of their previously heavy schoolbags which is now reduced to a single tablet consisting of books from entire web. Most of the students feel learning induced through tablet or other mobile devices is more interesting.

**Limitations of research:**

* Data collected is restricted to few individual cases and based on limited perspectives.
* Only the participant’s perspective is considered while in future this results can change due to the improvement of tablet devices and also the conclusion can change if more people’s perspectives are considered.
* Additional qualitative research is required to gain further insight into the impact of modern technology on teaching and learning.
* Accessibility to internet is one of the major criteria to assess the usage of tablet or mobile devices. If certain rural areas have limited internet accessibility this perspective will change.

**Future Research:**

Future research can be conducted on the context in which tablet or mobile technology is used for teaching purposes and the motivation it has on students to be more involved and how they can challenge themselves to achieve more.