

Collaborative Analysis of Offenders' Personal and Area-based Social Exclusion

- A demonstrator project for e-social science at the University of Sheffield -

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The aims of this project are:

1. To demonstrate how grid technologies can enhance the capacity to address substantive social science research questions;
2. To bring together researchers and practitioners from different backgrounds and build an interdisciplinary community of scientists who can carry forward and develop e-social sciences;
3. To produce training output supporting the application of grid technologies for social science.

To achieve these aims, the project addresses the following key questions:

1. Are there measurable relationships between the characteristics of young people with difficulty, and the socio-economic and physical characteristics of the area they live in?
2. Are government policies addressing the multiple facets of social exclusion, including health, employment, and crime prevention, targeted in the areas that need them, where young offenders live and most crimes are committed?

Addressing the complex relational and distributional dimensions of social exclusion is undertaken by combining both quantitative and qualitative data at different scales within South Yorkshire, and in particular using grid computing to undertake:

1. A regional level analysis of crime, social context, and young people using Connexions (16-19 year olds not in education, employment or training), offences, victims, and offender data, and socio-economic and neighbourhood characteristics;
2. Two case studies focusing on street crime in Sheffield, and preventative measures in Barnsley to inform the data analysis;
3. Synthesis of findings and sharing of the results in a distributed environment among academics and practitioners in the region of South Yorkshire.

The novel approach from a technical perspective involves testing the integration of grid architecture for distributed access and data processing, together with Open-GIS architecture for geographic information search, retrieval, portrayal, and integration across software-independent platforms held by research institutions and government agencies in the region.

A key component of the project is to observe how the different communities of academics and practitioners involved in this demonstrator interact and socially shape the new technology and methods involved in grid computing. This will provide a much needed understanding of the social construction of this innovative tool for the social science, and contribute to the development of the necessary training material.

The paper will present the findings of the demonstrator project to date and reflect on the lessons to be learned for the further development and uptake of grid technologies to support social science enquiry and policy analysis.