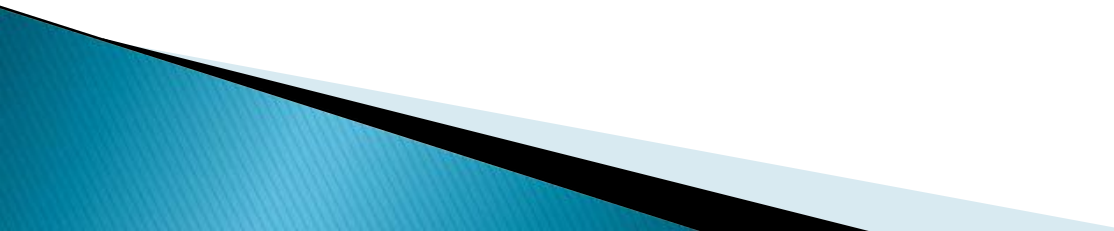


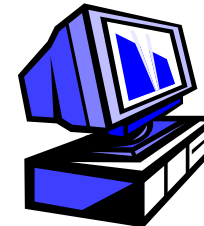
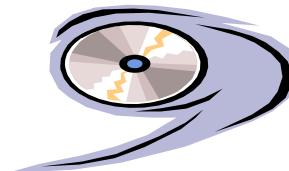
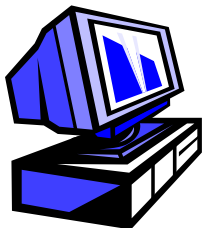
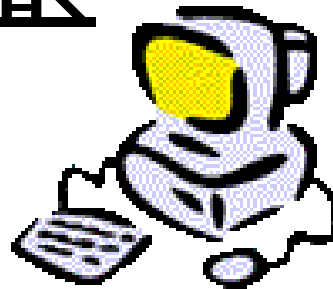
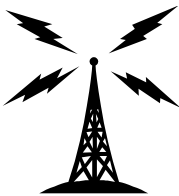
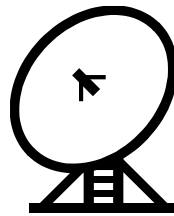
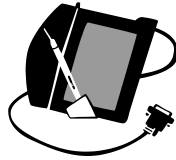
Broadband as a tool for rural development

Professor Frank Rennie
Lews Castle College UHI

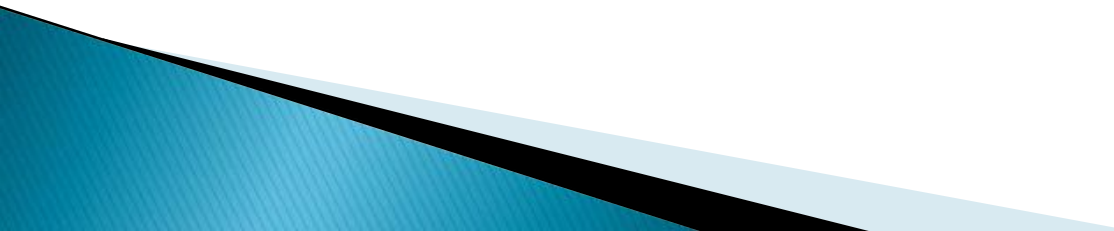
What I will talk about

- ▶ 1) How did we get to where we are?
 - ▶ 2) Emergent properties of broadband access
 - Faster information exchange
 - More complex data transmissions
 - Hyper-interaction between users
 - Always-on implications
 - ▶ 3) Lessons for rural development
- 

The Connecticon



Emergent Properties

- ▶ Self organisation – sorting out the weakest links
 - ▶ Stability domains – the safety nets
 - ▶ Memes – viruses of the mind
 - ▶ Complex system cycles – been here before.
 - ▶ Natural selection – the graveyard of ideas
 - ▶ What does this mean for rural development?
- 

Faster information exchange

- ▶ Rural businesses & SME
- ▶ Real time savings on information transfer
- ▶ New networks and business opportunities
- ▶ Side effects on training and learning
- ▶ New applications e.g. webcam



