Lesson_06 Application Systems

Application systems

Lesson 2.1.7 Describe the main functions of an application system.

> ***SWBAT/IB Teaching Standard for Assessment:*** Application software should include word processors, spreadsheets, database management systems, email, web browsers, computer-aided design (CAD) and graphic processing software.

Lesson 2.1.8 Identify common features of applications.

> ***SWBAT/IB Teaching Standard for Assessment:*** Including toolbars, menus, dialogue boxes, graphical user interface (GUI) components. Students should understand that some features are provided by the application software and some by the operating system. S/E This improves usability for a wide range of users. AIM 9 An appreciation of the improvements associated with developments in application software.

Do Now / Coding Component (2 minutes) **- TBD (a coding task may be the use of matrices as an introduction to spreadsheets.)**

Part A. Introducing the Lesson (5 minutes) **-** Teacher will briefly recap the prior lesson on operating system and emphasise that the OS by itself does not make the computer useful in performing tasks beyond making all the parts of the computer work together. A good analogy is a vehicle with an engine but no roads or destinations to go to.Applications are the main reason for the invention of the computer, primarily rapid and repeated computations. Introduce the video on the ENIAC - (https://youtu.be/nITFvyBI72Y) - and note that it was invented for military purposes, specifically the calculation of artillery parameters.

Part B. Student Centered Activity. (20 minutes) **-** each group was assigned to prepare a presentation on a specific application system and focus on the development of the dominant application software, and the evolution of the interface from text to GUI.

Group 1: Database Group (Dbase, Xbase, SQL, Access, etc.)

Group 2: Wordprocessing Group (from earliest versions including Wordperfect through current versions of Pages and Word and Google Docs)

Group 3: Spreadsheet Group (start from Visicalc, Supercalc, through Lotus 1-2-3, then Excel)

Group 4: CAD, email, graphics

Group 5: Browsers, gaming

Part C. Whole Group Lesson Component /Harkness Protocol (15 minutes)

Topic for discussion: Google Suites is an integrated application system that is free and contains most of the most commonly used applications – mail, word processor, spreadsheets, presentations, etc. What explains the persistence of other applications if Google suites can perform most of the tasks? Is it conceivable that most users will rely on Google suites and the other applications will no longer be profitable to maintain or support?

TOK connection is with economics (economies of scale) and science (evolution of systems)

Part D. Optional Tasks