1.0 Background
The CHCC (Collection of Historical and Contemporary Census Data and Related Materials) was a collaborative project, which arose from the merging of three separate census related projects. Seven partners from four universities were involved in the project:

The University of Manchester
- MIMAS (Manchester InforMation and Associated Services) as lead site
- CCSR (Cathie Marsh Centre for Census and Survey Research)
The University of Essex
- AHDS History (previously the History Data Service)
- UK Data Archive
The University of Glasgow
- LTSN Centre for History, Classics and Archaeology
- HATII (Humanities Advanced Technology and Information Institute);
The University of Leeds
- School of Geography

The project ran from October 2000 to September 2003, and was launched at the RGS/IBG conference in September 2003.

The main aim of the project was to develop the CHCC into a major learning and teaching resource. The specific objectives set to accomplish this were to:

- promote increased and more effective use of network based data services for problem-based learning and student project work across a broad cross-section of learning and teaching programmes;
- develop an integrated web-based learning and teaching system that links together data extraction and visualisation/exploration tools with comprehensive learning and teaching resources;
- significantly increase the Census user base by increasing use of the CHCC in learning and teaching;
- build new user communities by promoting increased awareness of the CHCC and its learning and teaching potential;
- improve the productivity of teachers by significantly reducing the overheads required to incorporate Census data related resources into learning and teaching programmes;
- improve access to key primary data sources and related resources;
- minimise the delays in getting the key 2001 Census outputs used in learning and teaching.

The project outputs can be divided into three main categories:

- learning and teaching materials;
- web-based interfaces to Census datasets;
- the Census Resource Discovery System (CRDS).

The learning and teaching materials were piloted throughout the project’s lifetime and made available to the community during the closing stages of the project. Various web-based interfaces were released throughout the project as part of the data delivery systems, via the CDU (Census Dissemination Unit) service at MIMAS, the AHDS History and CCSR. The Census Resource Discovery System was released to the community in October 2003, and continues to be populated with metadata as project outputs are made available.

2.0 Introduction
The first phase of evaluation of the CHCC materials required each member institution (Glasgow, Leeds, Manchester) to establish 2-3 ‘partner’ institutions with which to undertake formative evaluation. This evaluation was not intended to be extensive. Working with one teacher for one session on one course at each partner institution was thought to be sufficient to provide in-depth evaluation to be carried out. Getting partner institutions on board was the
most problematic stage of the process. In the case of Glasgow, personal contacts proved to be the most successful route.

At the end of the project there were some outstanding funds, which were originally intended to carry out a “case study” evaluation of the CHCC resources in 2004, by the University of Glasgow. The original aim was for a summative evaluation to be carried out, where the history units would be evaluated in Glasgow, and the Leeds/CCSR units evaluated with assistance from CSALT.

Unfortunately Glasgow could not carry out this work. The project co-ordinator contacted CSALT at Lancaster to ask if they were willing to undertake the work but they were not able to do so. Consequently, the UK Data Archive (UKDA) undertook the work.

3.0 Methodology
As the work was limited to a single month, August, during which many students and tutors were unavailable, the evaluation strategy focused on quality rather than quantity, in terms of responses. The evaluation included:
- student testing at the ECPR Summer School, University of Essex;
- case study focusing on classroom use by a tutor;
- testing by UKDA service representatives;
- general invitation to undertake evaluation via the UKDA web site.

Work package 1.
This part of the work involved:
- identification of, and initial contact with, those individuals who would undertake the evaluation work;
- formalisation of the evaluation plan;
- preparation of evaluation material;
- implementation of the evaluation.

Work package 2.
Tasks for work package 2 were:
- collation of results from the evaluation;
- writing of the report.

Timeline
Week 1. Formalise evaluation plan
         Make contact with tutor for case study and arrange meeting
         Prepare evaluation material

Week 2. Distribute evaluation material to service representatives
         Post invitation to participate and forms to web site
         Conduct ECPR evaluation

Week 3. Begin organising responses
         Conduct case study evaluation (depending on tutor availability)

Week 4. Complete collation of responses
         Write report

4.0 Implementation of the Methodology
Evaluation of the CHCC material was carried out using the methods detailed in the sections below. All participants were entered into a prize draw to win a book token, as an incentive for completing the questionnaire.
4.1 Evaluation session at the ECPR Summer School, University of Essex

The student evaluation was undertaken as part of the ECPR Summer School. After an overview of the project was given, the students were invited to try out a CHCC learning and teaching unit and to complete the evaluation questionnaire (Appendix A). The questionnaire focused on user opinion of the usability and usefulness of the learning and teaching unit.

As it was uncertain whether or not the participants had Athens passwords (it was anticipated that some of the participants would be from outside the UK), a unit was chosen for the participants to evaluate: http://www.chcc.ac.uk/CAS/unit7/unit7resources.html#. This unit was freely available to anyone and did not require Athens authentication.

The participants were also provided with the URL for the Census Resource Discovery Service (CRDS), so that they might put the learning and teaching unit into context with the rest of the portal. The CRDS itself does not require Athens authentication, but one is required to gain access to most of the learning and teaching units. Those attendees with an Athens password were also invited to look at other units within the CRDS. Handouts of the presentation and publicity for the CRDS and CHCC project were offered to workshop attendees.

4.2 Case study focusing on classroom use by a tutor

Originally, this section of the evaluation was to be undertaken during a class or tutorial. Due to the time of year when the evaluation was being undertaken (August), this was not feasible as students were largely unavailable for the task. A case study was therefore undertaken by a very experienced member of staff from the department of Government at the University of Essex. The staff member who participated in the evaluation has authored various articles on computer applications in the social sciences, research methods and political psychology and has conducted research into the history of the development of social science research techniques and computer-aided content analysis.

