Community Telecentres for urban youth
Final Technical Report

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Theme:	I2 R7842
Simon Batchelor	Simon@gamos.org
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Project Value	£ 254,000
Project Duration	36 months
Participating Countries	Mexico and South Africa (& Honduras)

1   Executive Summary

This report presents the findings and conclusions of a three year project that explored a different telecentre model. At the start of the research the model was distinct from other telecentres by its emphasis on local content. This is less of a distinctive now as the global community working with ICTs and Development have realised the importance of generating local content.

The research helped start and support two communities to add ICTs to their existing community centres. The NGO partners were Armonia (general community development in the slums of Mexico City, Mexico) and Youth Alive (youth development in Soweto, South Africa). After a consultation which showed how important content would be, the centres were designed around a team of youth who would collate from the global Internet and produce (mainly by video) content that was relevant for their own community.

The key feature of the model is that a group of young people form a team that develops local content. This may be putting offline Internet content on to CD Rom so that it is easily available to the community at minimal cost. More frequently it involved the making of videos that discussed local issues in the local language in the local context. The potential for such products is that they have a saleable value outside the community, and that they have the potential to build up a digital body of knowledge relevant to poor communities.
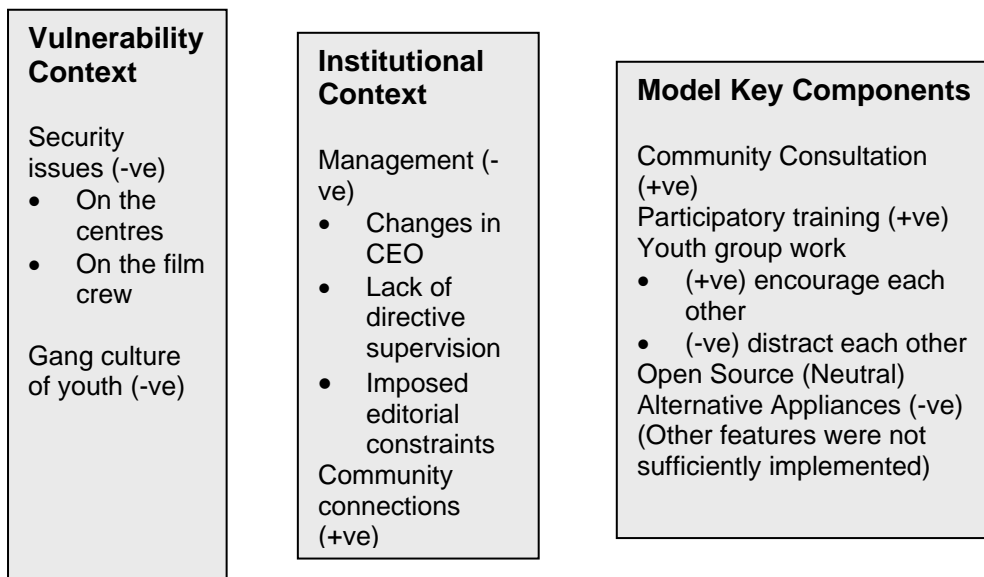
The model attracted interest from other telecentres, and in both cases, the partners assisted other centres to apply the model. Digital Village, an established telecentre in Soweto, had their capacity built to incorporate the essential ideas into their existing telecentre model. A new centre was set up in Honduras supported by the Mexican partners. In addition one of the youth in Mexico set up his own business, and on the basis of the research experience, the local government in Oaxaca, Mexico, asked Armonia to manage the community use of 15 computers which they had installed in their local offices.

Distinctives of the telecentres

The distinctives of the centre were said to be : "The Youth Alive telecentre will stand out from most (if not all) other South African telecentres by being":-

	YA South Africa	Armonia, Mexico	DV South Africa	ICM Honduras
• Focused on a very poor community	Done	Done	Done	Done
• Designed and run by individuals (youth) drawn from the local community	Done	Done	Done	Done
• Contributing to an established locally-driven ongoing project rather than being set up as a new venture	Done	Done	Done	Done
• Content-led rather than technology led with active encouragement to design and publish local content	Done	Done	Done	Done
• Create and use computer based learning for subjects beyond computers				Done
• Based on an integrated approach towards livelihoods rather than set up purely as an information and communication centre	Done	Done		Done
• Risk aversion by utilising technology in a strategic way – Alternative Information Appliances, Open source software, Alternative Connectivity Options	partially	partially		

While there are considerable lessons to be learnt from the research, it would not be true to say that all the centres were an unqualified success. The research was greatly affected by the management system of each community centre, and by cultural and contextual factors not anticipated in the model design. The diagram below summarises the contextual and institutional factors that affected the inclusion of ICTs into an ongoing community project.

Vulnerability Context	Institutional Context	Model Key Components
Security issues (-ve) • On the centres • On the film crew Gang culture of youth (-ve)	Management (-ve) • Changes in CEO • Lack of directive supervision • Imposed editorial constraints Community connections (+ve)	Community Consultation (+ve) Participatory training (+ve) Youth group work • (+ve) encourage each other • (-ve) distract each other Open Source (Neutral) Alternative Appliances (-ve) (Other features were not sufficiently implemented)

The main impact of the above factors was that the quantity and type of content produced by the youth was more limited than expected. Some finance has been generated by the products indicating a financial return that can help sustain the technology and community centre, but it has yet to generate a full cost recovery of all costs (including capital) involved. Similarly, the content has been almost equally orientated to promoting the centre and communicating its needs to the outside world, than to answering key questions from the local community about local community issues. At the closure of the research there are a large number of unfinished products in the pipeline but a question remains as to whether there is the discipline to finish the products.

Main recommendations

In the light of the research findings and the changes in the global development community's understanding of ICT and their role in the solving poverty, the main recommendations are:

• A content-led approach is a realistic model, and should be promoted in most multipurpose community centres (or telecentres)

• The forms of technology are continually changing and do not affect the creation of content – it is therefore not critical to the model to have any specific type of technology - as long as there are mediators within the community who understand the technology and can work with those who cannot drive the technology so that the latter can express themselves.

• Video is significant technology for getting the semi-literate to create local content, and should be promoted as a local tool.

• The livelihoods or 'Life events' approaches which emphasise the benefits of the technology more than the technology itself are an important emphasis in the design of any ICT for Development initiative.

- Adults learn best when studying for a subject that has obvious applicability to their life – telecentres should not confine themselves to ICT subjects only.

- The financial sustainability of ICT activities can be significantly enhanced by the production of content which has a market beyond the immediate community.

- However, the production of digital media is by no means a guarantee to financial sustainability and is subject to the normal market forces – of needing to be appropriate, needing to meet customer demand, having a suitable supply chain, etc

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2 Background

2.1 Research Justification

When this research started young people in the poor urban communities of Soweto and Mexico City had little or no access to appropriate PC and IT skills training and limited access to local information and services. Two indigenous NGOs were running vocational and skills training for young people from urban areas and they requested technical assistance to pilot a simple community telecentre model which would enhance the existing vocational training. They also hoped that the centres would have wider community benefits in the areas of providing users with access to civic and government information, community-building and networking.

The key research hypothesis was to pilot a new **content-led model** for telecentres. The research included an evaluation of the income-generating potential of the model, and monitored its progress throughout the lifetime of the project.

2.2 Demand

Both partners requested assistance to meet demands from young people.
At the start of the research the partnership noted the call by many involved in ICT for Development for increased access and actions including youth. While there are hundreds of documents calling for inclusion of the South in the new global "knowledge society", the research cited the UNDP as an example; UNDP IT for Development Programme (www.undp.org/info21/index5.htm): promoting connectivity and necessary infrastructure for access to information and development; provide training and education to impart requisite skills; empower communities and disadvantaged groups; conducting pilot projects through electronic telecentres.

Since then the Millennium Development Goals (MDG) have been adopted. Goal 8 (Global Partnership) has a target 18, whereby the benefits of the new technologies are made available to the poor. This project directly addressed this MDG.

2.3 Researchable distinctiveness

The **content**-**led** approach had not been applied by other telecentres throughout the world and in particular in neither South Africa nor Mexico. No other group had been identified with a similar approach. The project approach was widely advertised and discussed at the start of the project to ensure its distinctiveness. During the lifetime of the project, a focus on content has emerged among the wider development community, especially those concerned with how ICTs affect the poor. While "*Access*" to technology was the prime concern five years ago, there is now a growing feeling that access alone is not enough and that there is a need for a **content-led** approach. Programmes such as Local Voices (UN ICT Task Force) and Open Knowledge Network (DFID/IDRC) are taking these ideas forward. The research outcomes from this project contribute to the growing body of knowledge on content. It also considers the role of ICTs in youth work.

3   Project Purpose & Outputs

3.1   Purpose Statement

To evaluate the introduction of community telecentres in Soweto and Mexico City, and their impact on their communities.

The purpose remained unchanged throughout the lifetime of the project. However, linkages between Mexico and Honduras added value to the project and led to expansion of the project to Honduras without any increase in budget. Similarly an alliance between the partners Youth Alive and the established telecentre Digital Village enabled the research to further investigate the approach in an established telecentre.

