



One World Link

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Registered Charity No. 700714

REPORT BY LEE HALES

ABOUT HIS VISIT TO BO

APRIL 2003



Review of Trip to Bo, Sierra Leone.

Lee Hales, March 31 to April 19 2003.

This report details my three-week fact finding mission and teaching exercise in Bo in April 2003. The purpose of my visit was

- a) to ensure that at least one set (possibly even a networked set) of computers is up and running in at least one educational/training establishment, and that at least two people have the know-how to use and maintain the hardware and to train others to use the software.
 - b) To assess what further practical and training needs Warwick OWL could help with
 - c) To give any further advice and assistance to Bo OWL that may be possible within the time available
1. I arrived in Freetown on April 1st after a good flight from Gatwick. I met with Kathy Bendre on the flight and she helped me through the airport and heliport where I met with Rajiv Bendre. He put another student traveller and myself up in a guesthouse in Freetown overnight. The following morning I was taken to the British Council where Teresa Bangali was waiting to collect me.
 2. I arrived in Bo via public transport on April 2nd. The trip was a cramped, dusty 150 mile slog along the remnants of a fifty year old road but the cost was only Le10,000, which is less than £3. The public transport system is actually privately owned and controlled but is for the people, those who can afford to travel.
 3. My first night was spent in the Catholic Mission of Father Konteh, I stayed here for around a week and a half. The accommodation was excellent compared to what I saw on the streets and I was well fed and cared for at the Mission.
 4. My second day in Bo I repaired the computer of Father Konteh. He had no major problems but wished to install a printer and a scanner. He did not have the driver disks for these so I was unable to help. I recommend sending the information he needs on a CD the next time a package is sent. There is little more that can be done for problems of this kind, as all peripherals (printers etc) have different drivers and we cannot send a generic set out in the hope that they can serve everyone.
 5. I was taken later to the Orphanage that Father Konteh has established in Bo. This has capacity for around 50 children in house and many visitors from the local community. They have a secretarial assistant but the problem that she faces is electrical power, which limits the amount of work that can be done. The only solution would be an alternative power source (I will discuss options for this below) or a laptop computer that is capable of running off batteries for extended periods.
 6. A basic rule of thumb with laptop computers of the age we are likely to be dealing with: Three hours of electricity is enough to charge the computer battery fully. This will tend to provide around 2 hours of further un-powered use if the applications being used are not processor or hard drive intensive, i.e., office applications. This gives around 5 hours of useful work per day, which is probably the most you should safely use a laptop computer for. In a teaching scenario this is bad as it only provides a few students a very short access to computing facilities. Hence generated power running normal desktop computers is preferable.
 7. In the evening of the Wednesday I met Joe Kobba and his wife Safie. I was shown around a little of downtown Bo and we discussed the plans for the rest of the week. The next 8 days would be spent on a training program covering as many aspects of computing as I could, covering topics I deemed appropriate for the audience I would be working with. I retired for the evening with Joe

Kobba's laptop to repair. I left this on charge overnight, as this was the only time that Bo had electrical power.

8. Thursday morning I repaired Joe Kobba's laptop by replacing the faulty hard disk drive. The replacement was successful and Joe now has a fully featured top of the line computer. I will return the faulty hard drive to ASTRA computers of Kenilworth as per their request. I was collected from the Mission on Joe's Motorbike and taken to the French Centre, a public building at the top of Bojon street where we conducted our training sessions for the next few days. The Link hired a generator to conduct the training and we initially ran a single computer from this.
9. I started with a general overview of a computer system in a kind of show and tell form. I spent a morning doing this and the success was limited. Many people did not take in the information that they were shown and this led me to understand that this method of teaching was not likely to be appropriate for this audience. I had wanted to get more people up to have a go with the computer but with only one system and more than a dozen people this would have been very difficult to do. I was asked to pass around some components of the computer, namely the keyboard and the mouse, as some of the people had never seen or handled these things before. This I was surprised at as there are computers in most of the schools and in the town council. I explained the differences between a typewriter keyboard and the computer one (there were several secretarial typists present) and demonstrated the use of the mouse. We recessed for that day around 1pm so that plans could be organised for the rest of the week. I asked for more computers to be set up for the next day of training.
10. After the training I was taken by Joe Kobba and Teresa to see the site of the new community centre. It is now at the height of the first storey, bar one layer of bricks, and just needs a bit of rainfall to harden the surface before it is floated. I was shown around and told the plans to install a room full of computers that are open to the public for a small charge to come and learn computing and IT and possibly access the Internet. There will also be a good library resource, a small bar and a large hall, which is to be used for general purpose activities, events and community endeavours. It is an expensive project but has a fantastic amount of potential and is more than suitable for the ideas that the Bo committee have in mind for the next few years.
11. That evening I returned to the mission and was met by another priest from a nearby village. He had brought a computer in to be repaired. There was a fault with the power supply, possibly just a blown fuse, but I had neither the tools nor the resource to check the power supply and conduct repairs. I recommend for future visits to take a selection of electrical repair tools, fuses especially and a couple of multimeters. These can be bought for around £10 from most hardware stores, and can test fuses, electrical connections and circuits to fault find. Their operation is simple and training similarly so, I believe our Bo technician, Magnus, is more than capable of using the tool.
12. Friday and Saturday were spent training Microsoft Word. We set up four computers on the bench and ran them from the generator. The students split into groups of three and set about typing text into Word, selecting and formatting the page using the various tools demonstrated on Wednesday. By the end of the day the students had also used the Paint application as a tool to learn mouse control. This simple program is extremely effective for teaching hand eye co-ordination with a mouse and the monitor. I hope that the inexperienced students will go back to their establishments and continue this training.
13. While the students were using the computers Magnus and I, and some others who were interested in watching, set about upgrading the computers reserved for the link to Windows 95 and installing Microsoft office to get them all to the same standard. The technical ability needed to do this is low and the students who watched are all capable of doing the same on their own systems if they have a CD drive and the appropriate software. I will detail software requirements below.

