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# **Grow Your Own Media Lab**

## Introduction

In the year 2000 a Sheffield arts organisation opened an experimental internet lab. It provided a free opportunity for local people to pursue their own creative projects.

That lab, Access Space, is now the longest running open access internet learning centre in the UK. It's helped its participants publish thousands of web pages on hundreds of servers and produce scores of exhibitions, workshops and events.

Access Space breaks some basic rules of received wisdom about how a community computer project should work.

- To help people learn more, teach them less.
- To use the newest technology, don't buy new technology.
- To develop work skills, invite people to play.
- To get professional support, fix it yourself.

These ideas are counter-intuitive - and Access Space has faced an uphill battle to convince strategic agencies that its model works better. Meanwhile Access Space's community has grown and thrived while commercial cybercafes and supposedly strategic "digital inclusion" networks have run out of money, energy or interest.

Access Space moves beyond the digital inclusion agenda, proposing that networked technologies only truly empower when they enable people to create. To do this without boundaries people may need to repair, re-engineer and re-imagine technology, so Access Space helps its participants to see <a href="https://example.com/how/re-engineer/">how it works</a> not just how to work it.

In 2005 the Arts Council (a key long-term supporter) funded a project to work with other community organisations across the UK to investigate how they might adopt some of Access Space's successful tactics. That project was called "Grow Your Own Media Lab".

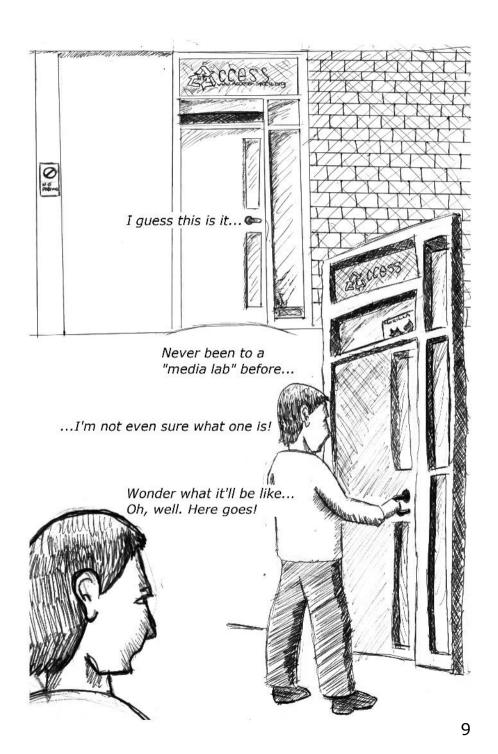
This publication is the final action of that project. It aims to help communities to understand and adopt some of Access Space's approaches. It also aims to inform strategic agencies, and challenges them to reevaluate their ideas. Is the enduring value of "investment in technology" about hardware and software, or about people and skills? We hope that this publication will encourage funding bodies and grant-givers to value this kind of community action and support similar activities in future.

There's also one more key audience for this publication - people who are thinking about starting an open access community technology project. People like us. To you, artists, community activists, educators, hackers, regeneration workers, we say, "Do it!". We can't guarantee success, but whatever happens, the tough process of doing I.T. yourself will make you, and your community, stronger. But beware of the quick and easy path: pay with cash and you end up poorer; pay with time and effort and you end up smarter.

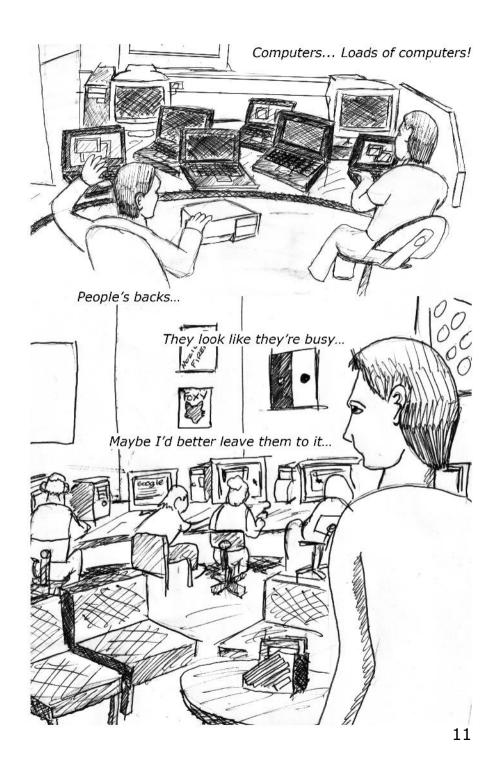
Originally, this publication was going to have the character of a "How To" or instruction manual. But "How To" documents quickly become obsolete as new technologies become available. With Google and Wikipedia you can work out "How To" on your own. (You'll note there isn't a glossary with this book.)

The key here is not *How*, but *What* and, most importantly, *Why*.

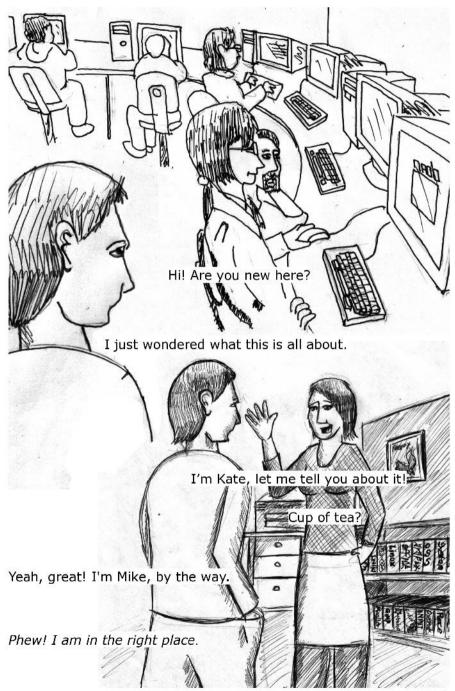
The Ten Second Rule (1/3)