3.2   Key Outputs

- Community consultation to determine TOR for telecentre
- Telecentre piloted in two locations (increased to four locations by using partnerships)
- Community consultation on sustainability and use of telecentre
- Results disseminated to both local and international stakeholders

Young people at Youth Alive Dube centre.

3.3 Outcomes

Potential Outcomes stated after consultation (2001)	Identified Outcomes as at end 2003	Notes
Unemployed young people get IT jobs, start own businesses	This outcome occurred, there was a stronger tendency to employment rather than starting own business.	Although a positive outcome for individuals, the continual loss of young people who left to start an IT job proved to be a weakness in the model.
Gradual development of multimedia based educational and life skills content contextualised to the country, educational curriculum, which potentially empowers the poor.	Content production for the poor occurred at all sites.	The managerial weakness of both the main centres, and their lack of a tight feedback loop limited delivery of this potential outcome.
Alternative livelihoods strategies for community groups and individuals	Limited outcome	Limited outcome due in part to other organisational factors (see lessons learned)

3.4 Collaborators

3.4.1 Armonia, Mexico City

Armonia is a non-governmental organisation in the service of the most needy communities in diverse parts of Mexico. Armonia works in a predominantly Catholic area and identifies its work as having Christian motivation to serve the poor.

Armonia works through a Christian Urban Transformation Centre named **CUTC Armonia-Jalalpa** in the west of Mexico City. Armonia has been able to expand its services to a Sub-urban area of Mexico City (CSUTC Armonia-Santa Cruz) and, at present, is advancing its efforts towards a community of artisans and towards an Indian community in semi-rural and rural areas respectively.

Armonia was founded in Mexico in December 1987 by Saúl and Pilar Cruz and from that time onwards has been directed by professional Mexicans with a strong sense of social responsibility for the contemporary problems of their city. The work has been carried out in association with humanitarian groups from the United Kingdom, United States, Germany and Mexico, with whom they share the vision of integrated service to needy communities in large cities.

Armonia as an organisation now has over ten years of experience, eight of which include the existence of a formally appointed Board. It has managed an average of US $350,000 per year, which has financed various projects at the community centre, housing projects, emergency aid and the development of micro-enterprises. Over the past eight years it has received a series of acknowledgements from the government of the city, thanks to services to communities within the district of Álvaro Obregón.

Armonia set itself up in one of the areas of most need and highest risk by means of a community centre. It defined its working agenda according to the real needs of the community. For this reason, it built 65 houses in an area known as "The Ditch¨ in one the poorest zones of the Ravine, with the help of foreign volunteers and members of the community. One of its main tasks has been the prevention of disasters caused by the possible collapse of mines over which literally thousands of people have built their homes.

Over the years, the organisation gained an excellent reputation for itself within the community and surrounding area, and with certain members of the government. Consequently, one of the problems they face at the start of the project was that of finding more resources to let the centre building grow, since the demands of the community are such that the community centre is not big enough to accommodate all those who wish to participate in the programmes.

Armonia at the start of the project purchased a new warehouse in the Jalalpa valley and was in the process of upgrading it to be a second community centre. This new centre is called Presedentes.
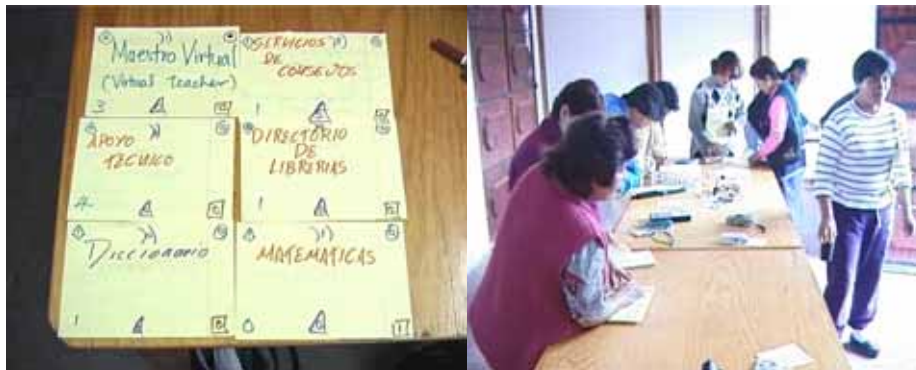

Consultation Santa Cruz centre, Group Exercises, Armonia

A participatory analysis of the core problems facing the community, undertaken by Armonia, has led Armonia to conclude that the poor face four key challenges – isolation, exploitation, hopelessness, and "choicelessness". This analysis fuels its guiding principles among which are:

• Giving relevance to the problems faced by the community and considering them ours in the fullest sense of the word.

• Concentrating efforts into one area of great need and advancing slowly and gradually from a centre of original influence towards other areas, without trying to take on all the problems of the city as a whole.

• Learning to work with and walk alongside the community. That is to say, emphasise that every member of Armonía should learn to 'walk' alongside the community people and accompany them through all the typical experiences and emergencies they face. This means that the organisation has almost its whole life orientated towards field-activities.

• Employing a participatory approach to the solving of problems. In this way, the community centre becomes a meeting place and a Christian Urban Transformation Centre of a very participatory nature.

• Selecting the majority of the personnel from the same community, especially for the department of operations

Consultation, Presedentes centre, group exercises, Armonia

The operative area is defined as that which comes into direct contact with the community and those related to it in a specific way. The personnel in this area are the teachers, co-ordinators, supervisors, builders and all those who have a responsibility to develop programmes directly with the beneficiaries. In this case, with only a few exceptions in the area of administration or if the community centre requires skilled teachers from elsewhere, **all the personnel are originally from the community where the work is being carried out**.

The job of setting up a network for stimulating work locally is carried out mainly by the Co-ordinator of the community centre under the supervision of the Operations Director and in agreement with the General Director and all those form the community, staff or volunteers who will participate in the programme.

Poverty is epidemic in Mexico, exacerbated by the 1994 peso collapse and economic crisis, and the more recent jolt in currency exchange rates in world financial markets. Seventy per cent of the federal district's estimated population of 12 million people -- some 8.5 million people -- survive on about 2,200 pesos a month ($260). 3 per cent of those 8.5 million people live in conditions of extreme poverty, earning about 250 pesos or $30 dollars a month.

Public programs to help the poor have long been subject to corruption and an inability at the federal level to resolve structural problems that leave most of the needy with little government support.

Web site development – Given the emphasis on local participation and community, Armonia do not see a web site as an important tool. There are therefore currently two sites, neither of which are developed and updated regularly.
www.armoniaonline.org and www.homestead.com/armonia/files/homepage.htm

3.4.2   Youth Alive, Soweto, South Africa

Youth Alive stated as a youth organisation to help the churches minister or reach the youth effectively. It is interdenominational and has been working in Soweto since 1959. In Soweto alone well over 30,000 young people have been members of Youth Alive in the last 30 years. They have become an established community resource.

Registered as a South African NGO they receive funding from Germany and the USA. The governing board is entirely South African Africans, as are the managers

and the staff. They have clubs in Soweto, Kwa Zulu Natal, Cape Town and Zimbabwe. The centre in Kwa Zulu Natal is more "modern" than the one in Soweto and there is scope for lessons learned to be disseminated beyond Soweto.

In Soweto they own and operate a community youth centre in Dube district. They also operate youth clubs in three other centres around Soweto. They have extensive links into the community and are networked widely at a grassroots level within Soweto. They are members of the Youth Association Network – all youth organizations working in Soweto. Youth Alive offers a service to local schools. Youth workers run special classes for Life Issues.

The Youth Alive Dube centre is a place to do homework

Currently there is a strong emphasis on HIV/Aids awareness. Youth Alive is seen as a professional resource for the educational authorities and during the consultation visit senior staff were involved in running a workshop for teachers for their in-service training on HIV awareness. Other life issues dealt with during the visit included drug and substance abuse awareness. Professional full time youth workers work alongside a network of volunteers from the community. Senior youth groups self-organise activities and presentations (on life issues) and the youth worker may or may not be in attendance as a facilitator.

At the community centre Youth Alive maintain a presence during all daylight hours. (One of the workers lives on site in a detached house – but due to security use during evening hours is very restricted). There are a number of formal activities which are divided into "clubs". In addition they offer informal services to "latch key" children and youth.

Youth groups at the Youth Alive centre, Dube

Young Adults – unmarried adults up to the age of about 27
Senior Youth – Teenagers - the age for senior high school and tertiary education
Junior Youth – High School (11 to teenager)
Children – 5 to 9

In the past they have offered business skills training, although this activity is currently suspended due to lack of funds.

The YAM managers and youth and community workers had already expressed an interest in the telecentre before the arrival of the consultants. They had discussed

tentative plans before the visit. One or two members of the Board had worked with the YAM staff and together they had drafted a proposal.

Older youth gather for Business Camp.