14. Friday and Saturday nights were spent at the sports events of the local schools. I was asked to present prizes at one of the events and was introduced to a group of Sports interested individuals, PE teachers mainly. This group called X+1 is a member of the link and has requested a link with a sports organisation in Warwick. I have contact details for their representative Mr Kaitibie if a suitable body is willing to link with them.
15. Sunday was a rest day so I went to the service at St. Francis and was amazed by the vibrancy and the joy that the congregation had when celebrating mass. I look forward to Bruce Knight's concert if it includes some of this energy.
16. Monday morning I was picked up by Joe Kobba at 9.30 as usual and we went to the French centre for the morning session. We now had two sessions a day in full swing, one from around 10 until around 12 and one around 1 until around 3.30. Mondays session was focused primarily on Hardware. The students split into groups, one who were interested in the software installation side and one who focused on the actual hardware. I started by showing everyone around the insides of the PC. We used some of the non-functioning systems for this and by 11 I had 3 sets of hard drives, CD ROMS, floppy drives and a plethora of cables being passed around, put together and taken apart. I do not know how many people will retain this experience of reverse engineering a computer but those who did should now be able to upgrade any computer with a compatible component, replace hard disk drives and the rest of it on their own systems.
17. The afternoon of Monday was spent finishing off putting the computers back together then I showed people how to go about the installation of Microsoft Windows. Some were not overly interested in watching a blue bar take 30 minutes to creep across the screen so returned to playing with Word and Paint. I was asked questions about printers as well and explained the differences between dot matrix, laser and ink jet. While Windows was being installed I demonstrated the similarity of dot matrix printers to typewriters and how to replace the ribbon in these and replace inkjet cartridges. The students were able to see the mechanics of the devices but had difficulty understanding the electronics behind an inkjet printer. This is not a problem though as the user need simply replace the cartridge and it works, if it does not then there is not a lot that the user can do to repair the fault. The components are just too small. I explained this same principle in regard to Hard disk drives, motherboards and some other components. Once they are damaged they cannot be repaired. It is difficult for these people to just throw something away that doesn't work, perhaps that is a good thing.
18. Monday night I spent touring some of the town that I did not get the chance to see in the first week. It is a big place but everywhere is the same, full of street sellers peddling useless goods that no-one wanted nor could afford. I returned to the Mission for dinner and awaited the return of electrical power.
19. Tuesday was to be my last day of direct teaching in the French centre. We had planned to cover Microsoft Excel. I wanted today to be something special about which the students could feel proud of what they had achieved. I began early and the students started by going straight to Word and doing what they had been doing all of last week. I asked them to stop and to run Microsoft Excel. They obliged and I ran through a step-by-step guide of how the spreadsheet worked. It took quite some time for some of the secretaries to understand the concept of clicking on the cells, entering information and formatting it the same way as they did in Word. I then proceeded with some basic mathematics and got sums, averages, adding and cell multiplication going to produce a spreadsheet table of rice bought in the week and the money spent on the number of bags for each day. Then editing these cells and seeing how the totals changed. This took all morning but finally the students all got to the same level and had a fair understanding of this powerful program.
20. In the afternoon I continued with Excel and introduced a few things about computer graphics in the form of generating charts from the data that the students had created. This took quite some

time using the wizard to generate bar charts, line graphs, pie charts and then editing the display so it appears where and how the students wanted it. I asked them to be creative in designing how it would look and they really struggled to do something when they had not been told objectively what to do. I also found this when one of the students accidentally closed down all windows on a Windows 3.11 machine. There was only one thing on the screen that they could click on and this would restore the program manager but they were unwilling to try until I told them what to do. As the end of the session approached we had a range of charts created displaying everything that the spreadsheet contained. The students then edited the data and saw how the charts changed accordingly. The result was a set of highly colourful pie charts that I wanted the students to embed in a Microsoft Word document. This is a challenging thing to do but should have made them feel proud of what they could achieve. Thinking now it was probably a little too advanced and could have led to confusion, but I got the students to link and embed their spreadsheets into a Word document. They gave it a title and bit of information, and then selected the pie chart as the element of the spreadsheet to display. By 3.30 they all had a poster showing how much money they had spent on rice each day of the week with a title and a comment formatted using Word art. I finally showed how to print the document but the lack of printing facilities gave a disappointing end to the day.

