

Measuring the Impact of ICT on Children's Education

Project 1: To improve pupils' skills in the Evaluation element of Standard Grade PE, through the use of a digital video camera and data projector and video capture and editing software. Pupils were filmed carrying out various activities, and clips were played back at a later date to stimulate class discussion and raise awareness of valid points of evaluation.

Once the kit was obtained, the project was carried out with certain classes in S4 last year on a trial basis, and will be continued this year taking in more classes.

MIICE questions below are asked at both level 2 and level 4, to provide the respondents with as much of a framework as possible to help them assess their level of performance. One response (1-4) should be made to each pair of questions.

Level 1 : unsatisfactory, major weaknesses

Level 2 : making progress, but not yet good

Level 3 : good; strengths outweigh weaknesses

Level 4 : very good; major strengths

Teacher Review

Outcome 4 Shared Planning / Organisation

This relates to learners' ability to think about what they are doing, and their ability to put it into a number of contexts

Working with the teacher	Level	How do we know?
<ul style="list-style-type: none">Do learners generally ask the teacher realistic and relevant questions? L2 <i>or</i>Do learners make good use of the teacher at all times in an ICT based project? L4		
<ul style="list-style-type: none">Does working with ICT enhance teacher - learner relationships? L2 <i>or</i>Do learners regularly assist and contribute to the learning of others within the class? L4		
Making the most of learning resources <ul style="list-style-type: none">Is the use of resources (eg time or materials) in the classroom generally efficient when using ICT? L2 <i>or</i>Is there an aura of purpose and good organisation within the classroom or gym and within groups when using ICT, including clear delineation of tasks and good access to appropriate resources? L4		

Outcome 5 Investigatory Learning

This relates to the learners' ability to make contextual use of the findings from a variety of sources

Collection and Analysis of Information	Level	How do we know?
<ul style="list-style-type: none"> Does the use of ICT help learners to derive relevant information from a mass of data? L2 <p><i>eg They focus on data relevant to evaluation or</i></p> <ul style="list-style-type: none"> Are learners able to derive relevant information and patterns of occurrence from a mass of data when using ICT? L4 <p><i>eg They become aware of patterns of good or bad practice</i></p>		

Outcome 7 Motivation

This relates to the degree of learners' enthusiasm, pride in their work, enterprise and active participation in their own learning

Enthusiasm and Enterprise	Level	How do we know?
<ul style="list-style-type: none"> Do learners make an attempt to focus on the work in hand and avoid distractions when use is made of ICT? L2 <p><i>eg they are reasonably willing to persevere and find solutions, even when difficulties arise, and to ask some questions about the work in hand. or</i></p> <ul style="list-style-type: none"> Do learners focus enthusiastically on the task in hand and avoid distractions when use is made of ICT? L4 <p><i>eg they are keen to persevere and find relevant answers, and to ask pertinent questions about the task in hand.</i></p>		
Enterprise and Active Participation in their own learning		
<ul style="list-style-type: none"> Are learners generally willing to try new approaches when their work is presented using ICT? L2 or Do learners have evident interest when new approaches to their work are made using ICT? L4 		

9 Quality of Outcomes

This relates to the setting and maintaining of high standards by learners on the part of teachers and school managers.

Planning of resources	Level	How do we know?
<ul style="list-style-type: none"> Are the needs of learners (rather than a desire for the latest technology) the key consideration in (P.E.'s departmental) resource planning? L2 or Does the school (and P.E. department) have open-minded policies for sharing resources, rather than a tendency towards garnering personal resources? L4 <p><i>eg The school /PE dept gives all its staff realistic access to expensive resources.</i></p>		

11 Teacher use of computers as productivity tools

This relates to teacher competence using ICT to support their productivity as facilitators of learning.

Skills in use of general purpose software for producing/modifying learning & teaching materials	Level	How do we know?
<ul style="list-style-type: none"> Can teachers produce straightforward print documents for learning and teaching purposes with a limited range of media? L2 <p>eg <i>prepare straightforward worksheets for a Standard Grade topic using text and simple illustrations</i>) or</p> <ul style="list-style-type: none"> Can teachers produce a flexible range of print documents embodying an appropriate range of media, for differentiated learning and teaching? L4 		
<ul style="list-style-type: none"> Are teachers able to prepare a slide show or equivalent presentation related to their needs for learning and teaching? L2 or Are teachers able to use movies, animation, sound and other multimedia elements when they are preparing a slide show or equivalent presentation for learning and teaching? L4 <p>eg <i>capture digital video, edit it and display results via a data projector</i>)</p>		

13 Teacher use of ICT to enrich and make learning more effective

This relates to the development of new teaching styles embodying ICT use.

Development of new teaching styles	Level	How do we know?
<ul style="list-style-type: none"> Are teachers aware of new pedagogical styles which the use of ICT facilitates? L2 or Is there widespread teacher exploration of new pedagogical styles when using ICT? L4 <p>eg <i>Teachers use the computers in the classroom, gym and ICT suites to explore a variety of group and whole-class learning possibilities</i></p>		
<ul style="list-style-type: none"> Are teachers experimenting with forms of collaborative learning when using ICT? L2 or Is there widespread use of collaborative learning using ICT tools? L4 		