South Africa has suffered greatly in recent years from the ravages of apartheid and social unrest. Though the future is beginning to offer signs of hope, life is still bleak for townships and the majority of black young people.

- Violence continues to cause grief and fear
- Schools are massively over-crowded and under-funded
- Unemployment runs at 94 per cent for all black school leavers

A whole generation of black young people have suffered a lifetime of turmoil and pain, and face a future without hope.

(from Youth Alive promotional brochure)

Web site development – Given the emphasis on local participation and community, Youth Alive do not see a web site as an important tool. There is therefore no Youth Alive website.

3.5 Methodology and activities

3.5.1 Methodology

The methodology included:-

Phase 1

Literature review distributed to partners on CD Rom	Due to the dynamic nature of the information a printed report was not produced, but a CD Rom collected and collated all the information through an Internet emulation. The CD Rom was circulated to partners and interested parties.
Based on the literature review, IDRC was identified as having guidelines on scoping and evaluation of telecentres. This has since been consolidated into the **The Telecentre Cookbook for Africa: Recipes for Self-sustainability by UNESCO** [1]	These guidelines were used to inform the community consultations and formed a checklist for creating the plan. The IDRC/UNESCO guidelines make certain assumptions which do not apply to this project and adjustments were made.
Community consultation (focus groups)	Consultations were conducted with youth communities in Mexico City (Mexico) and Soweto (South Africa). The project partners Armonia and Youth Alive both have community centres that work with children, youth and young adults. The results are presented in two consultation documents.
Evaluate data and jointly decide on telecentre model	The Business Plans developed are available.

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[1] It was also noted that 80% of telecentres in SA were unprofitable and that community driven activities needed to be in place for the telecentre to have any chance of success. http://www.communitysa.org.za/docs2/Daniel idrc fp 01.ppt

Phase 2

Provide pilot hardware/software	Equipment was purchased according to Business plan
Provide training to youth groups	Four trainings were provided for each centre. Note the difficulty of continuity of youth under lessons learned.
Provide remote support by email/Internet	Undertaken throughout the project.
Community consultation on sustainability and use of telecentre	Undertaken by partners and findings included here in report
Dissemination to local stakeholders (series of meetings)	Undertaken by partners
Dissemination to international agencies	Undertaken throughout project – see dissemination summary.

3.5.2   Activity Highlights Mexico

Summary Notes from Consultation Mexico.   In Mexico, the consultation was conducted in Jalalpas and Santa Cruz, a slum part of Mexico City and a low-income area respectively. Approximately 30 people were involved, two groups of approximately 15 people each gathered for three half days over the period of a week. The people gathering volunteer their services regularly to the centres. They work with the children and the youth. Approximately one third of the group were youth (between 14 and 25) and there were slightly more women than men. All the group live at or below the poverty line in Mexico and were representative of the surrounding community. In addition a survey of 100 local residents (random) was undertaken by the community volunteers. The project team identified and interviewed key ICT players in Mexico City.

Consultation starts with food, Armonia

Summary Notes from 1st Training Mexico Nov 2001 - The training visit to Mexico went particularly well, with a core group of 12 youth, a mix of male and female. High specification systems were purchased to complement the existing low specification access systems already obtained by Armonia. The youth editorial group were brought together from three of the community centres. The strategy adopted by Armonia has been to not put the high specification systems in the community centres because of the dangers of theft. They have converted a garage at their office on the edge of one of the slum communities and invited the youth to travel to the location (a short bus ride). These high specification systems are for the editorial and publishing work. The youth are all part of the community and receive requests from the community. They then create CD Roms with the required information (from internet surfing or by creation) and the CD Roms form a growing library in all three centres.

Some of the attendees of the first training, Armonia

During the first training the youth created a health video, several flash media mathematic programmes for primary school children, the bones of a web site for Armonia and a flash media challenge to youth on "responsibility".

Summary Notes from 2nd Training Mexico Mar 2002 Between trainings they created two videos – a promotional video for donors of the centre, and an awareness raising video on care of the elderly. In the second training they developed the web site further and worked together to create embedded Flash multimedia sequences using the application Swish (see www.swishzone.com). There was a problem that many of those who had received the first training did not attend the second, and there were a few youth for whom the training was a first time.

Summary Notes from review visit (3rd Training) Mexico Sept 2002 - The review visit coincided with the community's first use of video in a public gathering. A seminar and discussion on parenting and teenagers had been videoed and edited. This was then played back to the community and comments on the content and style of the video discussed.

The production centre has suffered from management problems, and lack of continuity of staff. The main problems Armonia are experiencing surrounds the use of teamwork to create products. Experience so far reached an all time low in March, due to the youth working as individuals with no co-ordination of tasks and no team leadership. Since then the teamwork has been encouraged by the management which has produced a more focussed atmosphere. However in July the main young person leading the computer side of things left, once again leaving the community to reorganise and try to find a way to get young people disciplined enough to work in teams to deadlines and to commonly decided specifications. The person has since set up a small multimedia business, and so in terms of job creation for the poor this can be noted as a success? In August and September, Armonia used some of its UK and US summer volunteers to provide computing support, working alongside the community youth.

Since the start, Armonia has produced several videos on educational materials and for fund raising. The fund raising videos were not in the original business plan and it is difficult to quantify their contribution to the local NGO. Also the community were commissioned by one of their UK donor agencies to film a participative evaluative exercise, as a paid commission. Security remains a problem. In September two youth were robbed of a hard disc they had purchased to support the project.

Expansion of the research to Honduras

Expansion of the project - A partner in Honduras has contacted Armonia and Big World wishing to learn from their experience and duplicate the model. In line with the objectives and outputs, this new telecentre will partner with Armonia (both Spanish speaking) as a part of the research, contributing to the knowledge on piloting, replicating and dissemination.

Summary Notes from 4th training in Mexico Feb 2003 - In order to add value to the DFID funding, Armonia formed a partnership with the new telecentre in Tegucigalpa, Honduras and used some of their funds to support the training in Honduras to ensure the achievement of the research objectives. Set up costs for the telecentre were covered by other donors, and the contribution from this project (R7842) was an initial training conducted by Consultant T Gibson with follow up by ARCA, local consultant partners of Big World, in order to promote the same model and structure as proposed by R7842.

Evaluation – The main methodology for evaluation was focus group discussion. Conducted by the partners with their own communities, the various findings were noted. There were a number of anecdotes regarding specific individuals who had benefited from the telecentres, however the following focusses on the overall and general lessons learned with respect to the research purpose.

Evaluation of video products, Armonia

3.5.3 Activity Highlights South Africa

Summary Notes from Consultation South Africa In South Africa, the consultation was conducted in Soweto. The profile of the groups were that they were all local youth, they have had interaction with the centre either through children and youth activities or have shown a spontaneous interest. There were three groupings – Children and Junior Youth (around 60), Senior Youth (two groups of 40) and Young adults (40). There were a slightly more females than males. In general, although they were from poor families, the families had spent a more than average amount (for Soweto) on education of their children. In addition a survey of community leaders was undertaken by the team. The project team also identified and interviewed key ICT players in Soweto and Johannesburg.

The consultation included participatory exercises to illicit everyone's opinions and to gain a common understanding. It included some hands-on use of technology to familiarise the community with possibilities.

"*During the Soweto consultation the team leader lent his video camera to an 11 year old girl who asked to "hold it". Showing her how to record, he left her alone surrounded by a mixture of boys and girls of her own age. Within 5 minutes they had self-organised into making a documentary with commentary, about their community centre, including singing and dancing. This illustrated the potential of youth creating their own content.*"

"*The Vtech laptop was left with eight ten-year- old boys. No introduction was made. The boys found the on switch and for about one hour they happily played the educational word game the Vtech defaults to. They quickly learnt basic computer skills such as how a mouse works and a touch pad. After an hour they explored further finding the word processor and other numerical games. The fact the Vtech withstood boisterous children with no supervision illustrates something*". Visit report Soweto.

A trainee works with the video camera, South Africa

Summary Notes from 1st Training South Africa Nov 2001 – The training was held at the Dube centre with six selected young people: four males and two females. The young people were unemployed members of YAM and four were regular attendees to the centre. The other two had been selected because they had contact with YAM and had particular skills, one being a female engineer, the other being a male graphic artist. During the training they created a draft HIV/AIDS flash media presentation for use in Schools and looked at the potential use of video.

Training exercise with Youth Alive

In keeping with the ethos of 'learning by doing', the youth facilitators undertook a challenge of producing a product in three days. The consultant facilitator identified an HIV/AIDS booklet that Youth Alive uses and distributes by the hundreds, and chose section 2 *What causes Aids?* as a passage of appropriate length for a three day exercise.

The group translated it to Zulu, drew cartoons (scanned in), added digital photos and combined audio, background music, text, drawings and pictures to produce a short Flash media presentation. The idea was that this was one part of a set of presentations on HIV/AIDS to be used in South African schools nationwide - which are being equipped with computers by the government, but which do not have local language learning software.