21. That afternoon I went out into Bo again and saw some more of the town. In the evening I was invited to dinner at the vicarage general out at CKC.
22. Wednesday was the first day of on-site installations. I spent the day at the Town Council. In the morning we arrived around 10 but there was no electricity so we waited for around 2 hours for the generator to be collected. After this I installed three computers in the Secretarial office, another in the management room next door, one in the resource room down the corridor and then returned to the Secretarial office to install office on these computers. One of the machines was not functioning so after dinner I returned to try and repair it but the hard drive was severely corrupted and there was not enough time to complete the installation. While performing this operation I met the senior electrician at the town council. He wired up the generator to the power system in a very professional way, he seemed to be the only qualified engineer around. I talked with him briefly about the options for regulated supply. I found out that it is possible to get 1kWatt regulators for mains goods in Bo. A regulator of this size would prevent a mains spike that could damage the computer for up to four computers with monitors and a couple of printers. Beyond this it hard to say how much load a regulator would take. Most computers of this age we are using are rated with 100W power supplies. These are capable of powering both the computer drives and also the monitor. This method is much more efficient than driving the monitor from its own cable as it only needs one power supply, this does however shorten the life of the power supply, but not by a factor significant enough to affect the useful life of these systems.
23. After the installation I was invited to meet with Mrs Nancy Nicholas, the chair of Bo Town Council. She spoke with us at length and Mr Kobba informed her of the purpose of my visit.
24. Thursday started early at Christ the King College where I had dinner yesterday. I went with no preconceptions and I didn't know what to expect but still I was surprised to find the computers in a staff room. There were two brand new Dell systems, complete with surround sound speakers and printers, large displays and a vast quantity of software. I estimate there was around £2000-£3000 worth of equipment there. With that much money we could have kitted out most of the school with a respectable set of computers and still had the CD writer and other features included in these machines. CKC had three printers. A Canon which was not functional due to a problem with the power supply which was beyond my resources to repair, a Lexmark inkjet that worked fine but required cartridges, and an Epson dot matrix wide carriage printer that was working well. Bo Link committee supplied CKC with four computers, two of which were Pentium class and one was a 486. The other was an ageing 286 or 386, which really was at the end of the tolerance of what we sent. This originally had DOS and Wordperfect installed. We upgraded it to Windows 3.1 and installed MS publisher but we found that this software did not work. I

recommend sending some software that is compatible with windows 3.1 specifically for these machines. The other machines we installed Microsoft office on and left in situ for use by CKC. If there is any more work that they need this can be performed by Magnus when more software is sent.

25. In the afternoon we travelled down the road to Bo Commercial Secondary School. Here they have a well-organised computing laboratory and qualified computing teachers, two of whom attended my training. The bulk of their computers are from the first shipment that the link sent in 1999. There are a few that are from this shipment, most worked fine except for one needing Office, which we installed, and one that was non-functional. I spent a significant amount of time trying to repair this system but I could not get it to work. We had a replacement at the French centre for the broken machine but it was one that they had provided and we had patched up already. It is the policy of the Bo committee not to replace a broken computer if it was working when it was sent out. I believe it would be a sensible plan to create a log of all things sent to Bo so that if such arguments arise again the Bo committee has a document which they can use to conduct repairs / distribute the computers quickly.
26. The following morning I was taken to Ahmadiyya Muslim Secondary School. Here they had the generator so we were able to start straight away. There was a limited reception from the staff there, but I was informed that Friday was not a good day for visiting the school. We started working. There were four machines that we had delivered. Two were reportedly working fine so I did not even turn them on. One was supposedly fine and the fourth was not functional. There was power being received but nothing on screen. The computer had been working when it was delivered so something must have gone wrong in the interim. We tried removing all drives and swapping memory, all the usual tricks but there was nothing. I then found the AMIBIOS chip, a key component of the computer, had been levered out of its bay (it can only be removed by force, not accidentally in shipping) and was loose in the bay. I queried this but the staff had no idea. Reportedly an expert from Freetown had been to try and fix a laser printer that they had but could not. It is possible that he or another individual had tampered with this computer and removed some of the key components for private gain. We tried everything but neither Magnus nor I could get the system to run. I removed the hard disk drive and installed it in an adjacent machine and in doing so discovered a memory fault, which I quickly fixed. The hard drive booted up and had been installed at the school with a copy of Windows and office. Therefore it is clear that the damage to the system had occurred at the school after delivery and was not the fault of the Bo OWL members. There was nothing that we could do about this machine unless the components that were missing were returned and the Bo committee had resolved not to replace a system that was functional when despatched.
27. The final thing at the school was the printer. This was a high quality HP laser printer with a bad installation. The so-called expert from Freetown had not diagnosed a parallel-cabled computer as mal-installed on the serial port. After changing this the printer worked first time. The problem with it was that it was designed for network printing. The only way to get it to print was to turn it off, tell the computer to print and turn the printer on afterward. It is little tricks like this that solve the majority of computer problems, but it needs someone on the ground with the skills to try them. You cannot learn them in a book, just through experience. This is why I recommend that people like Magnus who know the basics receive further training to learn the little tricks of the trade.
28. We left Ahmadiyya without actually achieving much and I was a little disappointed as their computing facility was one of the best we had seen, they had a good range of computers with good technical expertise to teach computing to the students, something which some of the other establishments would not be able to do with the facilities that I had seen.
29. Friday afternoon we returned to the Town hall to complete the installation there. I had only achieved a fraction of what I could do there on Wednesday. I started by completing the