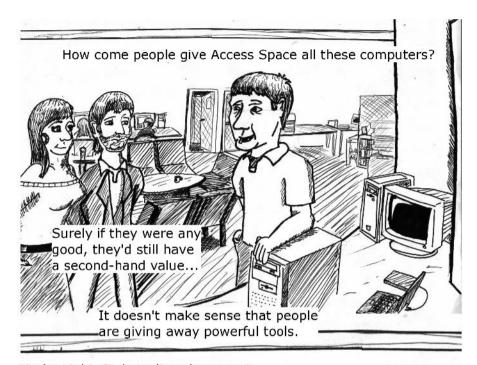
The Ten Second Rule (2/3)



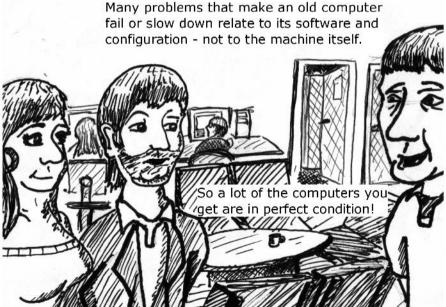
The Ten Second Rule (3/3)



How Come? (1/2)



You're right. It doesn't make sense!



How Come? (2/2)



So how about machines that have hardware trouble? Do you give up on them?

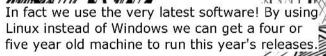


Not at all. Often we can fix hardware faults very quickly just by replacing a part with one from another machine.



But surely most people give up on a PC because it won't run the latest programs. So I guess you have to use old software?

Not if we use software that's more efficient.

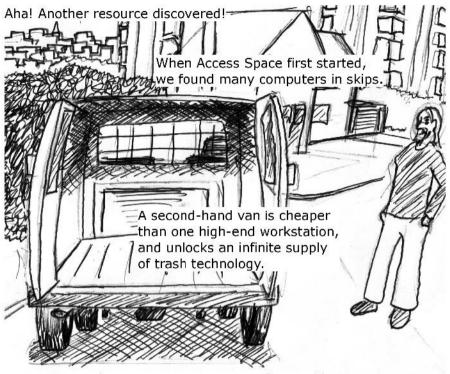


Wow! so why isn't everyone doing this?

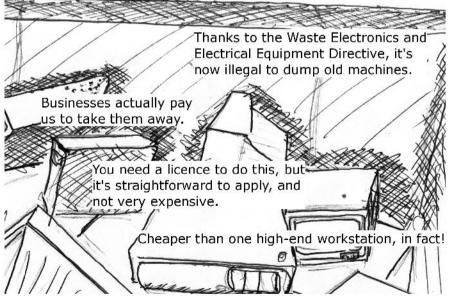
Maybe because many people would rather spend money than invest time.



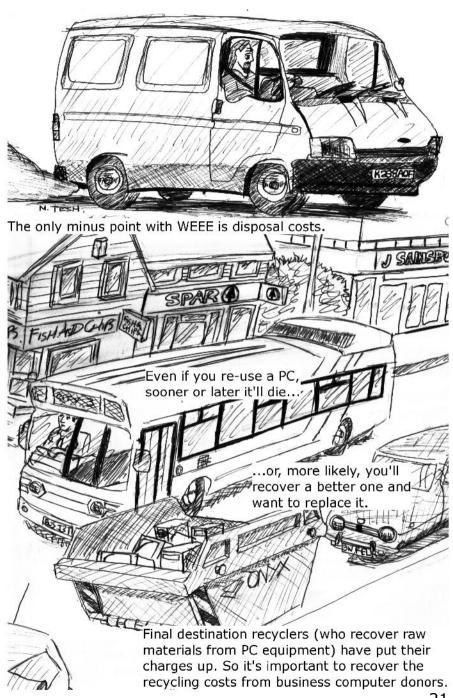
Skip Raider (1/2)







Skip Raider (2/2)



Do It Yourself (1/4)



Do It Yourself (2/4)



We have loads of donated machines, mostly in parts.

Most of them work. Some of them don't.

All you'll need to do is rebuild one, test it and install the software.

Then you can take it!



Oh dear! This all sounds a bit beyond me. Can't you just give me a computer? I'm a deserving cause!

Stealing?

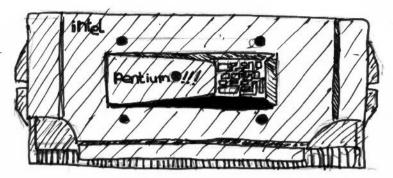
We could rebuild a computer for you... but that would be stealing.

We'd be robbing you of the skills to repair and configure your own computer!

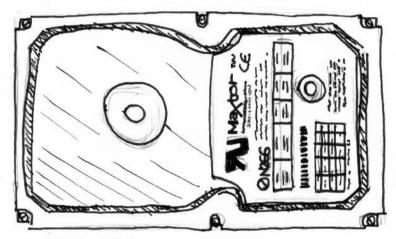
Don't worry. We'll give you all the help you need.



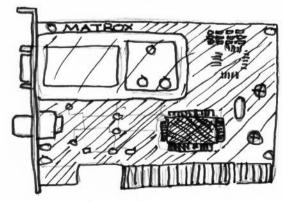
Do It Yourself (3/4)



Pentium 3 Central Processing Unit...

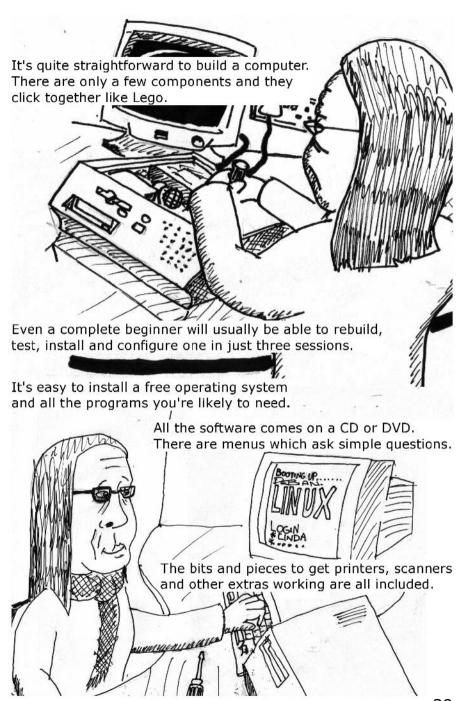


IDE Hard Disk...



