

TL Module 4: Organisation and Administration

Unit 2: Management of the Use of ICT in a Classroom Environment



Objectives:

Teachers should be able to manage the use of supplemental ICT resources with individuals and small groups of students in the regular classroom so as not to disrupt other instructional activities in the class. (UNESCO ICT-CFT, TL.5.b)



Duration:

Total of 3 notional hours – 1 hour tutorial, 1 hour computer practical session and 1 hour self-study, preferably at a computer.



A] Tutorial (1 hour)

Notes to Facilitator

Introduce participants to the concept that ICT is a great supplement to classroom teaching. You can use the introductory passage below to set the scene. Then for this tutorial focus specifically on issues around the use of one computer in a classroom setting, be it for individual learning, small groups or whole-class learning. In pairs, participants will be required to brainstorm ideas for the effective use of one computer in a classroom. They will then be required to brainstorm ideas for teacher use and student use of the single computer and formulate a range of specific activities that can be used for each. As the facilitator, you will be required to guide a group discussion and summarise the main points.

The following resources have been provided to guide the discussion and help you as the facilitator capture any salient points that may have been missed during the group discussion.

- [The One Computer Classroom](#)
- [One Computer Classroom: The Possibilities](#)
- [One Computer Classroom: Across the Curriculum](#)
- [Classroom Management of ICT](#)

Introduction:

ICT can offer a quality supplement to classroom teaching. Integrating ICT into daily learning activities can assist students learning individually or in groups. Not only does the use of ICT enhance the learning experience and allow learners to make connections to the outside world, but it also gives learners a place to find resources and to create work products. One of the biggest challenges many teachers face is a lack of computers. Yet even with only one computer in the classroom, there are many ways to use ICT effectively to improve learning.

Activity:

1. Working in pairs, think about how one computer can be best used in each of the following situations:
 - Individual learning
 - Small groups
 - Whole-class learning.
2. Next, brainstorm several teacher uses and student uses for the single computer and identify specific activities that can be used for each.
3. Discuss your ideas as a group as part of a tutor-led discussion.



B] Computer Practical (1 hour)

Notes to Facilitator

Introduce participants to the concept that ICT in the classroom can be both frustrating and fun and brings with it a number of challenges. The passage below has been provided as a sample text. Research the topic ahead of time in preparation for the session. You may review the resources provided in the activity below as a starting point.

Using one computer in the classroom can be both frustrating and fun. There are issues related to using the computer as part of large group activities and small group activities. There are also some general management concerns.

The general area of ICT classroom management includes a number of elements. These may relate to hardware and software management, but have a real influence on the actual success or failure of managing ICT. These include:

- **Time Management:** among the attributes of effective teachers is that of effective time management. Educators need to become adept at restructuring timetables to incorporate new ideas and procedures. The use of computers is a cross-curricular activity, thus they should fit into an existing structure or be part of as many activities as possible.
- **Planning:** like any other part of the curriculum, ICT work must be structured and planned. This should be done in conjunction with the school policy, the skills level of the teacher, and the availability of suitable software, as well as taking note of learner: computer ratios.
- **Integration:** ICT is a new tool for education and by integrating the technology across as broad a range of areas in the curriculum as possible, we as educators are broadening the horizons of possibility for our learners. Integration involves using the software at our disposal to impart a broad range of skills to our learners.

Activity: Computer Classrooms

Please note that this activity is a recommended **Portfolio Task** and should be prepared for submission.



1. In a computer lab, review the following set of online resources relating to the management of computers in a classroom setting:
 - [One Computer Classroom: The Issues](#)
 - [Classroom Management of ICT](#)
 - [ICT in the classroom](#)
 - Classroom Management & ICT: http://www.ise.ee/kronoloogia/murphy/classroom_management.html. (Internet access required)
2. Using a word processing program on a computer, construct a matrix of possibilities/uses for a single computer in the classroom.
3. Identify 5 challenges you might encounter in the use of a single computer in a classroom situation. Think specifically around timing, the rate at which learners learn and their particular skills level).
4. A number of practical considerations should be observed when planning for the integration of ICT in the classroom. Refer to the list of ideas below with regards to Planning for ICT Integration and in your word processor document, think of and capture an additional 5 factors to consider when planning for ICT use in the classroom. Provide an explanation for each.