installation of Windows on the broken third machine in the secretarial office. After this I went upstairs and installed a system in the office of one of the councillors. As I was doing so I was asked to go to the Chairs office and there I met with James Beadle from the Local Government International Bureau and Lucy Slack from the Commonwealth Local Government Forum. They were on a brief tour through Bo to check how the council was functioning. They were very interested in my project in Bo and the way in which it came about and requested a copy of my report. They went off for a meeting and I returned to the installation and completed the setting up of the computers in the councillor's office then proceeded to the Chairs office and installed a system there. The system that we first tried had errors so we replaced it for another system and I returned downstairs to the secretarial office to complete my work there. I installed a sound card in one of the machines. Sound cards are rare commodities in Bo and I had more than one request for them. They can be bought for as little as £10 but their real worth is less appreciable if you were to spend that £10 on some software that has a lot more educational benefit. The main reason for wanting the card is for the playing of music and videos. I tried to explain that most of the computers are not fast enough to play video CDs but I am unsure if this message was understood by most. Some sceptics took it as an excuse for us not to give them one, but it was the truth, you need a good specification computer to play video CDs. Also a sound card is little use without speakers, something that we did not send out. If the users can afford to buy CDs, speakers and videos then I think a sound card is also within their budget, so I do not recommend sending these.

30. I finished at the town council around 3pm and returned to the Mission to collect my things. Today I was to move to Joe Kobba's home. This transition was smooth and I was quickly settled there. I was immediately asked to check over Safie's office computer, which for some reason had been upgraded from windows 98 to Me. This upgrade is fairly pointless and has little benefit. At the same time Microsoft Word '97 had been replaced with the 2000 version but this was corrupted and would cause the computer to freeze up completely. The alternatives were to reinstall office from one of our CDs or to use a workaround. I showed Safie how she could access Word through an alternative method which she learned quickly saving her the cost and effort of an upgrade or repair. (This computer belonged to a NGO and Magnus did not feel it was fair to do the work for free). Again it is knowing these workarounds that makes all the difference between a qualified technician and an experienced one.
31. Later that evening I showed Joe how to use some of the more powerful features of his computer to play CDs and video CDs. These things are simple to do but need learning and there is no documentation available for the people to learn from. This is true in so many situations; I think future shipments should concentrate on this, sending books and educational software in the first instance.
32. Saturday was to be my last day of work but this changed when I arrived at the French centre and found it had been booked out by some people playing table tennis. We returned all of our equipment to the storeroom at Mr Ngombu's office and we worked there for the rest of the day. Magnus arrived and we began sorting through all of the remaining computers reserved for the Link and to be used in the building when it is completed or distributed to members who need them for specific tasks. There was a range of systems available including the IBM Aptiva that needed some work but once we got it running proved to be a top quality computer. We installed windows on a range of the systems and began rebuilding some others from the spare components left over from some non-functional systems. This was one of the major problems we found while sorting out the last of the machines, we ran out of spare components. Memory chips were swapped into better computers to make them work, meaning other systems would not function. We ran out of internal cables (IDE and floppy disk). Some systems needed additional power cables and the some drives were shown to be non-functional. Some keyboards did not work so had to be replaced, depriving more systems. I recommend sending a selection of components to help repair some of these systems and to upgrade some of the others. We have most of these components in stock the just need shipping. I will make a full detail below.

