

STUDY ON ICT IMPLEMENTATION STRATEGIES

Janice Richardson
4th October, 2000

This study is being carried out for the Luxembourg Education Ministry.

Objectives of the study:

- examine national ICT implementation strategies in four countries (Australia, Canada, Finland, Israel) through an in-depth study of one school per country in which ICT is being successfully implemented.
- draw up a list of the criteria which appear to account for successful ICT implementation in schools

Method:

Phase 1: contact has been made with several people (researchers, university lecturers, Ministerial representatives in the field of ICT in education) in each of the four above-mentioned countries as a means of obtaining background information on national ICT strategies.

Phase 2: the above-mentioned contacts are now requested to send me the name and address (including e-mail address) of one school (primary through secondary if possible, or alternatively one primary school and one secondary school,) in which ICT is being successfully implemented. The following questionnaire (Part II) shall be sent to each of these schools, to be filled out by the Head Teacher or the ICT activity coordinator. Responses may be returned by e-mail or by fax. Alternatively, a telephone interview could be set up at any time that suits the interviewee. Responses should be returned by 25th November 2000 at the latest.

Phase 3: the findings will be analysed and organised in the form of a report, to be completed by 23rd December 2000.

Questionnaire - Part I

The following questions have already been addressed to the initial contacts in the four above-mentioned countries in order to obtain background information on national ICT strategies. Any further information relevant to these questions will be gratefully received.

Can you give a general outline of the organisation of the national educational system?

What are the overall objectives of the education ministry in implementing IT in education in 1/ primary education 2/ secondary education e.g. to be used as a tool to implement current curriculum, as a catalyst to modify current pedagogical approaches, as a means of modifying the curriculum to adapt education to modern requirements, as a means of offering equal opportunities in education... ?

What resources and strategies are being used to realise these objectives: ICT/communication equipment, types of software, new school or curriculum and assessment organisation, teacher training... ?

What are the major sources for financing implementation, and the various phases of the implementation plan?

What means of assessment are being used to evaluate changes brought about by the implementation of ICT?

Questionnaire – Part II

The following questions are intended to provide a preliminary overview of the key factors contributing to successful ICT integration in schools in four countries: Australia, Canada, Finland and Israel. Responses are to be sent by e-mail to the address here-below at the latest by 25th November 2000. If participants require any further information, or prefer to make initial contact by telephone, a telephone interview can be set up at any time upon request. The information given in response to this questionnaire will be published in a report to be made available to all participants by the Luxembourg Education Ministry in late December 2000 or early January 2001. Unless otherwise indicated, the name of the school and of the person having given the information will be published in this report. We sincerely thank you for your cooperation.

A - Underlying ICT Integration Philosophy and Resulting Changes

A1. What role has the national ICT integration policy played in the ways ICT has been integrated in this school?

A2. What assistance has been given by the national ICT integration authority: a) material assistance; b) human resource assistance?

A3. What are the educational objectives underpinning ICT integration in this school? To what extent are these objectives being achieved?

B - Curriculum and Assessment Methods

B1. Has a cross-curricular approach been adopted? If so, how does this work?

B2. Has time allotment per subject been modified by ICT integration and in what areas?

B3. Has the curriculum been modified to give teachers time to adapt to and to implement ICT?

B4. Very often, computers are available but teachers don't know what to do with them; how has this problem been overcome?

B5. Have assessment methods evolved since the integration of ICT?

C - Content and Learning Resources

C1. In what ways have pedagogical approaches changed since ICT integration in your school?

C2. Has ICT integration in any way modified learning content?

C3. How essential is ICT to the various subject areas?

C4. What learning resources are available in class?

C5. What ICT applications are the most widely used?

D - Physical and Technological Infrastructure

- D1. What is the school/classroom configuration?
- D2. Where are computers and other ICT resources located?
- D3. How has ICT integration modified classroom organisation?
- D4. What appear to be the technological criteria for successful ICT integration in school?

E - Human Resource Development

- E1. Who made the decision to promote ICT integration in this school?
- E2. What type of ICT training programs (a/ pedagogical, b/ technological) have been offered to teachers?
- E3. How were these organised? Where, when (during/out of school hours, before/during ICT integration...) were these carried out?
- E4. Are all teachers ready to invest in Personal Development? Are any incentives used to encourage participation?
- E5. Who makes decisions on Personal Development programs?
- E6. Has the relationship between teachers/parents/pupils/hierarchy been modified by the integration of ICT? In what ways?
- E7. Do teachers have access to ICT outside of the school?
- E8. What facilities do they have to collaborate with each other within and outside of school?
- E9. Is there a section of the teaching population who is more easily adapting to ICT-based methods?
- E10. What appears to be the profile of an ICT-competent teacher?
- E11. If such a profile has been defined, what means have been introduced to lead other teachers towards this profile?
- E12. What appear to be the criteria for successful ICT integration in terms of human resources and personal development?

Do you have any comments that you wish to add concerning ICT implementation policy in your school?