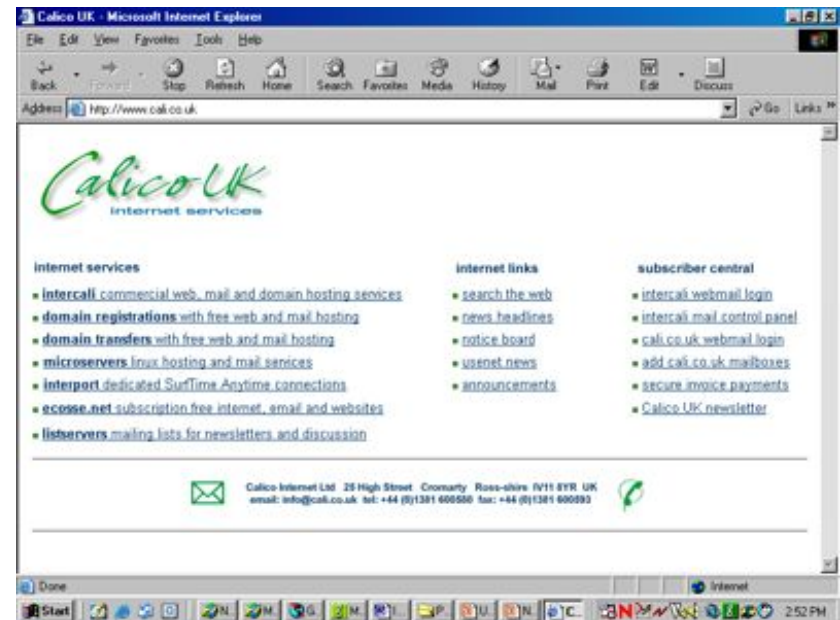
More complex data



- ▶ Scots–Irish Gaelic poetry
- ▶ Extension of offline activities
- ▶ Complex high quality images, text, and audio
- ▶ Built–in interaction
- ▶ Educational resource
- ▶ Masterclasses etc

Hyper-interaction

- ▶ ICT Consultancy
- ▶ Rural base but wide customer base
- ▶ Revised working practices
- ▶ Wide range of customer applications
- ▶ Competitive edge



Always-on



- ▶ Welsh Internet Radio
- ▶ International 24/7 coverage
- ▶ Gateway to other Welsh language activities
- ▶ Merchandising spin offs
- ▶ Educational and advocacy role