Planning for ICT Integration

- Children often work better in groups of 2/3 rather than individually. There are occasions where one computer per child works best but be open to varying the situation.
- Position the computer in an area of the room that is visible to the teacher but with least class visibility. This cuts down on the distraction value of work in progress.
- Have a cross section of software models available.
- There are times when it is not a good idea to use the computer.
- Limit the software base available to the children at any one time. Choice is fine but channel hopping with software will happen just as on television. This often means that software packages are not given sufficient time to be useful educationally.
- Develop rota systems for access and/or 'free time' access to the computer. You should log the people accessing the computer and monitor those who are either overusing or under-utilising the facility.
- Have a clock near the computer so that children can monitor their own time at the equipment. This helps maintain the 'fair play' syndrome of 'I didn't get my turn yet, Miss.'
- Have a 2- to 4-piece headphone block available beside the computer to allow individuals or small groups to operate in silence while the class may be engaged in other activities.
- Engage the skills of the many children with computer experience to help teach other children about various applications.
- Have prepared instruction sheets for various lessons or activities.
- As the teacher, you should have experienced or simulated the exercises the children are being encouraged to undertake.
- Take class lessons to initiate the use of various software packages.
- Alternatively, take the children in small groups until you have gone through the class.
- Perhaps just teach a small group and ask them to spread the message down though the class.
- Peer-to-peer learning can be very effective.
- Despite the considerable outlay, would a digital projector be a good investment for the school?
- Develop away from computer activities related to a particular project.

- Set up scoring charts for drill-type software. This will help to monitor the progress of the children through an information retention exercise. More importantly it will help to monitor usage (e.g. gender issues and overuse by children who are more able).
- Order relevant computer magazines for the school – *PC Live*, *Irish Computer*, *Computer Active*, *Technology in Education* might be a few useful ones to start with.
- Meet with colleagues using the same software. Support networks within the school, inter school and within education centres. Professional peer support is one of the most important aspects of this new technology.
- Be fully conversant with a software package before introducing it to the class. This runs from the very simple junior drill software (play with it yourself beforehand to hand it over to the children), to the more complex packages that may be used especially at the senior end of the school.
- Allow projects to be completed over a specified timeframe but be flexible.
- Buy a paper-binding machine for the school. Printed projects, books, leaflets, poems and e-mails can then be presented in a professional way and retained in the school or elsewhere as a shared data resource.

(Taken from: http://www.ise.ee/kronologgia/murphy/classroom_management.html)



C] Self-Study (1 hour)

Assignment 1 (60 minutes)

Reflect on your own classroom practice. Is the majority of the delivery 'Chalk & Talk'? What about using computers as a change agent? Think of a lesson where you know the students often struggle to remain engaged and consider how this lesson could be enhanced using technology:

1. **One Computer & Data Projector:** Does the lesson lend itself to multimedia? Could you create a presentation with pictures, illustrations, animations, video or photographs? What about adding sound? Are there some sound clips, speeches, music etc. that could accompany the text?
2. **A pod of 3-5 Computers:** Could the lesson be cut up so that student groups are required to collect data to build a full understanding of the topic. Stations could be developed, some with digital media, some with library books some with the class textbook etc. and students take turns at each station or report back to each other their findings.
3. **Individual Laptops or Mobile Devices:** If more technology is available can you use the productivity tools to help students demonstrate learning or at least consolidate the information you have told them.

Consider the queries above and then using a word processor revise the lesson so that technology plays a supporting role.



Resources Used in this Lesson Unit

The One Computer Classroom. Website available online at: <http://eduscapes.com/tap/topic84.htm#1> (CC: BY SA).

Lamb, Annette. (n.d.). *One Computer Classroom: The Possibilities*. Available online at <http://eduscapes.com/tap/occ1.pdf> (CC: BY SA).

Lamb, Annette. (n.d.). *One Computer Classroom: Across the Curriculum*. Available online at: <http://eduscapes.com/tap/occ3.pdf> (CC: BY SA).

Lamb, Annette. (n.d.). *One Computer Classroom: The Issues*. Available online at <http://eduscapes.com/tap/occ2.pdf> (CC: BY SA).

Intel Teach to the Future. (n.d.). *Classroom Management of ICT*. Available online at http://schoolnet.org.za/teach10/resources/dep/managing_ict/index.htm (All Rights Reserved).

ICT in the classroom. Available online at: http://www.new2teaching.org.uk/about/about_ATL/contacts.asp

Classroom Management & ICT. (n.d.). Available online at http://www.ise.ee/kronoloogia/murphy/classroom_management.html (All Rights Reserved).