



Report

by the Greater Glasgow Health Board, Health Promotion Department
for the Department of Health, on the project

“The Day The Sun Came Out” CD Rom

Funded from Europe Against Cancer Funds 1997.

CAN/GGHB

MF3

Health Board
Department

ACKNOWLEDGEMENTS

The report was compiled by:

Fiona Toal Senior Health Promotion Officer (Cancer)
Greater Glasgow Health Board

Caryn Nicolson Health Promotion Officer (Youth Team)
Greater Glasgow Health Board

Doreen McIntyre Programmes Manager
Greater Glasgow Health Board

Dr Colin Fleming Department of Dermatology
Glasgow University



PERL
Public Education and Resource Library
NHS Greater Glasgow



03693

We would like to acknowledge the help of the following departments:

Professor Rona Mackie, Department of Dermatology, Glasgow University

City of Glasgow Education Department

The Schools and Young People who took part

ABACUS Strathclyde University

Margaret McGranachan, Research & Evaluation, Health Promotion Department, Greater Glasgow Health Board

Angela King, Administration, Health Promotion Department, Greater Glasgow Health Board

EXECUTIVE SUMMARY

In October 1996, Greater Glasgow Health Board's Health Promotion Department received a grant from Europe Against Cancer through the Department of Health to develop a computer based skin cancer education classroom resource.

The product that has been developed is a Multi Media CD program entitled:
The Day the Sun Came Out.

The aim of the programme is to give young people the opportunity to critically assess their behaviour in relation to sun exposure.

To ensure the appropriateness of this resource, an assessment of need and pre-testing has been carried out as well as an evaluation study of teachers' attitudes and knowledge.

Findings from these studies show:

- A dearth of teaching resources on sun awareness.
- Glasgow schools (in general) have the computer capability to introduce this kind of resource.
- Teachers need to be made more aware of the importance of sun awareness education as a relevant issue for young people.
- A need for teacher training on sun awareness

TABLE OF CONTENTS

| | PAGE NO |
|---------------------------------------|----------------|
| Project Rationale, Aim and Objectives | 1 |
| Project Overview | 2 |
| Financial Summary | 4 |
| Project Evaluation | 5 |
| Interim Summary | 12 |
| References | 13 |
| Appendix 1 Teacher Questionnaire | |
| Appendix 2 Sun Awareness Fun Quiz | |
| Appendix 3 Teachers' Notes | |
| Appendix 4 CD Cartoon | |
| Appendix 5 CD Quiz | |

Europe Against Cancer Project Report May 1997

‘THE DAY THE SUN CAME OUT CD ROM’

In October 1996 Greater Glasgow Health Board’s Health Promotion Department received a grant from Europe Against Cancer through the Department of Health to develop a health promotion resource for sun awareness. The following report is a summary review of the project to date. A final report will be produced on completion of the evaluation. A CD-ROM is also enclosed with this report. This will run on Apple Mac or PC.

Project Rationale

Cutaneous melanoma is increasing in incidence in fair-skinned populations across the world, (Boyle,1995). In Scotland between 1985 and 1994 there has been an increase in incidence of the disease by 25% in women and 38% in men, (Scottish Abstract of Statistics, 1995). A number of risk factors are attributed to this, and exposure to sunlight is believed to be a critical determinant of incidence and mortality rates. In general people have most of their exposure to sunlight in childhood and adolescence. Scott (1992) has estimated that 80% of total life exposure occurs before age 21 years. In light of this, and more recent evidence from the UK showing there to be inadequate protection of children and adolescents from the sun, school aged children have been identified as an important target for education about skin cancer.

Whilst national campaigns have been found to be a useful method for informing the general public about sun awareness issues, more specific evidence on adolescent health suggests that person - centred experiential approaches to health education are more effective, (Mermelstien and Riesenber, 1992; Maibach and Parrot, 1997). Facilitating this through the use of ‘state of the art technology’ is believed in this report to be a positive step towards meeting young people’s minds and interests. It is hoped that by developing ‘The Day the Sun Came Out’ CD-ROM within a school setting, sun awareness messages will be sustained and communicated to a greater number of young people.

Project Aim

To raise awareness of skin cancer among pupils aged 11-14 years and teachers.

Project Objectives

1. To provide schools with sun awareness and skin cancer education through an interactive computer resource.
2. To raise teachers’ awareness of skin cancer, and encourage the inclusion of sun awareness in the curriculum.