PCI Graphics Card...

Do It Yourself (4/4)



Happy to Help (1/2)



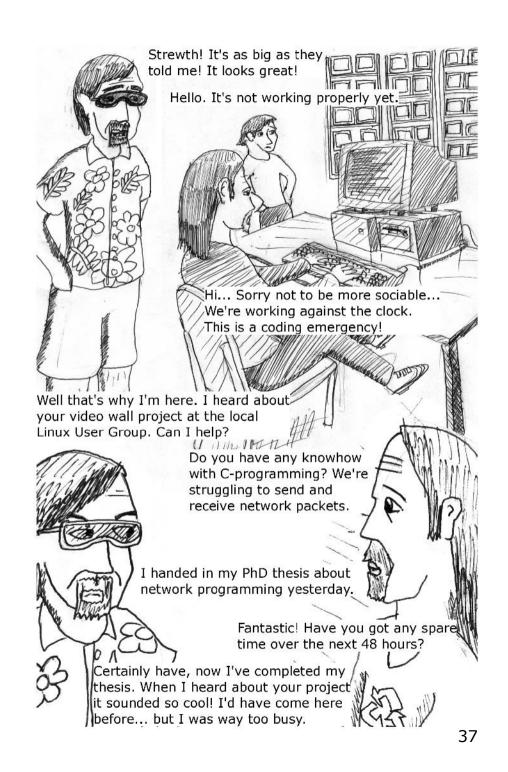
Happy To Help (2/2)



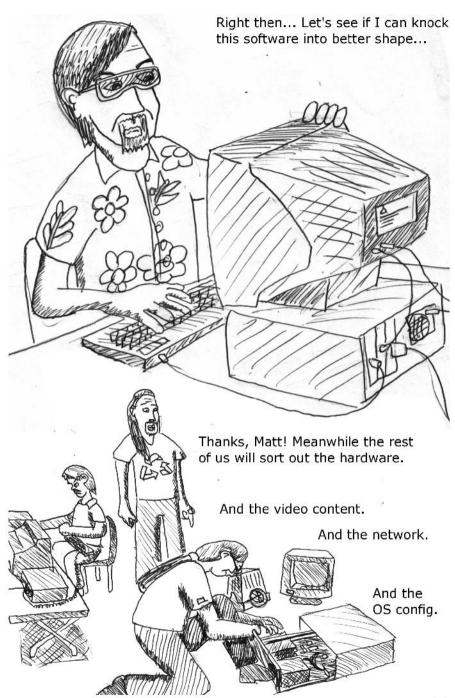
Video Wall (1/4)



Video Wall (2/4)

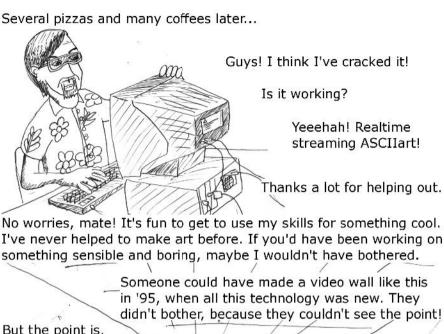


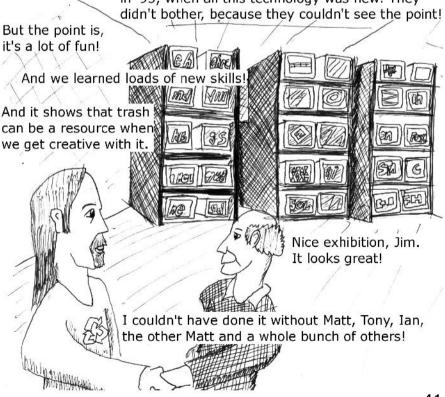
Video Wall (3/4)



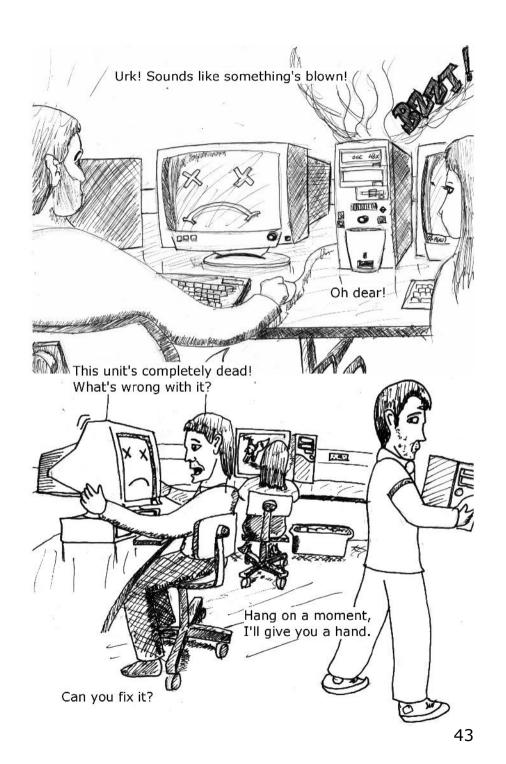
Video Wall (4/4)

Several pizzas and many coffees later...





