

Guidance on the appropriateness and complexity of the IT solution

Information technology in a global society (ITGS) students are expected to design, create and implement an IT product that meets the requirements expressed in criterion G and the requirements for complexity in criterion L (see the *Information technology in a global society guide*, March 2006). The following tables provide guidance on simple and complex products.

ITGS students will be expected to learn the IT skills required for the development of their product as they advance through the processes involved in criterion G through criterion K.

Multimedia

The project may be presented through a website, presentation, video or similar digital product or new technology.

Basic	Advanced (at least three appropriate techniques)
Navigation (internal and external links) Combining text and graphics Use of tables or layers for layout Use of headers, footers, watermarks or footnotes Combining two software applications Six slides for a presentation	Proficient integration of the different elements of multimedia Edited original sound Edited video clips Creation of original animation Manipulated graphics Links to underlying data (for example, database, mail merge) Navigation using frames and customized buttons Manipulation of codes such as HTML, XML, Java, JavaScript or Visual Basic to customize pages or improve functionality Cascading style sheets or schema Integration of components using advanced features from other applications

Examples of suitable topics could include:

- a website for a local photographer (client) to increase revenue
- a video created for the Spanish teacher (client) to illustrate how Spanish is used in a particular city.

Products developed using web-based templates or Web 2.0 tools

Students must use techniques listed for other types of product to ensure the product is complex. For example, a student may use three advanced techniques: one from web-based templates or Web 2.0 tools, one from multimedia and the third from spreadsheets.

Basic	Advanced (at least three appropriate techniques)
Organization of template structure such as merging and splitting cells Integration of other applications such as spreadsheets Integration of a range of different elements	Proficient integration of a range of different elements Use of editable sub-regions Use of advanced techniques or codes provided by the site Creation of original templates Integration of components using advanced features from other applications

Desktop publishing (DTP)

The project may be presented through a desktop published document. Ideally, it should have at least 12 pages.

Basic	Advanced (at least three appropriate techniques)
Combining text and graphics Use of tables for layout Use of headers, footers, watermarks or footnotes Combining two software applications Single document 12 pages	Manipulation of graphics to improve print quality Development of an original and unifying template Proficient use of typography Proficient interrelationship of graphical elements, images and text Links to underlying data (for example, mail merge) Integration of components using advanced features from other applications

Examples of a suitable topic could include:

- a DTP booklet for a history teacher (client) to give to 8th grade students (end-users) when they visit Florence.

Relational databases

Students must not use a template that comes with the product.

Basic	Advanced (at least three appropriate techniques)
Two related tables Two forms Two queries Two reports Data validation Three data types Use of graphics	Three or more related tables Macros Modules Subforms Complex queries/calculated fields SQL to develop a back-end database Use of graphics fields Proficient use of techniques to enable easy navigation such as menus or buttons Proficient design of reports and/or forms

Examples of a suitable topic could include:

- a database for a local garage owner (client) to assist in the efficient ordering of parts.

Spreadsheets

Students must not use a template that comes with the product.

In general spreadsheets work better as a component of a larger product.

Basic	Advanced (at least three appropriate techniques)
Cell formatting Macros Charts Basic functions (for example, IF, SUM, AVERAGE, MIN, MAX) Validation Screen layout Appropriate protection Printing a formatted page	Multiple linked sheets Pivot tables Goal Seek Scenarios Nested functions Customized macros Forms Menu page with buttons Complex functions such as DATE, VLOOKUP, CONCATENATE