This 'learning by doing' demonstrated:

Planning	Planning the general scheme
The need to emphasise local languages	The passage was translated from English to Zulu
Audio work	The translated passage was turned into sound files
Graphics	The team were asked to generate some cartoons to illustrate the points in the passage
Alternatives	The team failed to generate cartoons for the difficult subject of "exchange of bodily fluids" (not surprisingly!), and so the challenge of images was approached from a different angle
Digital camerawork	Taking pictures and then reworking them to be anonymous
Flash media	Assembling the components in a flash media product using Swish
Audio manipulation	Using various audio software to generate some background music for the passage to provide continuity
Learning computers	Many of the programmes used were unfamiliar to the group, but the Flash media environment was completely new to them

The draft product without music and with some errors in timing were distributed by floppy disc, for personal storage.

Summary Notes from 2nd Training South Africa Mar 2002 – The centre in Soweto was subject to an armed robbery about one month after the first training. This was a shock to the staff and held the work back. The thieves took only the office computer, but the experience made all the staff nervous. The combination of this and Christmas meant that the work progressed very slowly. The second training was undertaken in March and found that very few youth were regularly attending the centre. This was partly a breakdown in management and partly nervousness of violence which meant the centre was closed more. The second training visit was able to discuss the problems and a plan has been made to increase security, open access to the youth and develop the centre's activities as per the business plan. The second training developed further material for HIV/AIDS awareness.

Trainees work together on a video project, South Africa

Summary Notes from review visit (and 3rd Training) South Africa Sept 2002 - The telecentre part of Youth Alive has suffered from wider management problems at Youth Alive: there have been complete and radical changes in the senior leadership; there is currently a review by Board of YA activities and goals. However a centre manager was appointed in July to manage facilities, co-ordinate training of facilitators, and to create suitable local content. Following previous training visit in March 2002, Youth Alive senior staff are keen to develop a range of local language HIV/AIDS materials for use in local schools, and to explore revenue-generating opportunities. The centre has also been subject to continuing problems with security: Although the centre now has an alarm system, and 24 hour 'armed response', the external power supply connector has been stolen three times.

Expansion of the project - Youth Alive have been approached by the local Digital Village training centre to collaborate on creating more local language content and exploring the model proposed by the research. Chilawelo Digital Village is one of the most famous telecentres in Southern Africa. One of six centres started more than four years ago, it was set up by Africare with substantial donations from Microsoft and other corporate sponsors. The Chilawelo centre itself It has been running since 1997; and is the only one remaining. It currently runs 35 computers. Suffering from financial difficulties, a visit by Colin Powell in 2002 revitalised the centre. In discussion they see the benefit of the model proposed by the research and used at Youth Alive and have requested support to apply the model to themselves.

Summary Notes from 4th Training South Africa Nov 2002: Digital Village and Youth Alive negotiated a partnership, and Youth Alive used some of its project money to introduce the model to Digital Village and pay for training of Digital Village staff and youth. Youth Alive have since developed a close working relationship with

Digital Village. A training was conducted by Simon Batchelor (Gamos) and Jabulani Chiliza (Youth Alive) during the period including six Digital Village youth and staff participants, and four youth from Youth Alive. The training revisited the basics of video work and discussed business models for content production.

Screen shot Aids video, Screen shot Aids Multimedia presentation Youth Alive.

Evaluation – The main methodology for evaluation was focus group discussion. Conducted by the partners with their own communities, the various findings were noted. There were a number of anecdotes regarding specific individuals who had benefited from the telecentres, however the following focusses on the overall and general lessons learned with respect to the research purpose.

4 Hypothesis

During the consultation the hypothesis was refined and developed.

A) Adult learning

The key hypothesis was based on adult learning theory.
"Adults mainly learn during their struggle to undertake their livelihoods, (or to enhance a hobby)."

"Most adults throughout the world who have learnt how to use ICTs, have learned computing skills by attempting to do something else."

B) Telecentre the norm[2]

In contrast to the above most "telecentres" around the world (as at 2000 when the project started) operated in one of two modes:-

- Either they allow "free form" ICT use – internet cafes
- OR they formally (semi formally) teach "computing skills"

C) Consultation responses

Most telecentres encountered as part of the overview for the project, had a **technology-led** approach. Networked Multimedia Personal Computers were in most cases used only to train people on the use of computers[3].

Users learn basic computer literacy. For instance, in the Wits University sponsored schemes participants learn Microsoft Windows, Word, Excel and an Internet Suite. The consultations noted that while people wanted to be computer-literate, they recognised that this alone would not get them a job: they needed other business skills to go alongside any computer learning, and they wanted to use computers to do other activities. (A view gradually taken up by many within the ICT4D development community generally in 2003 (eg FOOD Case Study www.idrc.ca/telecentre/evaluation/nn/21_Tel.html).

In consultations, the few youth who had used an Internet café, surfed the web for "Britney Spears" web sites. Even the youth recognised that this was not that helpful to their struggle with poverty.

Therefore the hypothesis was that:-

That the normal model of telecentres (B) does not fit with neither (A) nor (C), therefore a new model which takes into account (A) and (C) should be developed.

Both Armonia and Youth Alive wanted to approach the telecentres within the context of their existing work. They had stated objectives that concern

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[2] An updated overview of telecentres as at 2002 can be found here -
http://www.digitaldividend.org/pubs/pubs_02_tele.htm
[3] As above, specifically page 2 Figure 6
http://www.digitaldividend.org/pubs/pubs_02_tele2.htm

- *Educational opportunities for Children*
- *Support for Families*
- *Personal development opportunities for all the community*

The key finding of the review of literature and the consultations was the lack of, and need for, suitable ICT **content**.

The design of the telecentre therefore reflected this content-led a**pproach**.

The proposed key design features of each telecentre were:-

1 The telecentre should have a **Content-Led Approach**.   The heart of the Digital divide is the recognition that Information is valuable. It is an opportunity for power. A key objective for the telecentres is to create a mechanism for allowing the poor to realise the economic worth of local knowledge and know-how. Therefore the centre will include a Multimedia Content **Design Studio** as part of the telecentre and a system for rewarding indigenous content. A youth-led editorial committee has been proposed. The community recognise that most information is intermediated for the final step (last mile of connection is generally "organic"). The editorial committee will be tasked to identify useful content and collate in such a form for ease of access by the very poor and computer illiterate.

2 To make the content immediately accessible and obviously appropriate to local people the service provision is to be based on the **Life Events approach**. This follows the general trend in e-governance to present services through a life approach or life event interface.

3 The initiative will be **Youth Led.** Even in these poor areas generation Y have been exposed to computers and accept their potential as the norm. The consultation showed that many poor children had some, albeit extremely limited, access to computers, and/or saw them on television and understood the significance of their potential. The ideas of producing local content can be enhanced by letting youth be involved.

The challenges in this area are:

- Youth have technical expertise (or gain it very quickly) but may not have the authority/leadership skills

- The older members of the community are likely to be the repositories of helpful life experience: so it will be necessary for youth to draw on their knowledge

- There are opportunities for South-South co-operation and mutual capacity building

4 Where possible build using **Open Source Options**.

The rationale for this is lower "per seat" and lifetime costs. Open source options also meant that local staff are paid to develop and maintain the software (keeping finance within the community) not the license holders through their agents (often part of the wealthy elite). Open source also has the potential to allow people to graduate from the telecentre and start their own businesses at minimal cost.

Certificates are important and valued by the business community therefore **accreditation** is important. Due to the general perception of companies in Mexico and South Africa (and the world), there may be a need to enhance the open source options with some sort of generally accepted accreditation in order to maximise employment opportunities.

5 Focus on delivery of services via consumer **Alternative Information Appliances (AIAs)**. There is an increasing range of alternatives to the standard (and relatively expensive) multimedia personal computer. The Knowledge and Research project has identified a number of workable alternatives for delivery of services. For want of a better term we have generically called these Alternative Information Appliances. AIAs again offer lower "per seat" and lifetime costs. They are often more robust, require only minimal maintenance and are more affordable. Examples of AIAs for **delivery** of information and **basic** computer literacy include (this is not an exhaustive list by any means):- Vtech (battery-operated) educational laptops ; Games Consoles ; DVD players; use of multiformat CDs.

The AIA approach opens up the potential for significant cost savings per seat and on lifetime costs. While content is not readily available (except for Vtech educational programmes), the AIAs offer a possible cost-effective and wide audience for long term distribution of home grown local content. An analysis of AIAs can be found in the KAR supporting report, but it should be noted that DVD systems for instance are an open source product being sold for $100 in Mexico and for hire at $6 per week in Soweto. Production of DVD content is now technically feasible for affordable cost and people could access the content at home on their television.

6 There is a need to find the **optimal risk adverse approach**. It is important to offer security of data as well as equipment and yet to include a scalable system to allow for future expansion. There is a need to explore Alternative Networking Strategies. Most telecentres seem to be built around client-server networks which can be very vulnerable to disruption and expensive to support.