Formal Learning

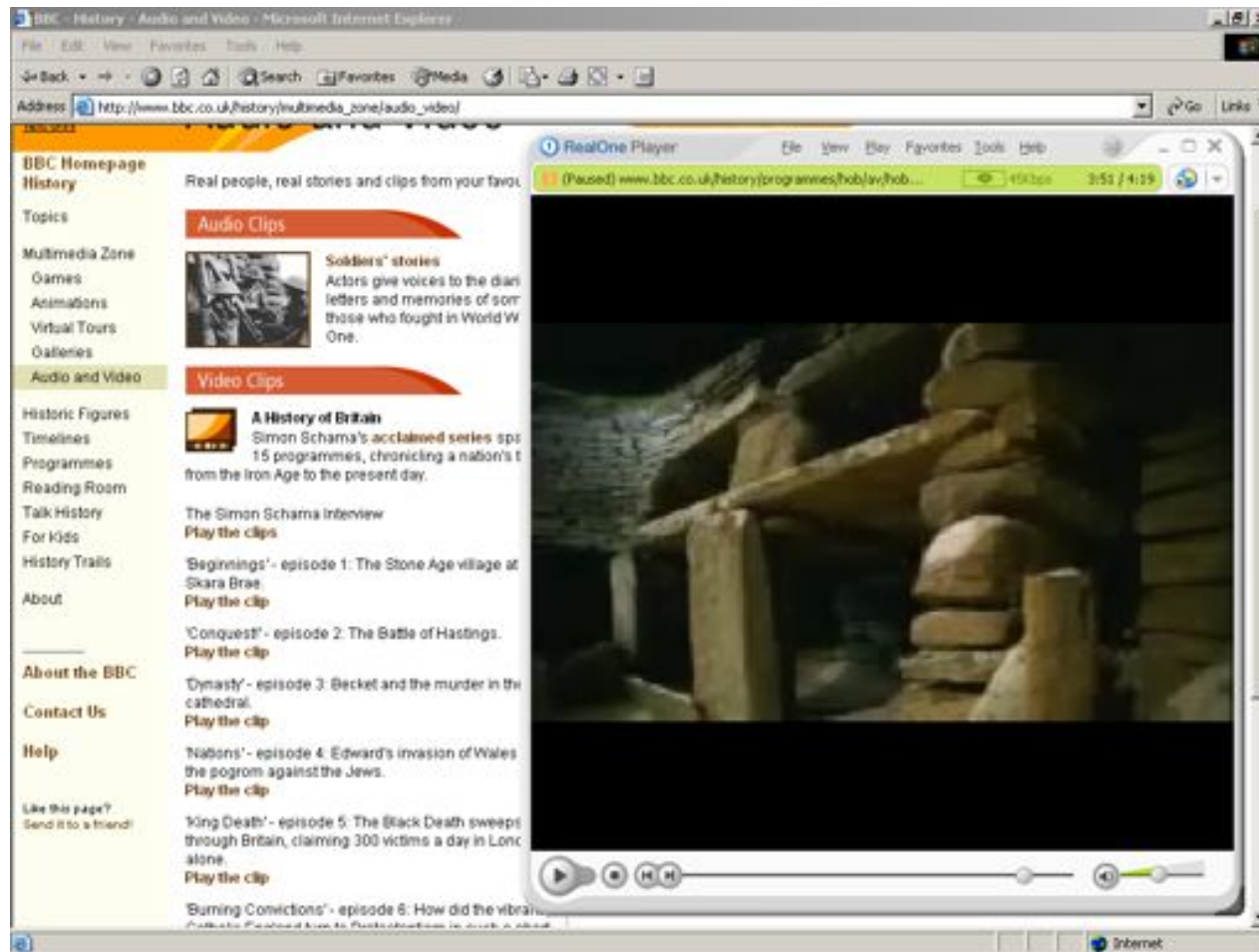


Contextual Communities

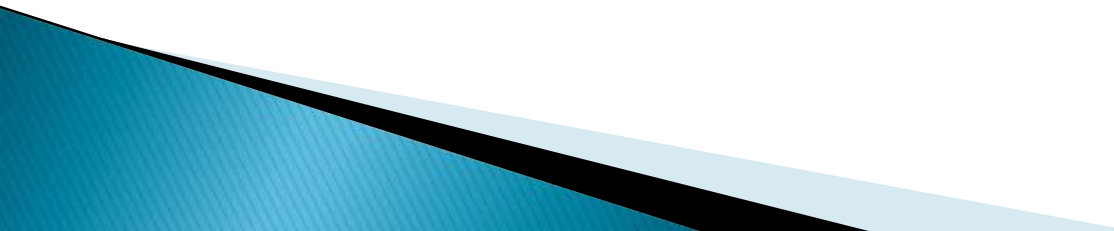
- ▶ Self organising groups of learners
- ▶ May be structured or not
- ▶ May be work or topic based
- ▶ May be open and distributed
- ▶ Will be flexible and transient