33. Sunday was a rest day and I went to the Palm Sunday parade at St. Francis. This was a long parade through the town and I experienced some interesting culture in this popular ceremony. That afternoon I borrowed Joe's Bicycle and rode down to town to meet with Teresa's Women's group. This group is highly active and meet regularly to discuss issues affecting women in Bo. They have organised cooking and gardening training for themselves and are quite adept at traditional crafts, as my gift of a traditional shirt will testify. They were designated one of the computer systems by the committee for use in developing the role of women in the community. The group requested that I show my photographs to the members here and ask that the link between the two groups be strengthened by the development taking place in Bo.
34. Sunday evening I was taken around the town and shown New London. We then headed over to MIA, the Manjama Institute of Agriculture. This is an agricultural training centre that teaches good farming practice and also good homemaking. The proprietor, John Bosco hosted us for the evening and also invited us for lunch on Tuesday.
35. Monday was my final day of official work in Bo. I returned to Mr Ngombu's offices at the Railway station and with Magnus continued to work on the remaining computer systems. By lunchtime we had refurbished a further 5 systems and declared some others deceased. We spent a short amount of time going through some of the other equipment there. Magnus repaired a couple of the typewriters and I showed them how to operate the Canon Starwriters. These are electronic word processors with large memories and the facility to save work. There were two of them and one still had ink in the cartridge. I doubt if it would be economical to send replacement cartridges for these due to the amount that they are probably going to get used, it would be more worthwhile getting cartridges for the printers. There was also a stack of boxes containing books on a range of subjects. I was concerned at this as these books can serve a much more useful purpose in schools and libraries and made a point of my wish that they should be distributed as soon as possible. The members promised that they would see to it. Some of the books were focused on Computer Science and Electronics, the ideal first reference for people wishing to learn about general computing and the technology that they have been sent.
36. That afternoon Magnus took me to see the National Regions Secondary Schools Football Tournament. This was an excellent event attended by the deputy Minister of Education and Sport. The teams from the Northern, Southern, Eastern and Western regions played a very high-class game and seemed to be well supported in terms of kit and personnel. It is something that the Sierra Leoneans seem to do well, organising sporting events and highlighting talent of young people. In the evening I returned to Joe's and we had a quiet evening.
37. Tuesday was a free day for me to experience Bo. All the work that I had planned to do had been achieved and the teaching had been an amazing success, so I took the day to tour around the town and see some of the sights of Bo with my guide for the day Mr Kaitibie. We toured around the markets of Bo and some of the back streets that I just would not have seen under other circumstances. After this tour I went back to Coronation field to watch the second day of the sports events. The morning event was volleyball and the event was competed in by both teams of boys and girls. We spent some time here before taking a taxi up to MIA for lunch. Unfortunately John Bosco was unable to join us for lunch but the food was fantastic and my hosting excellent. Mr Bosco turned up later and invited us for drinks and we spent the afternoon discussing the role of MIA and general conversation about life in Bo. I left to take a tour around Mr Kaitibie's farm and his land. I saw how traditional farming is done in Africa. It is a shame that more people do not take up farming; it would solve many of the problems faced in Bo. After a brief stop there and a chance to sample some of the produce, the cucumber crop, we returned to Coronation field to watch the last of the football games for that day. This was another close fought game and both teams showed skill worthy of a national team. Sierra Leone should be proud of the sporting prowess of its youth. We finished off the day with a quiet drink at a small bar near the clock tower. We returned to Joe's and he had organised a small gathering of OWL

members and friends who had helped with the project so far. We celebrated the success of the event until late into the evening over more than a few drinks and some traditional African food. I tried the Pepper soup and this was, to put it mildly, quite hot. I was also given some gifts by various people, including another fantastically embroidered and patterned shirt and a woven wall hanging that included the words – “Thank you Lee from Joe and Safie: Bo Sierra Leone”. This was an unforgettable evening and something that rounded off trip extremely well.

38. Wednesday was the day that I was due to leave Bo for Freetown, but during the lunch at MIA on Tuesday John McFarlane, our treasurer, telephoned Joe Kobba from Freetown and informed us that he would be arriving on Wednesday afternoon. The decision was made to delay my departure by a day. This allowed me an extra day in Bo that I took full advantage of.. Mr Kaitibie picked me up early and we walked to his school, Sir Milton Secondary, on the far side of town. Here I met with one of my pupils, the secretary and watched her adeptly use an ancient typewriter. The computer we had sent to this school was not operable because there was no electricity supply available this far out of town. I was shown around the school by the deputy head and saw some students studying even though this was in the middle of the holiday period. The few students who had come in had books and pens and were studying everything from French to History. The classrooms were all lacking in basics, the library was virtually bare and the chemistry lab only had equipment thanks to a donation organised by John Myers for which the school was extremely grateful. This school was reportedly obliterated by rebels when they attacked the town during the war, and the lack of funding has made it extremely difficult to rebuild and deter vandals. There is little that my expertise can do for a school without electricity, but it is planned for the future and this is one of the schools that could definitely benefit from a few of the books and equipment sent out. I recommend giving this school a good slice of the materials sent in future also because it is a relatively small school and as a result is forgotten by the government.
39. After visiting the school we walked through Bo back to Coronation Field to watch the final day of the sports events. We watched the last of the Volleyball and then returned to Joe’s for lunch. On route I met with Mrs Nicholas from the town council. I spent some time in her warehouse and enjoyed a cold drink before returning for lunch. A number of people met us in the afternoon at Joe’s and finally at around 2pm John McFarlane arrived from Freetown. We talked over lunch about his trip and his plans and my experiences in Bo. We got him settled at his accommodation and I returned to Joe’s to sort out the last of the tasks I had to do in Bo. I walked down into town and visited Channel 9, a local bar that I had visited regularly, for the last time. I also called in at Father Konteh’s church, but he was in a service with the Bishop of Bo, so I returned to Joe’s and had a relaxing afternoon. John McFarlane returned and we talked until the evening. I asked Joe to take me back to the Mission in time for the service to end to drop off all the materials that I had used for the training scheme so that the children at the orphanage could use them. There was only a few pens, crayons and paper but they could be put to good use.
40. I returned to Joe’s in the darkness and met Magnus who thanked me for the tool kit that I had given him. I had taken a couple of larger kits to Bo and one was kept by the link and the other was given to Magnus on the understanding that he would use it to service computers of link members free of charge but could also use it for his business and earn some money. He reported that evening that he had used it that day to great effect and repaired a computer for which he was paid a good wage. This he spent on a shirt and a hat for me. It was a fantastic gift and the meaning behind it will be a forever-cherished memory.
41. All of this left just enough time to pack up my things by torchlight and get a couple of hours sleep before having to get up at 4 am to be ready for the bus to Freetown. We arrived at the designated time of 5 am and waited. The bus finally left around 6.15 but they charged me twice as much as the journey to Bo cost because of the “size of my bag.” Still this was only £6 and this was cheap compared to my other expenses.