7 Personal Digital Storage. As well as general security on data it is particularly important that individuals with possibly only transient access to ICT services and equipment need a persistent, accumulative, future-proof collection of personal digital assets. PDS would include services such as scanning in birth certificates and land deeds for long-term secure storage. .

8 There should not be an assumption of 24/7 connectivity with the global community. It is important to explore **Alternative Connectivity Options**. The so-called 'last mile' is the most difficult part of the network in areas with low infrastructure and low consumer spend. Alternatives have been explored as part of the telecentre design. The focus of many telecentres is Internet connectivity. These projects prioritise objectives based on education, livelihoods and personal development and have chosen to acknowledge that information is intermediated at the last mile. Not all

systems will be connected and advisory services will be coupled to internet access thus saving duplication of work and frustration at identifying relevant information.

Finally, an idea raised in the consultations is that the telecentre should be membership-based to develop a stable clientele that would contribute to the main objectives. An approach for this would be a Vouchers system that would allow free trials and then work towards Training. This offers the possibilities for a PR and Marketing Tool.

One of the community members at Armonia

5   Findings

In order to implement the above features of design, the methodology targeted the equipment and skills required to execute such an approach. This section brings together the main findings and lessons from undertaking the project activities.

5.1   Participatory Training

This worked well and the project training confirmed the peer group learning approach. The training visit from the team started each day with group discussion of how to develop a project plan and the surrounding challenges of setting objectives, managing time, marketing, problem analysis and how to get information needs from the community. The youth then divided into smaller groups, set themselves a project, developed a project plan and then attempted to develop the product. The team showed the youth the basics of how to start on a computer and introduced them to a suite of intuitive software programmes. The groups then worked on their products.

All the groups made remarkable achievements, particularly given their lack of exposure to computers prior to the training. For instance, one group planned to create a health video. A script was suggested by the visitors. They went to UNICEF and obtained *Facts for Life* in several local languages. Using the chapter on Diarrhea they learnt how to use a video camera and how to edit video. Within ten days they had developed a CD with 8 short videos that fitted the Diarrhea chapter. They also created a music video writing their own music using the images of the children in the slum they had filmed for the more serious video.

While this sounds successful, one must put it in context of the reality. The filming encountered two problems – the youth were initially invited to film in a local health clinic by a nurse, and then thrown out by the manager. They were also threatened by several men who thought they were journalists until one of them was recognised and the men gave them an opportunity to explain why they had a camera. There were a great deal of technical problems in setting up the computers, registering the OS, installing software, finding the right software.

Many of these technical problems were solved by the group working together with the team member, and the group learnt that no one person knows enough to solve all problems – the nature of computing is that software developers change programmes and cause unknown conflicts – and that the only way to solve all these problems is to be a lateral thinker and think through the problem, exploring as you go. Even though the youth had not been presented with computers before, they proved to be typically Generation Y and find ways of doing things that even the team members had not thought of.

5.2 Organisational development

The response in Soweto was more disappointing. During trainings, the youth became excited at the prospects and could see how they could work as a group to develop products. However, there have been a number of management failures within the partner and accordingly activities have been weak. The project team are working hard to try to support the partner in their areas of weakness, while at the same time develop linkages with other groups in Soweto which might contribute to the research data. In a sense the results in Soweto very much contribute to the research knowledge since they have highlighted again the importance of non-technical organisational frameworks for the success of these sorts of projects.

As described in the above, most of the difficulties of the research have been systemic in nature. If we liken the telecentre component of the community to the sustainable livelihood model , we note that theft is part of the vulnerability context and there is little that can be done about it. Youth Alive was robbed at gun point and there is little the community can do to protect themselves from this. Similarly, both locations have experienced difficulties in management. In Mexico it has been undisciplined youth that have found it difficult to apply themselves in a systematic way. In South Africa, the local organisation has experienced changes in the top leadership – unrelated to the centre but nevertheless having a significant impact on it.

In terms of the research outputs, both centres have been piloted, and a number of interesting and useful lesson have been learned. There is considerable and growing interest in the model used (ie the youth production centre). There have been advances made in generating local content (a missing element of many telecentre projects), which may contribute to DFID's new initiative on local content. The systemic problems of the wider context have helped to confirm that ICTs must be used within the context of a broader capacity-building strategy.

Movement of youth. The model depends on a group of youth creating (creation, adaptation, collation) local content in order to provide the community with easy access to offline content that makes the centre both cost-effective and of relevance to local livelihoods. Both centres have found that the youth trained respond well to the training.

However, both the main centres have found two common problems. First many of the youth do not have the discipline to do the more boring features of service provision to the community. To get the youth to be disciplined is an important business skill for them, but the struggle to do so has been time-consuming for the centre management. Second, those who do develop the necessary skills and discipline leave the community having new found skills that enable them to get a paid job.

The model anticipated this, and the idea of a **group** of youth was intended to overcome this. A constant training by the older youth of their peers and the next "generation" should have been occurring during the ongoing service work. This has happened to a certain extent, but so far in sporadic numbers yet to create the critical mass the centres needed to have a cost effective generation of local content. This critical mass seemed to be happening towards the end of the project and an extension to the project was made to evaluate the impact. However, the critical mass did not occur, and the centres "limp" on from one set of youth to another.
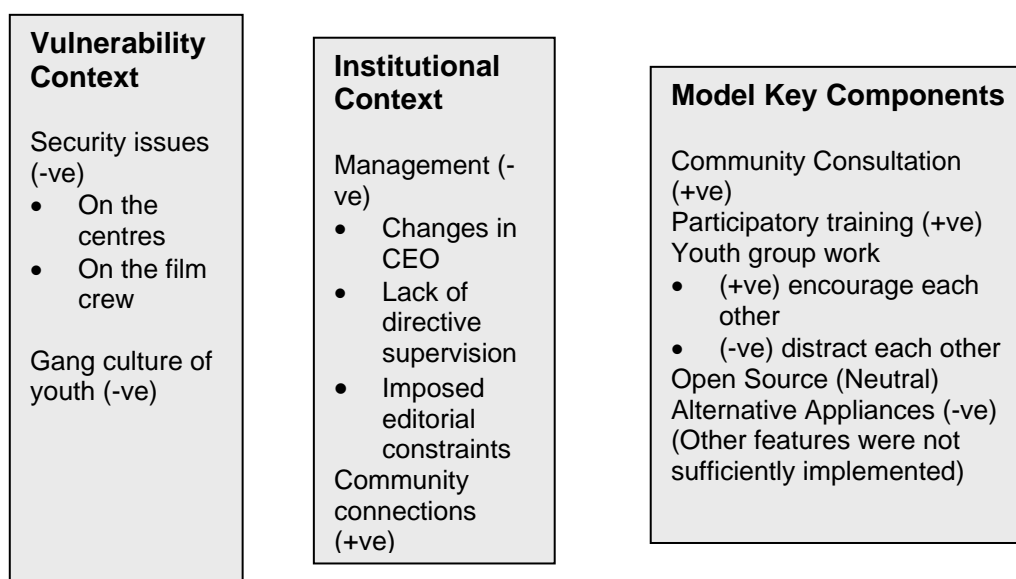
Management that exercises tight editorial control. This component of both centres has compounded the above. The senior management in Youth Alive underwent a significant change in July 2002 (as reported in September 2002). While the new management has enabled the youth to develop their skills, there are still some elements of the management that restrain the youth, effectively setting goals that the youth themselves may feel constraining.

In Mexico, the management retains an even tighter editorial control on the youth. While this is potentially good for accountability of resources, it restrains the youth from front line interaction with the community. The community make requests to the management of the community centres and these are passed on to the youth as instructions.

Control in management is required, and the first point above talks about the lack of discipline the youth (like many teenagers and twenty somethings have around the world). However, in some cases what seems to be over tight editorial control has frustrated the youth to the point where they leave. The model proposed assumes that the youth become a self disciplined team because of their community connections – this has not been the result.

Management that exercises too loose control - In contrast to the apparent tight editorial control, the management in both the main centres does not retain a day to day monitoring and quality control function. There is not the discipline of a normal working environment, and while this need not be a problem as such, it has nevertheless led to the youth not working in a systematic and structured way – therefore not learning the skills required to run business.

Security - In addition to the above, the centre in Soweto continued to experience security problems throughout the project.

Vulnerability Context	Institutional Context	Model Key Components
Security issues (-ve) • On the centres • On the film crew Gang culture of youth (-ve)	Management (-ve) • Changes in CEO • Lack of directive supervision • Imposed editorial constraints Community connections (+ve)	Community Consultation (+ve) Participatory training (+ve) Youth group work • (+ve) encourage each other • (-ve) distract each other Open Source (Neutral) Alternative Appliances (-ve) (Other features were not sufficiently implemented)

5.3   Replication

Both partners took the initiative to pass the model on to other telecentres.

Digital Village, Soweto - In the case of Soweto, Youth Alive has formed a partnership with Digital Village (http://www.sustainableicts.org/DIGVILL.htm). This was encouraged within the research project because Digital Village is an established telecentre and has an ongoing stream of client youth coming for basic computer training. It has also discovered many of the lesson learned regarding "multi purpose community centres".