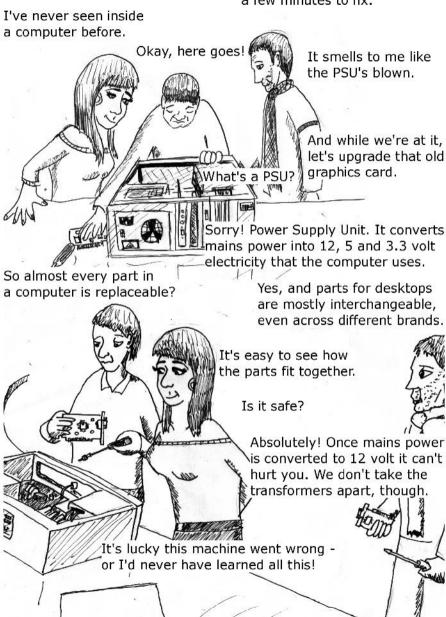
You Can Fix It (1/3)



You Can Fix It (2/3)

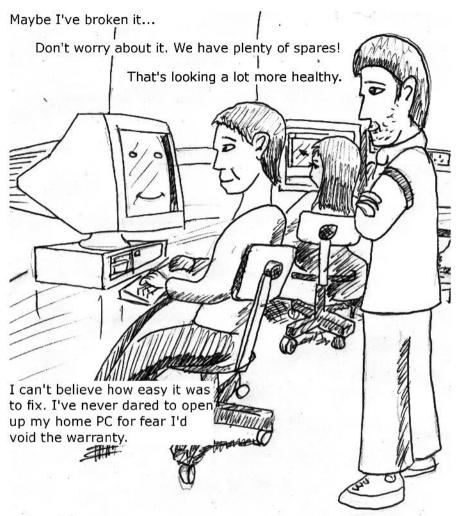
Rather than me fixing it, why don't you?

Most problems only take a few minutes to fix.



Easy, isn't it?

You Can Fix It (3/3)



By picking up the skills and confidence to open the lid, you'll save a bundle on repair costs and make your computer last longer.

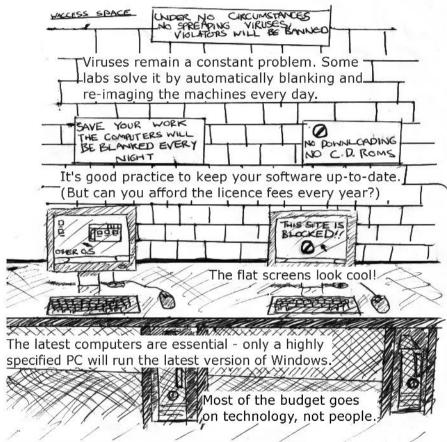
It's a shame more media labs don't let their users fix the machines.

Ironic, isn't it? If a lab works perfectly, users learn less. As long as there aren't too many, glitches can be a help!

Spot The Difference (1/2)

Access Space has a particular way of supporting its community. But not everyone does things our way. Here's how not to do it...

Signs issuing threats to users may not be effective, but certainly are economical!



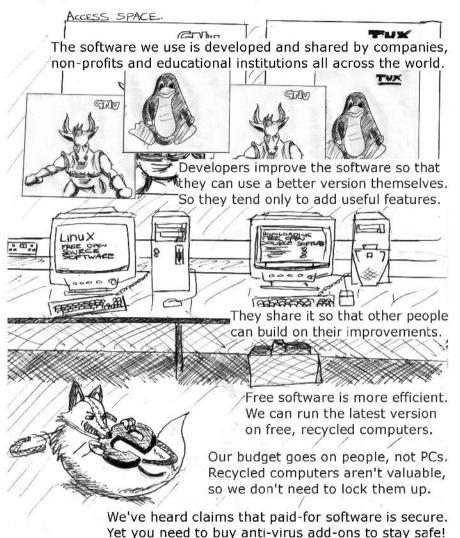
These expensive PCs are secured under the desks to make them harder to steal.

You can increase security by blocking sites that may have problem content. It's a never-ending battle against users as the blacklist needs to be continually updated.

Subscription blacklists claim to be the answer, but fail to teach browsers what's inappropriate. Doesn't a human problem need a human solution?

Spot The Difference (2/2)

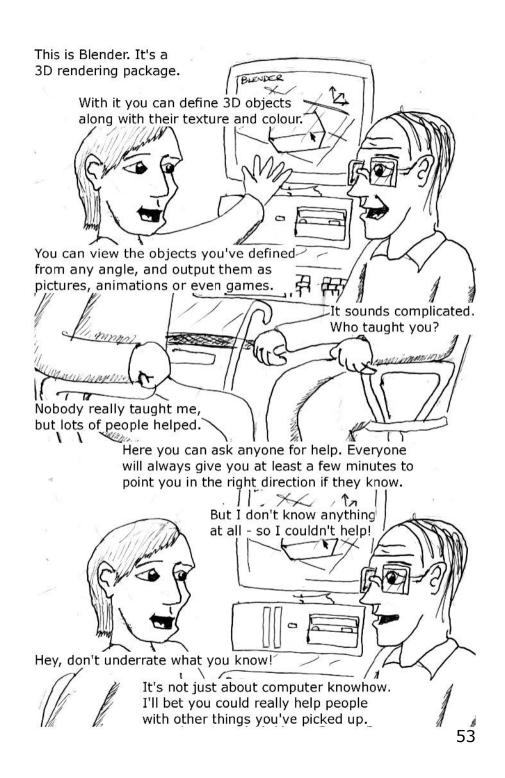
Access Space has only used free software since it opened in 2000. In eight years we've never had a computer virus.



Linux comes with free anti-virus updates.

Because it's a shared system, the users are the developers, so tens of thousands of experts around the world can address emerging problems very quickly. What better way to check their fixes than to share them with everyone else?

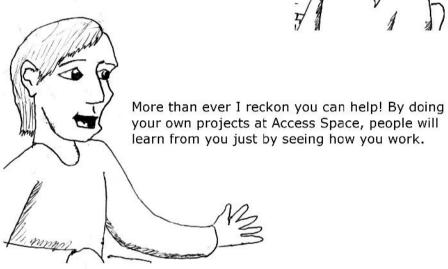
Soft Skills (1/2)

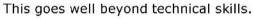


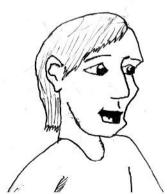
Soft Skills (2/2)

The most valuable skills I've learned are the hardest to pin down - how to organise my ideas... how to help people to work together effectively.



