**Applying a model of ICT use to your own practice**

***Provide one example for each of the following models, drawing upon your own practice.***

1. **CURRICUAL MODEL**

**Reference: Straker, A., & Govier, H. (1989). *Children using computers*. Oxford: Blackwell Education.**

**ICT used to support the curriculum**

*Examples*

* *Students use word processing or desktop publishing software to produce a poster about climate change*
* *A student researches climate change using internet sources*

**Your example: Student using google scholar to search for relevant sources for further assignment references.**

**ICT used to enhance the curriculum**

*Examples*

* *A student downloads photographs of the impact of climate change from a range of countries in Northern Europe*
* *Students access a television news report of damage to the polar ice cap that experts have linked to climate change*

**Your example: Student using word processor for essay writing, check the spelling and proof read the assignment.**

**ICT used to extend the curriculum**

*Examples*

* *Students use Google searth to explore satellite imagery of the artic region in real time*
* *Using Skype, students join their peers from several European countries in a live ‘expert session’ hosted by a Norwegian university*

**Your example: Students using Virtual Learning Environment (VLE) to interact with the lecturer and their peers (course participants).**

1. **CONSTRUCTIVIST MODEL**

**Reference: Papert, S. (1980). *Mindstorms: Children, computers, and powerful ideas*. Basic Books, Inc.**

***When you see a learner using a computer, do you see the computer controlling the student, or the student, controlling the computer?***

**The computer controlling the student**

*Examples*

* *A student clicks and drags text to label the geographical features on a map.*
* *A student* completes an online test of his knowledge of the internal angles in regular polygons.

**Your example: A student clicking a book reader button on an e-book and voice and animation of paragraphs start showing and pages turning over. All a student does is follow with eyes what computer does.**

**The student controlling the computer**

***Examples***

* *A student uses an art package to manipulate an image.*
* *A student* role plays as a Roman legionary commander, deciding where to establish his camp based on a number of different factors.

 **Your example: A student uploading a profile picture on a student profile from another application.**

1. **Interpreted as the relationship between learner and COMPUTER**

**Reference: Somekh, B. and Davis, N. (Eds) (1997). *Using information technology effectively in teaching and learning: Studies in pre-service and in-service teacher education*. Psychology Press.**

**Computer as tutor**

*Examples*

* *The student works through a tutoring package designed to test his knowledge of a mathematical process through a series of examples followed by multiple choice questions*
* *The student works through a PowerPoint presentation with information on a topic he is studying.*

**Your example: Student read FAQ on technical support link about downloading e-book and all other challenges related to it. Then thereafter go to the link and apply the steps learnt from FAQ.**

**Computer as neutral tool**

*Examples*

* *The student uses a word processor to draft and edit a piece of writing.*
* *The student uses a search engine to look for information on a topic*

**Your example: Student following instructions of using a certain font and font size for a certain task and spell check.**

**Computer as cognitive tool**

*Examples*

* *The student creates a spreadsheet and then uses it to answer ‘what if…” questions and explore the impact of changing variables in the model*
* *The student uses a graphics package to experiment with distortions to an image*

**Your example: Student type their essays and when doing review of grammar changes their word count in essay.**

1. **Interpreted according to the experience of the learner as s/he uses a program or application**

**Reference: Kemmis, S., Wright, E., & Atkin, R. (1977). *How Do Students Learn?: Working Papers on Computer Assisted Learning*. Centre for Applied Research in Education, University of East Anglia.**

**Instructional**

*Example: The student answers a set of maths calculations or multiple choice questions and is given feedback on their performance at the end of the sequence.*

**Your example: Student is doing a psychometric assessment on the computer and get results on completion.**

**Revelatory**

*Example: The student explores a model of what happens when a volcano erupts; the student is able to alter the data (for example the stresses involved) on which the model is based, changing this to explore what happens as a result.*

**Your example: Student manipulates data in psychometric test to get different results and tips of the assessment.**

**Conjectural**

*Example: The student creates a spreadsheet based on the costs of a wedding; he manipulates the data to explore the effects of changing variables such as the number of people attending, the cost of an alternative venue or the cost of a sit-down compared with buffet reception.*

**Your example: Student paying the fees on different times where the Rate Of Exchange (ROE) is different.**

**Emancipatory**

*Example: The functions in a spreadsheet allow the student to easily create charts to illustrate his research data. As he changes his data the charts are automatically updated.*

**Your example: Students asked to write essay of about 5 000 words and as they type the word count increases.**

1. **Teaching interpreted as design of activities, not transmission**

**Reference: Selwyn, N. (2011). *Education and technology: Key issues and debates.* A&C Black.**

**Complement: Digital media provide new tools for accessing information and learning**

*Example: The teacher asks students to research basic information about a topic online before supporting them in the classroom as they apply that knowledge*

**Your example: Students are asked to refer to Harvard Referencing guide for their assignments and teacher comments later on its appropriate use.**

**Extend: Digital media provide new means of communicating information and learning**

**Your example: Virtual Learning Environment**

**Transform: Digital media provide new functions and ways of applying knowledge and learning**

*Example: students create their own multimodal text with embedded video, sound files and animations.*

**Your example: Students creating their personal highlighters, notes, summary of video or sound clips from e-book.**

1. **SAMR MODEL**

**Reference: Puentedura, R. (2008). TPCK and SAMR: Models for enhancing technology integration. [**[**https://itunes.apple.com/us/itunes-u/as-we-may-teach-educational/id380294705?mt=10**](https://itunes.apple.com/us/itunes-u/as-we-may-teach-educational/id380294705?mt=10)**]**

**Substitution**

*Example: The students of a class use a Word Processing program instead of paper to list recycling keywords*

**Your example: Students writing their introductions on a virtual learning environment platform.**

**Augmentation**

*Example: The students of a class download and insert pictures from the Web in their Word document*

**Your example: Student downloading word template from resources, fill it in and upload it back to discussion forum.**

**Modification**

*Example: The students of a class use Framapad (*[*https://framapad.org*](https://framapad.org)*) to collaboratively discuss recycling techniques*

**Your example: Student creating a blog about specific topics for readers to engage and be informed.**

**Redefinition**

*Example: The students of two classes brainstorm on Popplet (*[*http://popplet.com/*](http://popplet.com/)*) about how they could inform their neighbourhood on recycling matters and then create a video which they post on the neighbourhood website.*

**Your example: An upload of relevant resources about specific topic of the course for learners interaction (review, debate and consumption).**