The computers are linked to a community centre that is variously used for sports, hobbies, women's credit meetings, etc and has a library used extensively by the children of the community. It is community managed by a committee of local people. It therefore is an established centre, and by forming an partnership, Youth Alive hoped to investigate the research model without some of the setting up constraints that they have experienced (eg security).

From Digital Village's point of view, the computers have been used almost exclusively for training the community on and about computers. The linkage between Information and Communication Technology and everyday livelihoods had not really been made – so the offline localised content was an innovative addition to their set up The use of the model within Digital Village will be monitored by both Youth Alive directly and the research team, and the results included in the final impact analysis.

Integral Community Ministries (Project Genesis) Tegucigalpa, Honduras - In the case of Mexico, the problem of youth migration in Armonia has been extreme. Few of the youth trained in the first trainings remain within Armonia. This is important to the model and may reveal a weakness of the model. However, Armonia and the research team have undertaken wider dissemination of its activities and as a result of this, a connection was made with a telecentre in Tegucigalpa which was starting in Jan 2003.

There are a considerable number of failed telecentres in Mexico City and this research project was started against this backdrop. It was felt that to encourage the start of a new telecentres funded by other donors or identify another telecentre within Mexico City for partnership would not be achieved within the timeframe of the research. However the request from Honduras presented an opportunity to explore the value and replicability of the proposed model. Armonia decided to use some of its resources to pay for training for the new centre on the research model. This has enhanced the research by giving another view of Latin American youth, and whether the editorial model for local content can work with different management.

Ricardo Romero - As a result of involvement with Armonia, one of the youth that left the Armonia community, has started his own business based on the research model. The business is the generation of local content for health and livelihoods information (for sale to community centres and NGOs operating with the poor). The business is effectively an "editorial group" albeit not directly attached to a formal community centre. Armonia has kept in touch with the youth, as have the research team, and the outputs of this business have been included in the overall assessment of model impact (see output appendix).

5.4 Potential Gains and actual Outcomes

The model relies on the premise that community clients, particularly the youth, are (potentially) learning skills at several levels at once. The process of planning and design is in itself a valuable life skill for personal and business use. The working environment should have encouraged responsibility while the actual tasks develop computing and graphic skills. Depending on the subject matter there are also opportunities for increasing knowledge of life skills.

Potential learning	Theory	Practice
Planning	Planning a project, working out the timing, dividing the work among a team – potentially the main skills of a business	Higher management did not keep the teams on track and the youth themselves did not have the self- discipline to keep to the plans.
Local languages	Potentially products made in local language, reinforcing their use by the community	Youth tended to look down on local languages, and stuck to English and Spanish
Audio work	A technical skill	Youth obtained this skill
Graphics	A technical skill	Youth obtained this skill
Digital camerawork	A technical skill	Youth obtained this skill
Flash media	A technical skill	Youth obtained this skill
General computer skills	A technical skill	Youth obtained this skill
Life skills	Potentially, the youth would learn the details surrounding the subject area – such as HIV education	Youth are able to articulate the essential messages of the products they finished.

The research concluded with five locations that are operating the model in part or whole, and the surrounding communities were interviewed to identify the impact. The inclusion of the other partners offers insights which get beyond the setting up problems of the original pilot programmes and add to the research purpose.

One of the stars of the Aids Video, Youth Alive

6   Lessons learned (and issues faced)

6.1   Regarding community dynamics:

Movement of youth – a number of trainees moved on before they really served in the digital centre – this was true for Youth Alive Dube centre, Armonia and Digital Village. Some got jobs and this seems reasonable - in fact it is an intended outcome. However, this meant that a critical mass of youth passing their skills on to each other was never reached.

Dedication of youth – while some youth were interested in the training and the more interesting parts of producing digital media, very few had the dedication to apply themselves to the boring work. Inevitably to produce a video or any digital product requires some pushing through on the tedious parts. It seems that volunteer youth don't have that dedication, even those committed to the organisation as a whole.

Staff should have single roles, not dual roles – training the existing managers of the centres and youth workers, was not very successful because they then didn't have the time to apply their learning to the digital activities.

Management - there were difficulties of varying kinds in two of the five locations. Due to the major changes in the top level of management in YAM, there wasn't a single champion who had the time and authority to push through the digital agenda. All the management and Board were keen on the digital additions, but at the start the day to day activities were overseen by the CEO, then a member of the Board, and finally more with the centre manager (who was also interim CEO). The various managers were busy with other activities and the strategic change process provoked by the leaving of the CEO. Provision and hire of a manager for the specific digital activities was discussed at the start but was not implemented until relatively late on in the process.
Similarly in the Armonia centre, the champion was the CEO, but that CEO did not have time to manage the day to day activities. A manager for the editorial group was hired later in the project but this manager had other duties that divided their time.

Illness – a relatively medium-term illness of the digital manager caused a disruption in the growing momentum of activity. Lesson learned is that this is unavoidable!

Involvement of mainstream youth leaders –The mainstream youth leaders in South Africa and the community centre managers in Mexico were never really involved in the application of the technology to their youth groups and children's clubs (other than during the initial consultation). There was little day to day consultation leading the digital work to become isolated from the mainstream community work.

6.2   Regarding situation and context

Security – was a big issue. As well as delaying the start of the project in South Africa it has been the root cause of not making the equipment more publicly accessible. By definition low-income housing areas tend to have a high crime rate, particularly crime with violence. The YAM Dube centre was robbed at the start of the project (although relatively little equipment was lost, it was a shock to the staff and made people nervous of advertising the digital equipment widely). Even when a strong security system was in place there were still thefts of circuit breakers from the outside.

Lessons learned– put in place strong security measures before equipment purchase, ensure all parts of the system are within the security boundaries, and try to engage the surrounding community in a joint responsibility and protection of the centre.

6.3   Regarding the technology

Purchase equipment as required – the initial purchase did not buy all the equipment in one go.   The purchase was staged as to when things were to be used. In the end, not all the specified equipment was purchased - eg the low spec systems for use by children. This strategy proved effective and made the best use of the finance available. It also supports lessons learned from other case studies such as SITA India (see http://www.infodev.org/symp2003/publications/CaseStudies.pdf p62).

Investigate alternatives – several children's computers were purchased to explore their relevance. They assisted some of the staff to get used to computers, and they had considerable potential with children. One girl noted that their weakness was that they had a limited long-term appeal to children, since the children get to know the answers to quizzes. However due to security and management the project was unable to carry out a full knowledge and practice survey on the use of these systems.

Low-cost computers – second hand older computers were purchased instead of innovative alternatives. They were intended for people to practise typing skills and basic word processing. They have been used in some community centres, and the staff and community obtained benefit from these low specification systems.

Keeping in mind the realities of Mexico City slums, Armonia

7   Specific issues raised in the business plan

The plan discussed a number of features that distinguished this telecentre model from other telecentre models. Given the above comments about unexpected factors (security, management), we need to comment on these specific issues:-

"*The telecentre should have a **Content-Led Approach**. A Multimedia Content Design Studio as part of telecentre*"

The content approach has dominated the activities of the research approach to digital media. There has been a focus on video, and there have been many discussions about local content products. A number of videos have been made, and raw footage of HIV/AIDS training is also available. A list of outputs is given in Appendix 1.

This approach has been endorsed by community feedback and while the quantity of the outputs is less than originally envisaged, nevertheless the community have expressed appreciation of those products that have been made.

*"Service provision to be based on the **Life Events approach**. an ongoing selection and **creation** of a local taxonomy of information needs"*

The Dube and Armonia centres have never really been made available to the public and there hasn't been a general service provision. However, Digital Village and ICM Tegucigalpa have made services available. The subjects covered by the digital media products (eg videos) include life issues such as HIV/AIDS, but they have not been driven by the public requests per se, but by the knowledge of the management based on their interaction with youth.

*"The initiative should be **Youth-Led**"*

The initiative has involved many youth, but as detailed above they do not have the consistency to deal with the details of the project. There needs to be a strong leadership to keep the youth focused.   A young person has been appointed manager in YAM South Africa and in the latter stages of the project, the centre has begun to function and produce media products.

*"Where possible build using **Open Source Options**"*

This was not addressed in the project. The centres use low-cost software for production of media products such as Swish and Studio 8 but they are not open source per se. The use of the software options was slightly superceded by the provision of Microsoft products included in the purchase of the equipment. The issue of accreditation has not really occurred as most of the centres have not offered training on computer products as the demand is not high.

In Digital Village, where provision is made for computer training, the centre offers accreditation – having been founded by a donation from Microsoft. It should be noted that commercial centres in Soweto that did offer general computer training have ceased to trade since the project started. The Digital Village that offers computer training is just financially viable.

*"Focus on delivery of services via consumer **Alternative Information Appliances (AIAs)**"*

The alternatives were found to be good for introducing clients (adults and children) to computers, but did not have a very long-term life. They were soon set aside by the community because the adults moved on to the other computers, and the children learnt by heart the answers to the built in games and tests.