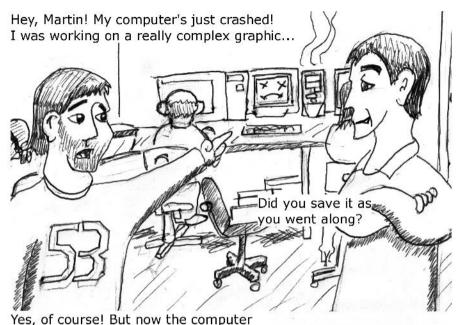






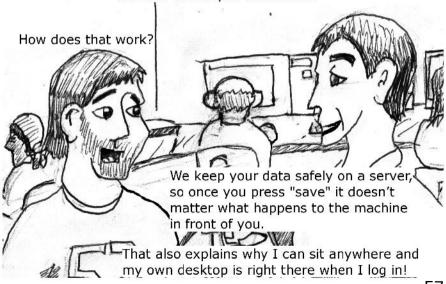


Safe Desktop (1/1)

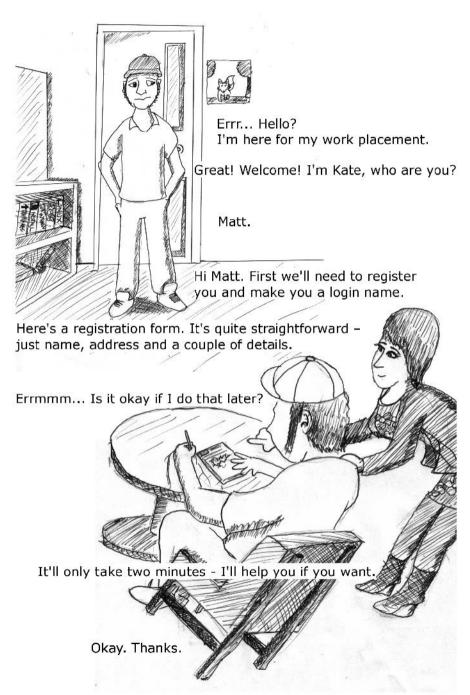


won't even turn on - so my work's gone!

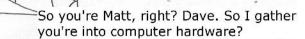
No problem - just switch to another workstation and your work will be there. You can carry straight on from where you last saved.

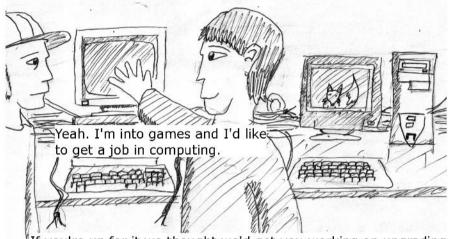


Basic Skills (1/4)



Basic Skills (2/4)





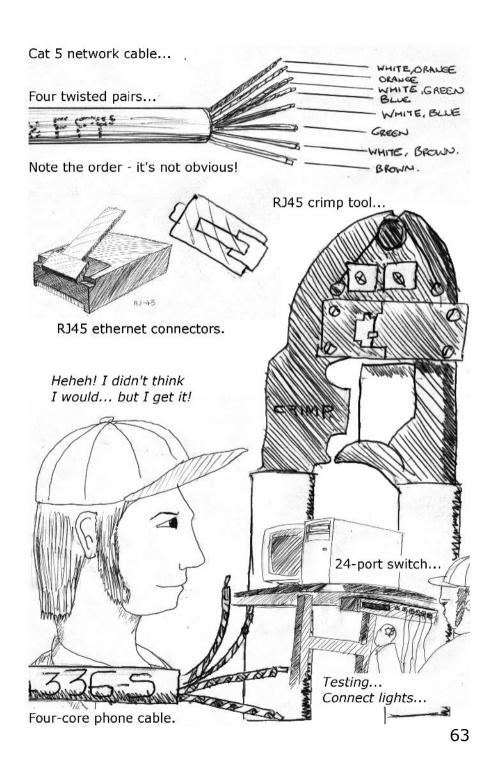
If you're up for it we thought we'd get you working on upgrading the network. As you can see, the cables are really messy.

## But I... Errmmm...

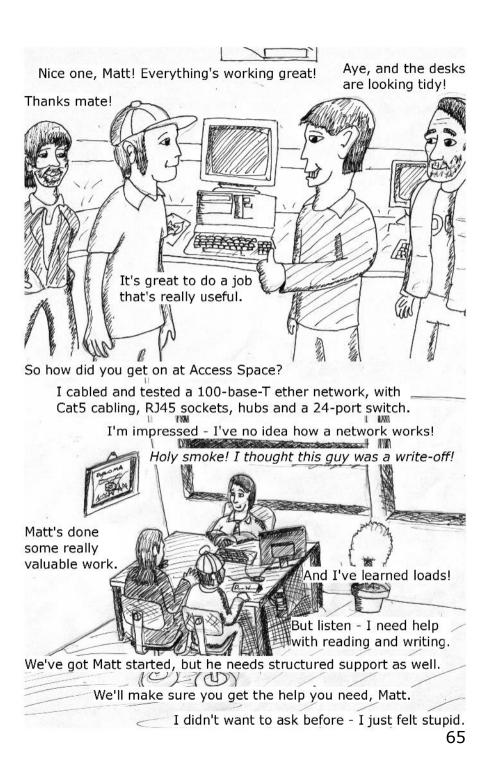
Don't panic mate. I know you're not that confident with reading and writing. But you're clearly keen and capable. We found that out at interview!



Basic Skills (3/4)

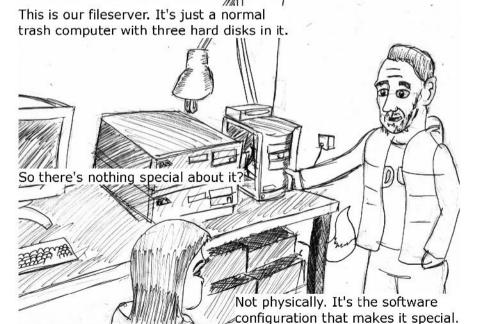


Basic Skills (4/4)



Trash Server (1/2)





Trash Server (2/2)

So how much did it cost in total? The machine itself cost nothing. We could have used recycled disks, but to make sure everyone's data is safe as possible, we bought the two data hard disks new for forty guid each. And how reliable is it? In eight years we've never lost any data. It starts from one hard disk, and the data is stored on another one. Every night a third hard disk backs up the main data disk. We could have used a "RAID" system which backs up almost instantly, but this is simpler, and we reckon simple is best. What about software? Surely that was expensive! No - all the software we use is absolutely free. We just had to work out how to configure it. Why do you leave the case off? Better airflow keeps the disks cooler when they're working hard.