42. I arrived in Freetown around midday and took a taxi to the British Council accompanied by Mr Kaitibie. Mr Bendre was happy to help and had sorted out my tickets back and accommodation for the evening. Despite my looking an absolute state (I was dusty, hadn't washed since the day before or shaved for a week) I went out to tour Freetown. It is not the greatest of cities but a little more modern than Bo. I met with some relatives of Mr Kaitibie who were assistant directors of one of the banks. They were highly qualified but still struggled to earn enough for their family. They asked for my assistance (money) and help from the link (money) to support them. I tried to explain the purpose of the link and the role that we played in Bo but it was hard to make people understand our role. I found this across Sierra Leone. You say you are from the UK and people automatically assume you are working for a rich NGO and have money for everyone, and that they above all people deserve that money. It is an attitude that needs to be changed, but social change is difficult and beyond my capabilities.
43. I spent Thursday night in the home of Honor Flanagan. She is the deputy director to the British Council and looked after me for the evening. I was invited to supper at the Atlantic bar and enjoyed an excellent meal there. On Friday afternoon Charles, a driver from the Council, picked me up and took me to the Heliport. On the way we picked up two journalists who were teaching journalism on behalf of an organisation called the Thomson Foundation. I was dropped off at the Heliport where I met with Rajiv Bendre and his family on their way home. I stayed with them and they helped me through the airport, back to the UK. I returned to my parents house from Gatwick and had my first sleep in 3 days, my first decent night in 3 weeks. This was the end of my first trip to Sierra Leone, but hopefully not the last.

Summary of Recommendations

I have suggested many things to be implemented in Bo, here is an overview of the recommendation I have made.

- 1) The computer systems that are available are functional but some require upgrades and spare parts. There are plenty of these components; indeed some remaining complete systems at Janet's and some of these parts need to be sent some time in the future to help Magnus to maintain the computers.

These components include:

1. Spare internal cables, Hard drives, floppy drives, some CD ROM drives (one per establishment would be useful, so approximately 6 drives), network cards and cables possibly (these are not essential and the skills to use networks are lacking), Memory chips (important, these seem to be in great demand, possibly due to theft), Keyboards and mice seem to break often. Monitors seem to be less important but a couple of spares may be useful as I envisage some breaking in the future, especially if the fragile connectors are being roughly treated.
- 2) Printers. There are a range of HP Deskjet printers, mostly 540s, in Janet's basement. Some of these have cartridges that I can get refilled at Cartridge World for £13 each. There is a limit on the age of cartridges that I can get refilled, as after a time they clog up and become unusable. As for dot matrix printers, we have recently acquired a number of these so maybe a shipment of printers could be organised at some time (when funds are available). The advantage of the dot matrix is that the ribbons last a long time and can be re-inked. Replacement ribbons and cartridges are available in Freetown if they run out of our supplies.
- 3) Software. It is impossible to send all the software that everyone in Bo wants for a couple of reasons. Firstly many people wanted device drivers to install hardware, but each of these is different and I cannot simply compile a CD with all the ones that people are likely to need as

there is just so much variation. Secondly, there is such a range of software types, but the majority of people just want office applications and dare I say it music and games. Office is tricky, as to send the Microsoft version would be an infringement of copyright and customs may frown on it. I have copies of free office suites including one which I use called OpenOffice. This software is virtually the same as the Microsoft offering, better in some ways, but is completely free. I will compile a copy of this onto a CD.