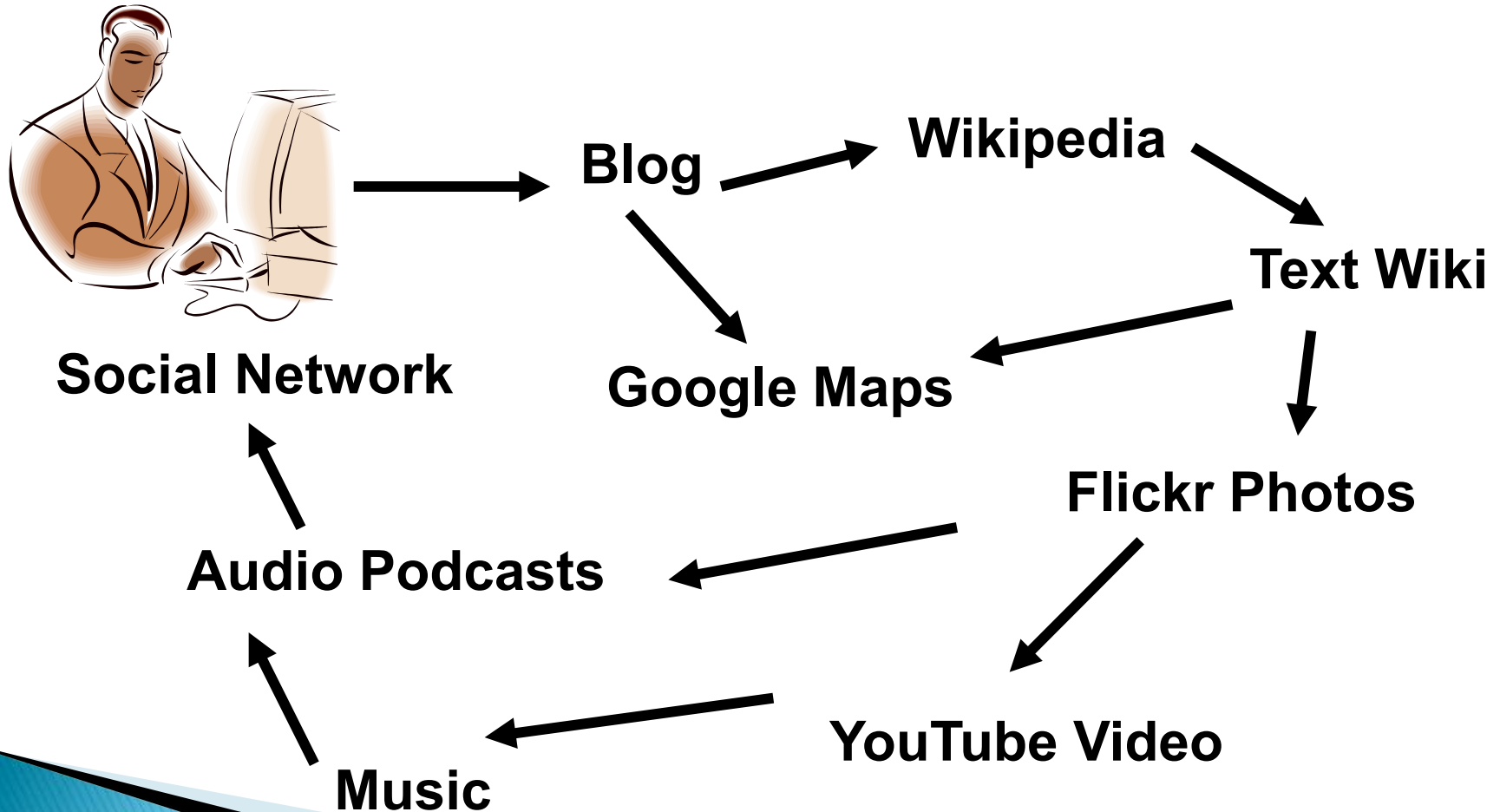
Informal Learning



Web 2.0

- ▶ Participative rather than Passive Receptor
 - ▶ Peer-to-Peer
 - ▶ Collaborative rather than single author
 - Wikis, blogs, web/podcasts, social networking,,,,
 - ▶ Attention rather than Information is premium commodity
 - ▶ Tests veracity and applicability
 - ▶ Context in addition to Contents
 - ▶ Truly multi-media
- 

Mashups for Development



Rural Sustainability

- ▶ **Reduced travel costs and travel time**
 - ▶ **Less environmental impact**
 - ▶ **Education can be local AND global**
 - ▶ **Local economic multiplier**
 - ▶ **New social networks & diversity**
 - ▶ **New intellectual & economic skills**
 - ▶ **Higher quality of life perceptions**
 - ▶ **Retention/attraction of skilled citizens**
 - ▶ **Reduces urban-rural disparities**
- 