Finding a Voice (1/6)



My daughter's really interested in computers...

Can she come here?

Hey, anyone can take part. Not just your daughter, you as well if you like!

What's her name?

Harriet. But she's not very good with strangers.

That's okay.

...but she...

Hi Harriet. My name's Jim. I understand you're interested in computers.

Yes.

Come and have a look at this.





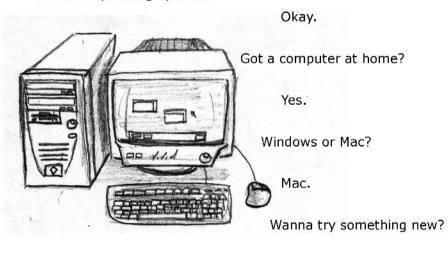
Finding a Voice (2/6)



Finding a Voice (3/6)

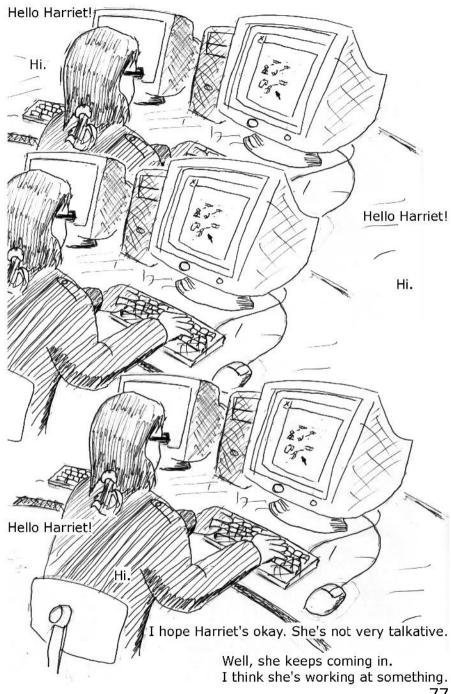


These computers run Linux, the free operating system.

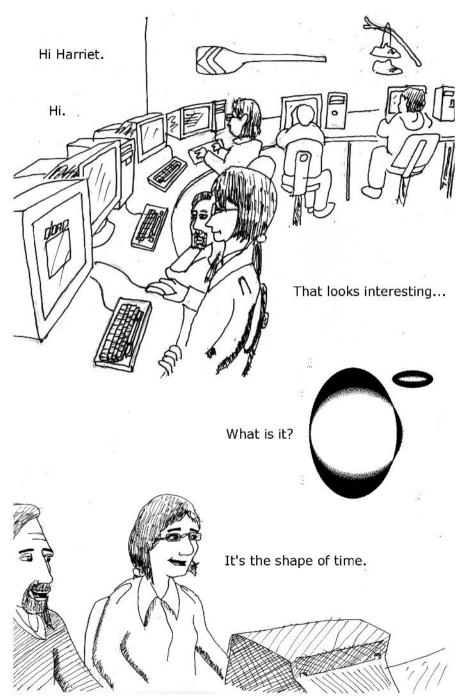


Okay.

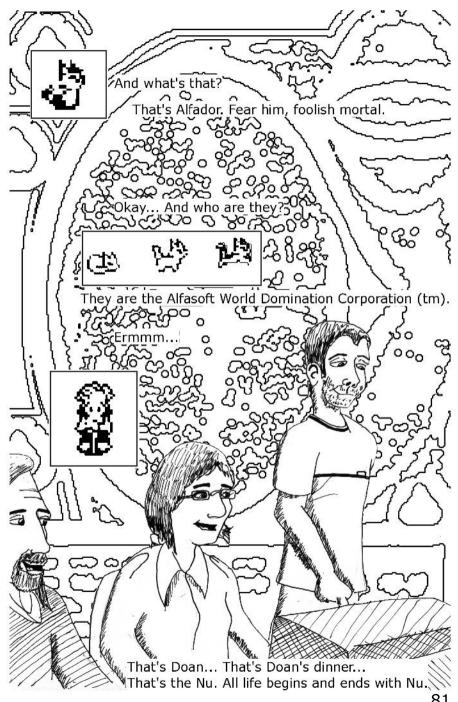
Finding a Voice (4/6)



Finding a Voice (5/6)



Finding a Voice (6/6)



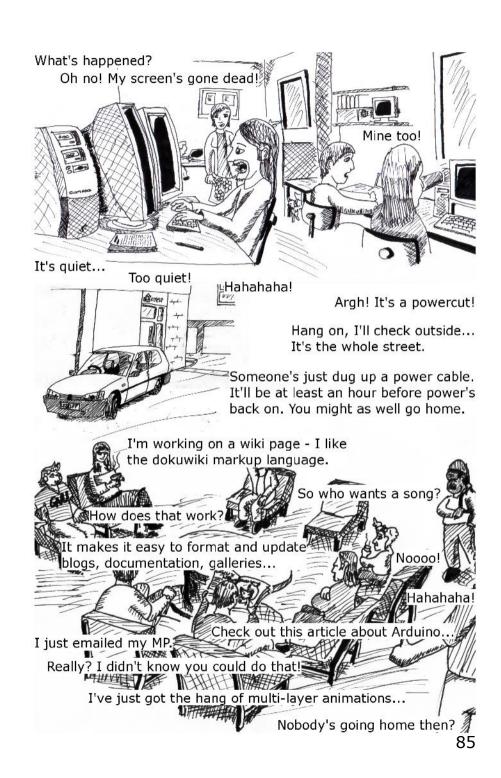
Power Cut (1/2)



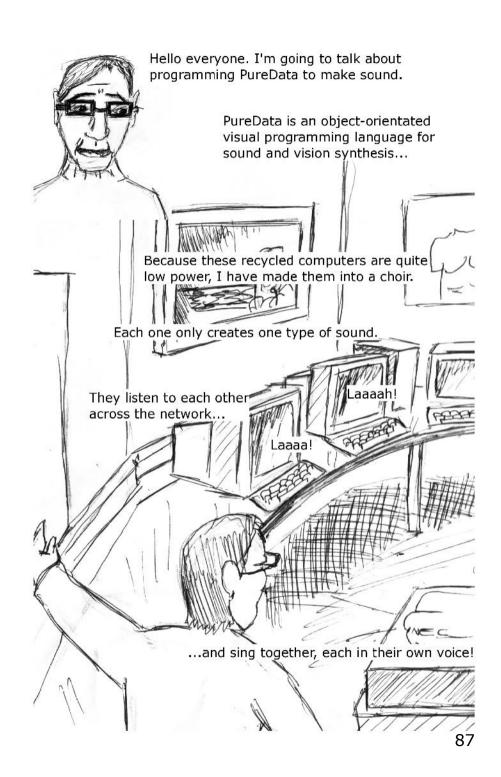
People are working away at their projects...