PROJECT OVERVIEW

The Product - 'The Day the Sun Came Out' CD ROM

'The Day the Sun Came Out' is a computer based Multi Media health promotion programme for sun awareness and skin cancer education. It has been developed as a classroom resource for young people between the ages of 11-14 years. The programme unfolds a cautionary tale which allows the user's character to make a series of choices relating to his or her experiences on a sunny day. Choices include clothing, degree of exposure to sunlight at various times of the day, and behavioural decisions. The effect of these decisions is stored and thereafter assessed and reviewed by the user. An additional section offers a twenty question quiz based on the cartoon and supporting material. At the end of the session both the cartoon and quiz may be printed and retained by the user.

Review of Operational Framework

Stage One

- Commissioning of CD-ROM production.
- Inventory review of computer capacity of local schools.

Stage Two

- Developing the CD-ROM Story Line:

The aim was to develop a cartoon computer programme which centres around the experiences and perceptions of likely users. To achieve this, fifteen young people were recruited to take part in a weekend workshop. Taking into account the variability of young people's perceptions and experiences, recruitment covered the following three area types of Glasgow: a peripheral housing estate, a more rural area, and a socially mixed suburb on the outskirts of Glasgow.

The weekend workshop was organised and run by a Youth Worker, and Health Promotion Officer. Support and input was given by a cartoonist, the commissioned computer company and a Dermatologist.

The issue of sun awareness was tackled by covering issues such as the biology of the skin, skin types, sun protection, fashion and behaviour. This provided insight as to the young people's levels of knowledge, and understanding of concepts. By the end of the weekend, the cartoonist was able to capture the young people's ideas about what they normally do and would like to do on a sunny day.

Stage Three

- Developing the CD-ROM Operating System:
The programme was constructed in Macro Media Director, the industry standard Multi Media authoring environment. It is designed to run on a range of hardware platforms to give the widest possible path for dissemination. This gives users the choice to mount the CD-ROM on Macintosh Power PC, 6800 series processors, Intel Pentium or 486 standard machines.

Stage Four

- Pre Testing of CD-ROM
To ensure the quality of the product and its appropriateness as a classroom teaching resource, the CD was tested in two inner city secondary schools in Glasgow. A total of 93 pupils aged between 10 and 14 years of age used the programme under the supervision of the teacher and project team. Feedback from pupils and teachers was given at the end of each session and the following amendments were made to the CD; structure of quiz, timing sequence of programme, language comprehension of script, and style characteristics. In addition supplementary teacher notes were developed.

Stage Five

- Initial phase of project evaluation (evaluation study of teachers' needs and attitudes towards sun awareness education).

Stage Six (commencing September 1997)

- Final phase of project evaluation (evaluation of uptake and use of CD ROM).

Stage Seven (commencement date still to be assigned)

- Dissemination strategy developed and implemented.

FINANCIAL SUMMARY

Cost (inclusive of VAT)

| | |
|--------------------------------------|------------|
| Development and production of CD-ROM | £12,925.00 |
| Cartoon production | £ 875.00 |
| Residential weekend (accommodation) | £ 644.90 |
| Mini bus hire | £ 211.50 |
| Youth Worker | £ 450.00 |
| <i>TOTAL</i> | £15,101.40 |

Costs for staff time for evaluation absorbed by GGHB Health Promotion Department and Glasgow University Department of Dermatology. Therefore, **funds remaining as of July 1997 = £2,898.60.**

PROJECT EVALUATION

Aims

The aims of the evaluation were:

1. To assess the practical issues involved in introducing the CD-ROM into schools.
2. To assess the usefulness to teachers of the CD-ROM as a teaching resource.
3. To assess the usefulness of the CD-ROM as a tool for changing knowledge, attitudes and behaviour of children with respect to sun awareness.

Methods

A number of factors must be considered when implementing educational programmes into the classroom setting. Given the impact that the teacher has on pupil learning, the initial phase of the evaluation study focused upon teachers' perceptions of sun awareness as a taught subject, as well as, their personal attitudes and behaviours regarding sun protection.

Evaluation was conducted using a 'closed question' survey questionnaire. Thus it must be borne in mind when interpreting the results presented that the responses are limited and therefore may not reflect the full spectrum of respondents' views.

All results reported were processed using SPSS statistical packages.

SAMPLE STATISTICS - Questionnaires distributed through school nurses and returned to the Health Promotion Department. The following table shows the number who opted in.

| | MALE | | FEMALE | | TOTAL | |
|----------------------|------|----|--------|----|-------|-----|
| | n | % | n | % | n | % |
| 45 Primary School* | 3 | 31 | 59 | 95 | 62 | 82 |
| 5 Secondary School** | 9 | 64 | 5 | 36 | 14 | 18 |
| Total | 12 | | 64 | | 76 | 100 |

* 26 primary school teachers were parents of children under 16 years

** 6 secondary school teachers were parents of children under 16 years