- 4) In Sierra Leone it is impossible to get hold of all the free software that we have thrown at us on the covers of magazines and from the Internet. I recommend perhaps asking people to send in any old CD cover disks as there is often a lot of useful software on these and they are completely free. I will be sorting out a range of ones that I have but have no use for. Obviously Internet ISP CDs are pretty useless, but CDs are good to collect anyway as they are easy to sort and can be distributed by mail or by the next visitor.
- 5) Power systems. The Bo Kenema Power Services is not reliable enough to serve the new centre in a full capacity during the dry season, so as a result I have drawn up a document listing the alternatives for powering the centre and other projects.
- 6) Electrical Equipment. I did not go to Bo with the intention of doing any repairs to electrical goods, this includes computer power supplies, regulators or UPS for the simple reasons that I did not take the equipment or do the tests, the spares to do the repairs and I did not wish to risk making a mistake where mains electricity is involved. I do recommend sending some of the equipment needed to do these tests. Namely some multimeters, which can be bought for around £10 for a basic model, and some equipment to do the repairs. This includes a selection of fuses, some electrical cable and replacement plugs.
- 7) As far as regulators and UPS are concerned these are expensive commodities and I am unsure as to overall value. It is something that needs further discussion within the executive. Power regulators are available that are capable of preventing surges in computers. Argos is a good place for these and there is one available for £15 that has 8 sockets and can regulate 3kWatts.
- 8) Additional Tools. I was only able to fit a couple of the larger kits into my bag but I believe a range of smaller kits, i.e. a single screwdriver with attachments, would be more than appropriate and I will look into the types and prices of these.
- 9) The X+1 group. These have requested that we link them with a sporting organisation here in Warwick. This is beyond my expertise but anything I can do to help - my experiences etc – then I will be happy to do so.
- 10) The Women's group. They have requested stronger links with the Women's groups in Leamington, again if there are any experiences that I can share then I will be happy to help.
- 11) Music, Videos and Sound Cards. Many people requested CD drives and sound cards for their computers for the simple reason that they wish to play music and videos through their PCs as a cheap alternative to buying a CD player. I understand that music is a big part of Mende culture but I see little educational or economic benefit in supplying £100 or more of sound cards to the town. If there are CD drives available these have an obvious educational and economic benefit in the software they can load, so I believe these would be useful, but soundcards are rare amongst the business machines we received and I do not see good cause to go and purchase some.
- 12) Books and training. People such as Magnus and the teachers at Bo Commercial are fully qualified to conduct repairs and upgrades and to teach computing to others. What they do need still is additional training in hardware and software that they have not had access to yet, namely database software, the Internet (possibly) and repairing the electrical components of their

systems. This training is partially available in Freetown but is much more readily available here. The alternative is to send a range of books, journals and magazines, which contain much more of the information needed to repair computers and to learn the software. There are very good guides available for learning databases for example and most computing journals and periodicals have regular instructions on various aspects of modern and historical computing issues. I have many back issues of computing magazines and the software CD's that come with them, I have stopped collecting them now because I have other sources of information that are much more relevant to my course, so many of these back issues may be useful for the technicians in Bo.

ADDITIONAL RECOMMENDATIONS

I recommend sending the information he (Fr Konteh) needs on a CD the next time a package is sent

Hence generated power running normal desktop computers is preferable

I recommend for future visits to take a selection of electrical repair tools, fuses especially and a couple of multimeters. These can be bought for around £10 from most hardware stores, and can test fuses, electrical connections and circuits to fault find

I found out that it is possible to get 1kWatt regulators for mains goods in Bo. A regulator of this size would prevent a mains spike that could damage the computer for up to four computers with monitors and a couple of printers.

I recommend sending some software that is compatible with windows 3.1 specifically for these machines, Windows 95 specification (specifically for early Pentiums running Windows 95) is about the limit of software specification for maximum compatibility in Bo.

It is the policy of the Bo committee not to replace a broken computer if it was working when it was sent out. I believe it would be a sensible plan to create a log of all things sent to Bo so that if such arguments arise again the Bo committee has a document which they can use to conduct repairs / distribute the computers quickly.

You cannot learn them in a book, just through experience. This is why I recommend that people like Magnus who know the basics receive further training to learn the little tricks of the trade

If the users can afford to buy CDs, speakers and videos then I think a sound card is also within their budget, so I do not recommend sending these.

These things are simple to do but need learning and there is no documentation available for the people to learn from. This is true in so many situations; I think future shipments should concentrate on this, sending books and educational software in the first instance.

It seemed to me that Milton Comp is a relatively small school neglected by the Government and I wonder if it could receive additional help to compensate

Power Supply Options

I would recommend having a look at <http://www.unlimited-power.co.uk>
This has some excellent options for alternative power supplies.

I think options for power supply need discussion and further investigation.

Thanks

I have had a fantastic time in Bo and I have many memories that I will cherish forever. The work that I got done has been an amazing success thanks to the work of a great many people. Special thanks must go to the following people:

Janet Alty, for introducing me to the Link and giving me the opportunity to go on this fantastic trip.

John Myers, for all your help in organising my trip and sorting out simply everything so quickly. I could not have done this without you.

John McFarlane, for sorting out the money for my trip.

Rajiv and Kathy Bendre, for taking care of my travel plans to and from Freetown and the UK.

Teresa Bangali, my Guardian Angel, for all your care and attention and for the amazing gifts from your women's group.

Kini Kaitibie, my tour guide and official photographer.

Joe Kobba, my host and organiser. For all your help and care and fantastic hosting.

Safie Kobba, my fantastic host. For the amazing food, including the pepper soup, and the wonderful gift.

David Ngombu, for all your help and good company.

Magnus, for your expert help and selfless hard work. I could not have done it without you.

Father Konteh, for your excellent hosting and care, I had a brilliant time at the mission and I'm sorry I had to leave.

Andrew Taylor and family, for putting up with me for the evening and ferrying me to Gatwick through the rush hour traffic, it saved me a lot of hassle.

Everyone who attended my training and helped with the installations, all members of the link who helped and cared for me, and to the people at the Mission, thank you all for everything you have done and the amazing gifts you have given to me.