Power Cut (2/2)



The Cool Factor (1/4)



The Cool Factor (2/4)



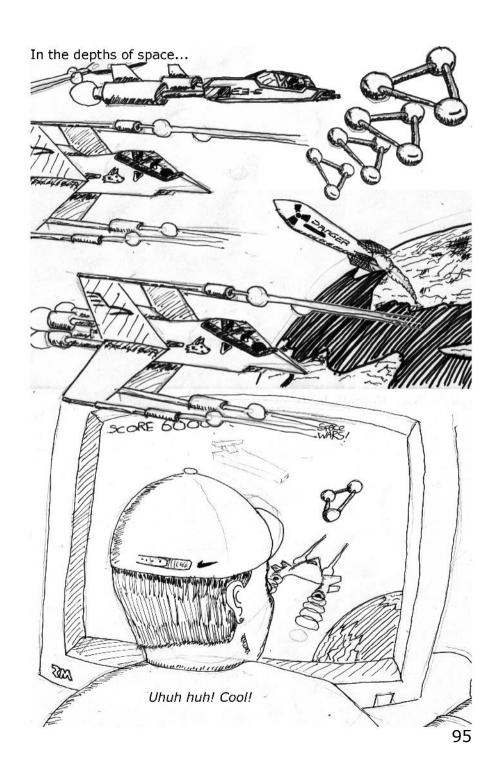
The Cool Factor (3/4)



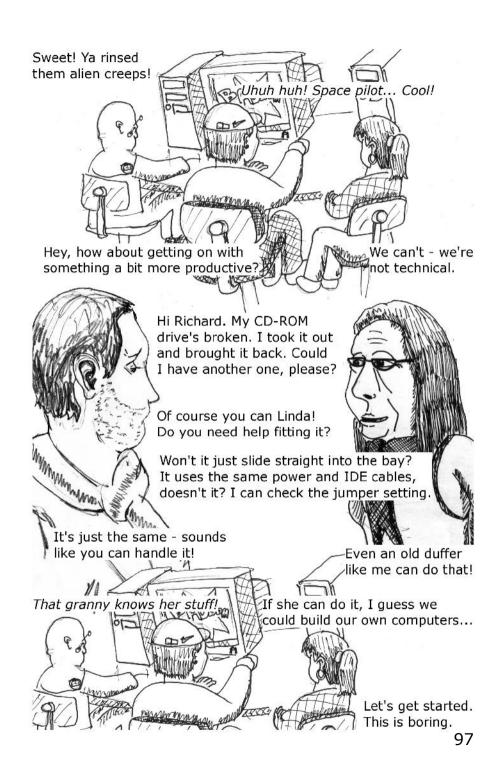
The Cool Factor (4/4)



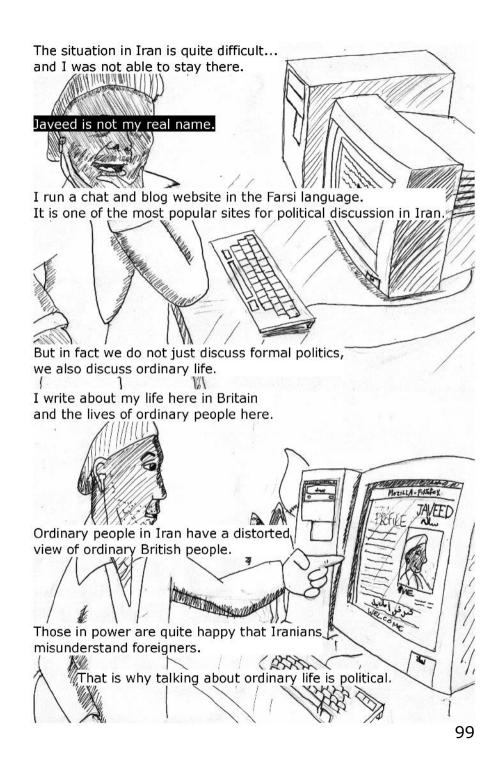
Peer Pressure (1/2)



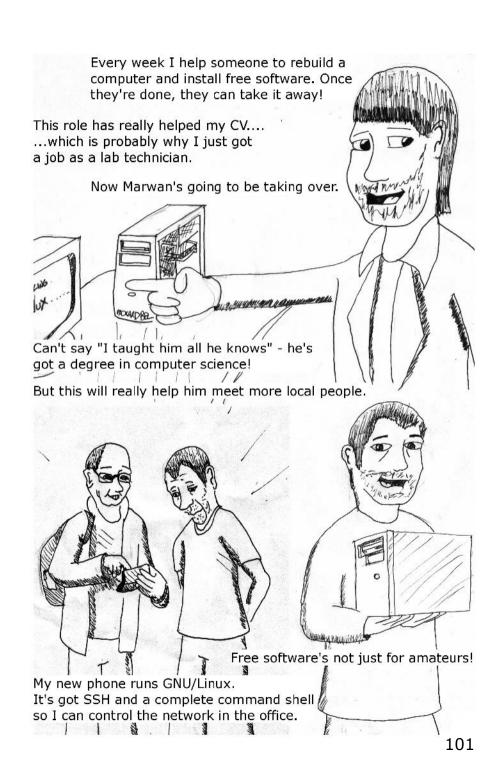
Peer Pressure (2/2)