"There is a need to explore Alternative Networking Strategies"

The computers were not networked, and this provided a viable security of data. The use of individual computers in the Dube and Armonia centres contrasted strongly from Digital Villages more traditional networked approach. In Digital Village a highly qualified volunteer has to spend the last hours of every day cleaning the network of unauthorized and unnecessary data. In contrast the individual systems of the other centres needed only monthly attention, using common tools such as defragmentation.

*"Important to provide **Personal Digital Storage**"*

Given that the public and wider YAM members have not been using the digital side of the centre there was no need for this element of personal digital storage.

*"It is important to explore **Alternative Connectivity Options**"*

The centre had difficulties getting a viable Internet connection. This was finally achieved in the last few months. As such most of the work was conducted offline.

A focused user, Youth Alive South Africa

8 The centre as a service provider

The proposal discussed being a resource for the wider community of youth clubs and for the public as appropriate. It has only very partially fulfilled this due to security and management issues. The proposal discussed

Advisory services –   "**Me helping myself**"
Training (education and job incubation) –   "**Me improving myself**"
Content services –   "**Me helping others**"

The content-led approach has given opportunity to youth to develop skills that are "me improving myself". The difficulty has been that the improvement has led to them getting jobs, which mean they do not have the time and space to pass on their skills to others. The constant turnover of those involved and "improving" has created its own problems for the project. The content-led approach has also created products that are for "helping others". The products have yet to be rolled outside into schools and other youth activities – this has begun to happen only at the end of the project.

Service menu	Children (<11)	Junior youth High School (12 – 17)	Senior youth (17 – 25)	Adults
Library resources	1	1&2	2	2
Learning programmes (school curriculum)	1	2		
Basic Computer Skills learnt through doing.	X	X	X	X
Training in specific work related skill			X	X
Training in Computer skills		X	X	X
Careers advice		1	1 & 2	1 & 2
Issue based advice (e.g. Drug abuse)	1	2	3	3
Connectivity to global community		1	2	2
Technical Support services	X	X	X	X
Design studio		X	X	X
Business incubation			X	X

Table Key : 1, 2 and 3 indicate specialised curriculum tailored to age group. X indicates generalised curriculum or none required.

The above is the service menu developed from the initial consultation. Most of the activities with the younger sections have not been applied. A few of the activities for the older youth have.

The distinctives of the centre were said to be :- "The Youth Alive telecentre will stand out from most (if not all) other South African telecentres by being":-

	YA South Africa	Armonia, Mexico	DV South Africa	ICM Honduras
• Focused on a very poor community	Done	Done	Done	Done
• Designed and run by individuals (youth) drawn from the local community	Done	Done	Done	Done
• Contributing to an ongoing established locally driven ongoing project rather than being set up as a new venture	Done	Done	Done	Done
• Content-led rather than technology led with active encouragement to design and publish local content	Done	Done	Done	Done
• Create and use computer based learning for subjects beyond computers				Done
• Based on an integrated approach towards livelihoods rather than set up purely as an information and communication centre	Done	Done		Done
• Risk aversion by utilising technology in a strategic way – Alternative Information Appliances, Open source software, Alternative Connectivity Options	partially	partially		

9 Financial Sustainability

The resulting financial proposals from the partners took into account current trends in their location and suggested that the content-led approach opened new opportunities for revenue streams that could make the telecentre financially sustainable. Within the Business plans cost data was based on conservative figures, included rent for space within the community centre and recovery of capital was factored in (with 7% interest charges and three years' recovery). The design support during this feasibility phase (part of the KAR Phase 1) was not included as a cost to the telecentre and will not be recovered.

Since the telecentres have not implemented the model as outlined in the business plan – for security and management reasons, it is difficult to comment on the financial sustainability of the centres. However, there are strong indications that the strategy of producing content for sale outside the centre does provide a viable income stream.

Armonia (Mexico City) have been able to sell the following products outside the telecentre:-

Record of volunteers visit (single purchase)	$200
Record of volunteers visit (7 * $20)	$140
Evaluation data recorded and edited (purchased by donor)	$1000
Record of conference (CD Rom)	$150
Record of conference (CD Rom)	$250
Presentation for Training institute	$375
Total	**$2115**

In addition Armonia note that they have created promotional material which has increased their donor base.

9.1 Unexpected Outcomes

Based on their experience within Mexico City, Armonia was asked by the local council of Ouxaxa, to set up a telecentre within Municipal offices. 15 Computers were purchased by the local government and the NGO Armonia has co-operated to set these up and to undertake management of the centre. Armonia already had a community project in the region.

10 Dissemination

The experience so far on this project has been shared widely in small workshops (eg KAR ICT day, Tanzania content workshop), web based discussions (eg GKD, Bytes for all), websites (eg www.big-world.org) and newsletters (eg Iconnect, South African Youth network) among others. There has been a general positive response to the model of a design peer group mediating products to create local content for wider access through multi purpose centres. In addition to the above in region activities, a paper has been written for the European Conference on E-Learning (ECEL) 2002, describing results to date of the two telecentres, which was presented to educators in November 2002.

Youth Alive expanded their lessons learned to Digital Village

11 Recommendations

When it started this KAR funded research was working with a model that had considerable distinctives. Its focus on local content was in contrast to the main focus of those working with ICTs and the poor – on ICT access. In the years the research has been conducted the development community has moved on quite considerably – in two main respects.

First it has emphasised the Millennium Development Goals. The MDGs focus on the educational, health and livelihood needs of the poor, and call in MDG 8, Target 16, for a concerted effort by the private sector to make available the benefits of ICTs for the marginalised. It is the provision of the benefits that has come into focus not blind access to ICTs (although the target currently has indicators based on access not benefits – but this is being discussed and addressed by the ICD community).

This research presented a model that focussed on the benefits of the ICTs not on the ICTs per se. Indeed in straight measurement of the availability of computers per user, and the hours people spend in front of them, the telecentres have not been a success. They continue and have a measure of financial sustainability but they are not populated by the majority of the slum areas where they are situated. However, when we consider their impact in terms of life events, and input to people's well being – i.e. the benefits of the ICTs – we see that they are well-appreciated by the communities and that the communities can identify specific benefit from the ICT being in their multipurpose community centres. Educational benefits for the young, health awareness for Mothers and Children, and Livelihood inputs in the form of work packages for people.

Second, the global community has called for their to be sufficient attention to be given to Local Content. The UN ICT Task Force has a programme called Local Voices. It introduces the subject by saying:

Priorities for ICT for development have been infrastructure, enabling environments and capacity building. But they are only a means for creating and exchanging content. If poor people are to be full members of the global information society their point of view must be the priority.

» Poor people are largely excluded from current ICT content
» Technology must be shaped to meet their needs
» Their own local content is globally valuable
» Local content can be carried by ICT
» The poor have a unique and creative contribution to make through ICT
» ICT content, locally created, can benefit and empower them

The lessons learned from this research demonstrate how an emphasis on local content can cultivate a "creative contribution" from the poor. The youth editorial committees have clearly demonstrated their ability to create content – IF management and teamwork are in place to ensure realisation of the dreamed of project. The main lesson is that this content the ICT Task force speaks of is unlikely to come to realisation unless there are clear financial incentives, and there are mechanisms for completing the product.

In the light of the research findings and the changes in the Global development communities understanding of ICT and their role in the solving poverty, the main recommendations are:-

- A content led approach is a realistic model, and should be promoted in most multipurpose community centres (or telecentres)

- The forms of technology are continually changing and do not affect the creation of content – it is therefore not critical to the model to have any specific type of technology - as long as there are mediators within the community who understand the technology and can work with those who cannot drive the technology so that the latter can express themselves.

- Video is significant technology for getting the semi literate to create local content, and should be promoted as a local tool.

- The livelihoods or Life events approaches which emphasise the benefits of the technology more than the technology itself are an important emphasis in the design of any ICD initiative.

- Adults learn best when studying for a subject that has obvious applicability to their life – telecentres should not confine themselves to ICT subjects only.

- The financial sustainability of ICT activities can be significantly enhanced by the production of content which has a market beyond the immediate community

- However, the production of digital media is by no means a guarantee to financial sustainability has is subject to the normal market forces – of needing to be appropriate, needing to meet customer demand, having a suitable supply chain, etc

12 Appendix – Examples of Products

The following is a list of products produced by the youth of each community as part of this research. A sample of each product is given on the accompanying CD Rom. An introductory comment and some observations are made for each sample which draw out some specific lessons learned from the product.