Thank you

Lee Hales, May 2003



APPENDIX A

Long Term Strategic Recommendations.

2. The main ways that computers can assist the community of Bo are
 - a) for learning how they work and what they can be used for (IT education), so that the people of Bo keep abreast of the rest of the world
 - b) to assist other education e.g. learning about other subjects through electronic reference programmes, self learning programmes, interactive disks and eventually email with schools in other countries etc
 - c) to enable office tasks such as word processing, desktop publishing, simple accounting, and simple data bases
 - d) to build up the basic skills base in IT in the community in preparation for more advanced uses
3. The two high priorities would appear to be:
 - a) to enable secondary schools in Bo to maintain and utilise the equipment they have and to extend that facility to other schools
 - b) to enable the Bo OWL committee to extend the learning facility to adults and young people not in school and to extend that facility to other organisations
4. The possible strategy to meet those priorities could be:
 - a) to support and enable those people in Bo with the capacity to maintain the hardware and to teach use of the software to do so for the benefit of children and adults regardless of their ability to pay more than a small amount by providing training and equipment to teachers and to technicians willing to provide services in return
 - b) to link schools or other groups in Warwick District to projects to support counterparts in Bo, e.g. by collecting donated software or raising money for an item of equipment (e.g. printer or keyboard)
 - c) To monitor and review the need for replacement or additional hardware
5. The use of computers for complex systems may not be needed in Bo for some time. If larger organisations such as Bo Town Council or Bo Hospital might in the long term benefit from using information technology for the same purposes as comparable institutions in the UK, then major investment in hardware, software, sustainable infrastructure (power, air conditioning etc) and training would be needed. This is beyond the scope of One World Link.
6. There may be ways in which small systems packages such as Payroll or Pharmacy Drugs control could be contemplated provided that reliable power and accommodation could be guaranteed. If there is a local government/public services orientated visit to Bo then the possibilities for this could be investigated.
7. The use of computers for recreational purposes in Bo is certainly desired by its residents. Game playing can be helpful in the development of a range of skills; but the system requirements for this are beyond our capacity to provide. The use of computers for musical recreation tends to depend on access to the Internet. Although computers can play CDs they are not needed for that reason; cheap portable battery operated CD/tuners are more versatile, more reliable, and will have better sound. If a particular youth organisation or centre such as the OWL Centre wished to have a high specification machine as part of their service to the youth community; then perhaps we could see if an organisation in Warwick might be prepared to make this a special project to help provide.
8. Access to the Internet for browsing and downloading or any other purpose would seem to be a long way away time-wise from Bo unless a wireless system could be introduced; but even that would require capital investment. The use of email from "Internet cafés" may be more feasible as long as the telephone service works some of the time or the mobile phone service can offer that.

Warwick OWL could do more research in conjunction with Bo OWL with a view to assisting this development and providing an internet café at the new Centre.

9. More and more commerce in developed countries depends on computerised systems and computerised parts. It is beyond the scope of this report to evaluate that.

APPENDIX B

ACHIEVEMENTS

The purpose of my visit was

- a) to ensure that at least one set (even network) of computers is up and running in at least one educational/training establishment, and that at least two people have the know-how to use and maintain the hardware and to train others to use the software.
- b) To assess what further practical and training needs Warwick OWL could help with
- c) To give any further advice and assistance to Bo OWL that may be possible within the time available

The achievements were

- a) Three secondary schools have a set of working computers and staff who are able to utilise them for teaching purposes
- b) A further set of computers was set up and used for training adults in a temporary location for the length of my stay. I am confident that a permanent set up will be provided by Bo One World Link Committee in their community centre which is under construction, and that it will be used for adult and youth education
- c) I conducted a training course for 12 teachers, local authority staff and others which taught them basic computer operation skills, the rudiments of word processing and introduced them to other aspects of Microsoft Office. All were familiarised with the components of the computer and some practised disassembling and reassembling the parts
- d) I identified one member of OWL with good technical skills willing to give time to maintaining the computers which have been provided. I also identified willing volunteers and members capable of following the work that we were doing, even if they did not understand fully. It is these people that I hope will go on and learn more so that they in turn can teach others.
- e) I installed 6 of computers at Bo Town Council. Some of these will be used by secretaries I trained to perform their typing tasks. I believe that the secretaries have the ability to carry on learning and improving their skills
- f) I have made an assessment of the IT situation and potential in relation to needs which Warwick OWL might address; and I have made a number of recommendations in this report
- g) I was able to give further assistance and advice to various individuals as detailed in my report
- h) I consider that the possibility of building usable networks at present is limited, and this was not achieved. The benefits of a network are clear, but the difficulty in attaining a functioning one with the technology and skill available is severely limiting.
- i) I feel that I have achieved more than the objectives set for my visit
- j) Personally I have gained an amazing experience of life in a completely different culture. I have seen life from a different perspective. I have learned that I have the ability to teach and that people do want to learn what I have spent many years trying to understand. My experiences in Bo have affected my outlook on life after my exams are over and I join the world of work. It has certainly left me a lot to think about!