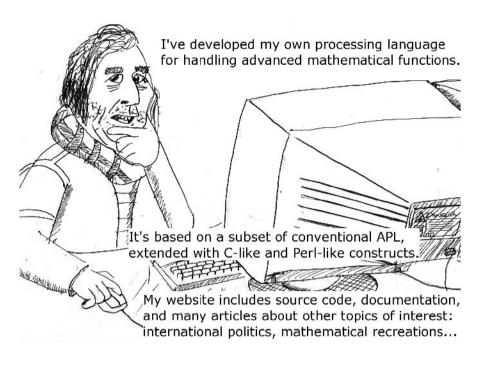
My Project (1/8)



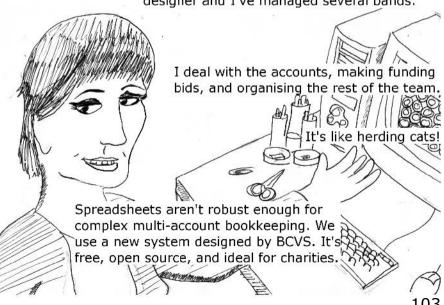
My Project (2/8)



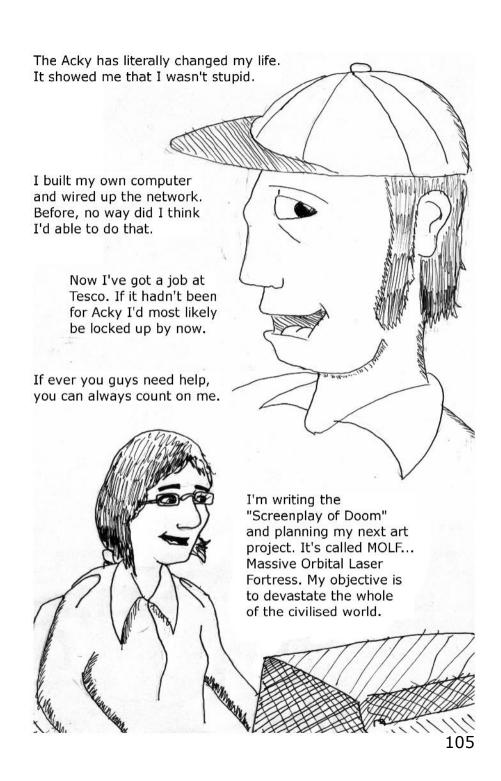
My Project (3/8)







My Project (4/8)



My Project (5/8)

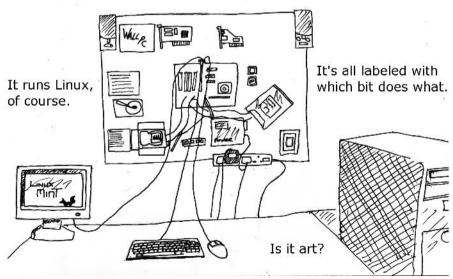


I sell my photos and paintings online, and I've had a couple of shows at Access Space. More than a marketing tool, I see the web as a means of artistic expression. When I'm working in that way I collaborate with notorious online revolutionary Carlos Barcode.

My Project (6/8)



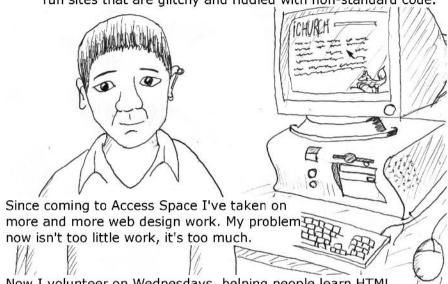
One of my recent projects has been the Wall PC. It's a bunch of recycled components stuck on a board. You can hang it like a painting. It works as well! We used it to display videos in the recent "Recycle!" exhibition.



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My Project (7/8)

I'm meticulous about web standards and accessibility. You'd be amazed how many supposedly thorough, ethical organisations run sites that are glitchy and riddled with non-standard code.

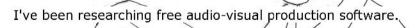


Now I volunteer on Wednesdays, helping people learn HTML. This isn't just because I'm nice - it also develops a network of freelancers that I can rely on to help me with larger jobs.

You are nice, though, Mark!

Hahahaha!

I'm a musician, and I've produced several albums. I also manage Access Space's Arts Programme.



Last year it was tricky to make movies with Linux. But now PureDyne's packages make it straightforward to make quality AV content with completely free software... on a trash PC!

Our workshops with the developers have moved the usability from "works in theory" to "works in practice".

My Project (8/8)

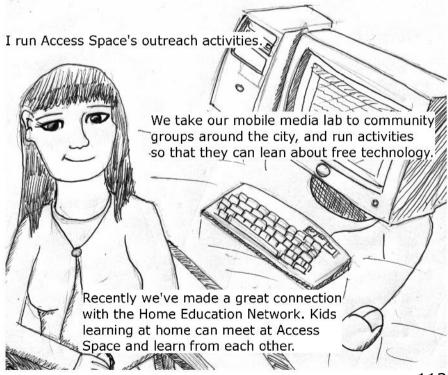


I've been helping some local charities to get a web presence.

Nothing technically complex - just simple HTML and some pictures.

These organisations are often overstretched. Even when I offer to make them a website for free, they don't know what they want.

I help them to understand what they do and what they want to communicate.



The stories in this book are based on genuine incidents, interviews and case-studies. In some cases names or resemblances have been changed to protect individuals' privacy.

<u>James Wallbank</u> is CEO of Access Space Network Ltd, the Arts, Education & Regeneration Charity which runs Access Space.

<u>Michael Tesh</u> is a regular Access Space participant and an emerging illustrator and graphic artist.

<u>Scott Hawkins</u> is a Senior Lecturer in Design and a member of the Art & Design Research Centre at Sheffield Hallam University.

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Access Space would also like to acknowledge the support of Sheffield Hallam University's Art & Design Research Centre in the production of this publication.

Special thanks are also due to the hundreds of Access Space participants whose collective efforts have created a unique creative learning environment.



LOTTERY FUNDED

