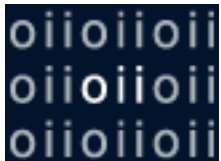


e-Sciences: Infrastructures that reshape the Global Contours of Knowledge

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- Introduction
- Geography
- Organization
- Communication
- Knowledge
- Examples
- Conclusion

Introduction

- Debates about Globalization
- Increasing Use of Online Resources
- 'e-Sciences'
- Global Dimensions

Geography

- The World Wide Web
- Search
- National e-Science organization
- Barriers
- National isomorphism and policy diffusion

Organization

- Supranational coordination
- Disciplinary collaboration
- Inter-institutional collaboration
- Obstacles

Communication

- The 'openness' of scientific communication (Fuchs)
- Publication and priority
- Limits on attention space
- Variation by discipline in mutual dependence (Whitley)

Knowledge

- Technological artifacts drive ‘high-consensus rapid-discovery science’ (Collins)
- Variation by discipline in task uncertainty (Whitley)
- Variation of tools, but online tools constitute ‘big science’ and a ‘large technological system’, adding to and complementing others
- Fragmentation in the larger environment of science in terms of priorities and attention
- The ‘migration’ (Fuchs) between fields and online measures of scope

Conclusion: Frontiers and Limits

- The Mistake of 'all or nothing' globalization
- Constraints and advance via interlocking of tools and physical/natural world
- The changing shape and visibility of mediation
- Limits and possibilities of policy directedness
- The Momentum of e-infrastructures