12.1 Armonia, Mexico products:

Evaluation (2 min clip). This is a small clip from a set of videos that documented the evaluation process for Armonia. Armonia had been asked by its principal donor to undertake a self-evaluation of its activities, and to report on its findings. Armonia felt that since the community work was predominantly about relationships and process, that video would be a good medium to catch some of the dynamics of the evaluation. The NGO Donor agreed to pay $1000 for the video set, and the videos may have application throughout Latin America for similar community projects.
Improved communication between donor and community and within community

Luisito. This is a small documentary about the day in the life of a young boy called Luisito. It shows his living conditions and many of his life challenges. It also shows how Armonia helps Luisito and many other children overcome these challenges. It was intended to be a promotional/advocacy video for the slums of Mexico City and the work of Armonia.
Advocacy to donors and potential donors regarding conditions within Mexico City slums.

Christmas. This is another small documentary about how Armonia celebrates Christmas. This is purely promotional material intended to raise interest from Armonia's many individual supporters in USA and UK.
Promotional and educational material for donors regarding specific work of Armonia

Promotional DVD. This is a straight forward promotional video for the USA and UK. Two videos, one with the Chairman of the UK Trustees stating why he supports Armonia, and the other with the Chairman of the US Trustees stating his position.
Promotional and educational material for donors regarding specific work of Armonia

Diarrhea. This is an educational video on how to respond to Diarrhea in children under 5. It was based on the UNICEF/WHO/UNESCO publication *Facts for Life*. It is intended to be shown to the local community and the evaluation suggested that it was appreciated by the audiences that have seen it.
Mother and Child health education for the local community, with potential use in other communities by other NGOs.

Hope. A short film showing the living conditions of many of the people that attend the Armonia centres. The idea being that Armonia brings them hope for the future.
Advocacy to donors and potential donors regarding conditions within Mexico City slums.

Music. This is one track of a CD Rom devoted entirely to music. While this has been happily accepted by volunteers and supporters of Armonia, it is unlikely to have a wider audience. The music is based on Western songs, and although the singing and performances are "Mexican" it is not really culturally archived material. The copyright on the songs would also prevent wider sales even if they did have popular appeal.
Promotional material for donors, with little educational content and limited appeal.

Psychology (first two mins of 40 mins). This was a video supervised by the manager of Armonia for his Masters degree in Psychology. He asked the youth to assemble footage

taken from an interview of a client by a famous psychologist and then commented on the conversation (on the video) as an essay response as part of his degree.
Specific commission, which demonstrates a value to the middle class Mexico City community for future commissions. Note since this one, the youth have been asked by the university to undertake paid commissions.

Offline Maths websites (Spanish). This is a part of a CD Rom created by taking websites from the internet and making them available offline on a CD Rom. This allows the community centres to build up a library, for those inexperienced in the internet to gain experience without the costs of being online, and to not have to repeat the surfing time required to find the relevant sites.
Used by the children of the community on the low specification computers to enhance their homework

In addition to the above

Offline Faith based sites for children (Spanish) – Armonia is a Christian organisation in a predominantly Catholic community. This offline CD Rom has a number of sites that discuss the Bible for children. A number of **homilies** given as the community meets on Sunday have been captured by video and edited to approximately half the original time. Feedback on these videos was particularly positive and much of the material is on life skills – how to deal with teenagers, how to cope when one of the parents has to be a migrant worker, etc. The talks are faith based, nevertheless might have wider application throughout Latin America.

Documenting conference on "Integral Mission" Thailand. The Armonia director attended a conference in Thailand on how social action fits with the Christian scriptures. The team assembled the conference papers, some pictures that the Director had taken, and a small video clip and sold the resulting CD Rom to participants for $10 each.

Documenting conference on "Integral Mission" Mexico. As the host for the next conference (a result of the CD Rom mentioned above), Armonia captured the proceedings on video and intend to create a CD Rom of the conference.

Record of visit for volunteers (Music, English and Spanish). Armonia regularly gets volunteers from UK and USA who come and work with the children. These include professionals such as doctors and opticians, and young people (GAP year school leavers). It has found a ready market in producing a record of their time at Armonia.

Stock footage of some of the special events, mixed with a short video featuring the volunteer and their team. These are sold at approximately 10 to 20 dollars each (depending on the volunteers situation), and in one case one volunteer bought $200 worth to give to friends.

12.2 Integral Community Ministries, Honduras products:

- A promotional video on the educational work being carried out by Genesis Project with the neediest children in the community.
- A documentary style video on the women entrepreneurs who are partners in community banks, and who have been able to improve their condition of poverty.
- A promotional video on the Genesis Youth Camps, which has been a resource for forming moral and spiritual values with youth for over 25 years.
- A video on the work with youth, which emphasizes the positive actions of the youth in the community.

Future prospects

- Project Youth 2010: The Genesis Project is in the process of writing and proposing a longer-term strategy which focuses on developing the potential of the youth and children in the community, especially in two sectors of the neighborhood where

juvenile delinquency rates are very high. During the first stage the project team is considering using training in digital video filming and editing with the youth at risk, in order to work on raising trust and self-esteem among this group. The team is excited to initiate this project and is looking forward to being surprised by the creativity of these young people and what they might have to say to society.

- One of the team members has finished writing a training curriculum for new members of the community banks, and is planning to create a training video to reinforce the curriculum.

- The team is also considering creating video resources to help them in their work with youth groups. Some of the possible topics for reflection include: working with street children, youth violence, responsible parenthood.

- An ambitious proposal was presented in January to the InterAmerican Development Bank through FIDA, which called for innovative projects. The proposal presented included the acquisition of more equipment and training to form a youth group of ten video producers, who would create three videos from their own perspective on reality. Once the videos are done, they would also show them in their schools and youth meetings to conduct discussions on the topics raised. The response to this proposal is expected next month.

12.3 Ricardo Romero, Mexico products:

Ricardo Romero is a young person who worked at Armonia. Following the training and a year's work with the research, he left Armonia to set up a business of his own in video production.

His videos are typical commercial videos:

- Wedding

- Anniversary

- Baby

12.4 Youth Alive, South Africa products:

Child Development. This is a short video encouraging parents to consider their child's development.
Used by the local community and schools to start discussions on child development.

History of Books. A promotional video encouraging people to read and in particular use the library at Digital Village Soweto.
Used by local youth groups to promote the use of libraries.

Human Rights. This is a short film aimed at raising awareness of basic human rights in South Africa. It also lists organisations that can be approached if rights are being violated.
Used by the local community to better understand their rights.

Pedestrian Crossing. In "Pedestrians" a simple message for school children is presented almost as a documentary. We note the use of the British "look left, right and left again" approach, which is wrong for a South Africa that drives on the right. Therefore the youth seem to have taken an established script and used it as the basis for the video.
Used by local youth groups and schools to promote the road safety.

Promo video. In the Tree of Life "Promo" activities that are happening within the youth centres (eg Tree of Life camp), are filmed and used to create promotional material and a record for the attendees.
Used by local youth groups and schools to promote the youth camps of Youth Alive.

Starting a business. In "Starting a Business" the script is obviously made up, and based very loosely on some guiding principles for starting a business. There are a number of points the viewer may disagree with.
Used by local youth groups and schools to discuss small businesses.

12.4.1 Observations regarding these last three :

Also while these examples presented as part of the final evaluation consultation are in English, many other products are in local language.

We might note also that the visuals are variable. In the Promo, the shots are long, with little editing. In Starting a Small Business, the shots are immature with shaky camera and ill framed pictures. In Pedestrians we see the basic rules being adhered to – a more steady camera and some planning of the relevant shots.

The use of music in the Pedestrian Video works well, while the use of music in the *Starting a small Business* video is distracting.

In terms of teaching or communicating a lesson, the feedback on the Promo was the most encouraging, because the youth saw in the opening sequence the fun and enthusiasm of their own peer group. Interestingly they were not put off by the apparently more sedate latter parts of the video showing "listening to lectures". While as outside observers we might be able to see ways to improve the video, the raw nature of the video is good for communicating the central message. Pedestrians is a more thought out video and works well. It was well received by younger children.

Starting a Business is a discussion starter. The video is immature in its script, visuals and overall presentation and yet because it is made by young people for

young people it still has incredible value in terms of problem-solving for the poor communities.

The key point to note is that while these products may not be interesting to an international audience, they are the products of youth who are just starting out on an adventure and as the team receive feedback on their videos it is likely their video style will mature.

Starting a small business. A second video aimed at guiding entrepreneurs with starting a small business. Covers topics such as the business plan, marketing, recruiting and the feasibility study. The script seems more thought out than the first video although the music is distracting.
Used by local youth groups and schools to discuss small businesses.

Draft Flash chapter on Aids in Zulu. Developed during the training this is the use of computer to make a presentation on AIDS. The chosen chapter was a very difficult one about how the virus affects the cells of the body. The young people drew cartoons, scanned them in created music and presented the chapter as you see here.
Used by local youth groups and schools to discuss AIDS.

CD Rom of local poetry (English, Xhosa, Zulu). In Poetry, one of the youth presents her own poetry. Her creativity in the poem is at an international standard, although the visuals are constrained by the security of the camera - she wanted to take the camera to her home village, but the management did not feel that was possible and that it would get stolen.
Potential digital product for sale

Plans for near future or partially completed

Documentary on Gangs in Soweto