The case study allowed for an in depth analysis of the usefulness of the CHCC material within a classroom environment and how the material could be used within a university course. The tutor was provided with some guidelines (Appendix C) as to what type of information was required.

4.3 Online evaluation via the UKDA web site

A questionnaire (Appendix B) was posted on the UKDA web site, to allow for evaluation by the general public. The questionnaire was similar to the workshop questionnaire and was presented as a Word file, to be downloaded by the user and returned. It was felt to be too time consuming, within the already tight timetable, to create an online questionnaire.

4.4 Testing by UKDA service representatives

A short questionnaire (Appendix B) was also sent via a mailing list to ESDS representatives who were invited to complete it. The same questionnaire was used as for the online evaluation.

5.0 Results

Results from the evaluation of the CHCC learning and teaching resources can be found in the sections below.

5.1 Evaluation session at the ECPR Summer School, University of Essex

The summer school evaluation session saw a total of eight attendees who came from a range of disciplines and backgrounds. The majority of users were postgraduate students or researchers, although there was one scientific assistant and one school inspector present.

Overall, the feedback was positive and all of the attendees felt that they would use the Census Resource Discovery Service and its learning resources again. The majority (88%), found the service interesting and enjoyable to use (see Figure 1).
All of the users thought the resources were attractive and that the tutorial was fun to use. Two thirds of the users found it easy to navigate through the tutorial (see Figure 2), although one user found it difficult to access the web site initially.

The majority of users (88%) felt that the content of the resources was relevant to the topic and all of the users thought the resources were attractive (see Figure 2). Approximately 40% of the users thought that the online multiple-choice questions were helpful and 71% of users
thought that the practical exercises were interesting. Over 83% of users thought that the online reading list was a useful aid. A quarter of the users felt that the material within the resource was relevant to their subject area. This may not be of significance though as this session was open to users from all disciplines.

All of the users ignored the stop and think questions, which could be a reflection on the lack of time during the session, rather then their disinterest in the questions.

All of the users felt that using the material stimulated their learning. Most users (63%) found that using the material stimulated their interest a little in the subject matter and half of the users felt that using the material improved their understanding significantly (see Figure 3). The majority of users (71%) thought that the material may have enhanced their methodological skills a little and 75% thought that the material may have improved their all-round computer skills (see Figure 3). Some of these findings may be understated in this evaluation if the unit chosen to use was not of interest to the user.

Most of the users (71%) felt that using the CHCC learning resources were as useful as other forms of learning. The remainder of the users thought that the materials were more useful than other forms of learning.

5.2 Case study focusing on classroom use by a tutor

An evaluation of the CRDS and it’s associated learning and teaching resources was undertaken by a tutor from Essex University. The tutor looked at learning and teaching units 5, 7, 14 and the data analysis units. The tutor was provided with a number of questions as guidelines to the type of information being sought (Appendix C).

Student Use

The tutor thought that students should encounter little difficulty using the service and would recommend its use for self-learning outside of a course, as it presents a comprehensive overview of the population census as a social research resource.

The tutor also thought that the service would seem more interesting to students than more traditional methods of learning, but that most of the material could have been presented in a conventional book, with the addition of a CD-ROM in the back. The tutor felt unsure that this
way of learning differed greatly from traditional methods and was therefore unable to express
his opinion over how beneficial the service might be to students.

Problems which the tutor envisaged could occur included printing expenses of units and the
use of some data from the 1991 Census, which would seem out-of-date to some
undergraduate students given their age.

Tutor Use
The tutor suggested that the service could be used as part of a teaching course by including a
reference to CHCC in the supplementary resource section of the reading lists’ section on
‘official statistics’. However, it was not felt appropriate to dedicate a class/lab slot to the
CHCC in the same way that is done for resources, as it was felt to be lacking in user
interaction. The tutor thought that the service could become part of a course once a year,
rather then being integrated into a course on a monthly or weekly basis.

The tutor thought that one benefit of the CRDS was that it provides another resource,
separate from the University’s library, which does not always have sufficient copies of texts.

The tutor suggested that the service could be improved by including more modular
interactivity. The use the internet was seen by the tutor as a ‘cheap’ way of distributing text,
but the advantages of using this medium were not exploited as there was very little creative
use of interaction or adjusting material to accommodate the screen. Consequently many
students might print off the text which can be expensive in the long-term.

5.2 Evaluation through electronic media
There were very few responses (two) received through electronic media (email and web site)
evaluation, which could be a reflection on the evaluation being undertaken during the summer
months. The responses which were received came from non-student backgrounds; a teaching
assistant and a subject librarian.

Both of the respondents enjoyed using the service and indicated that they would like to use it
again. Neither respondent found it difficult to navigate through the tutorial and thought that the
resources were both relevant and attractive. One of the respondents thought that the multiple
choice questions and online reading list were useful. The practical exercises were thought to
be interesting by the respondents and the tutorial was fun to use. It was felt that the material
stimulated learning, in particular it was thought to improve understanding of the subject
material and methodological skill a lot. The respondents thought that the learning and
teaching materials were as useful and more useful then other forms of learning and teaching.

6.0 Conclusions
Although there were fewer responses then anticipated, those that were received were of good
quality. A good range of users were engaged, through student attendance of the workshop,
electronic evaluation by information professionals and a tutor-led case study.

In general, the students and the information professionals liked the learning and teaching
resources and felt that they would use them in the future. The students thought that the
service was attractive, fun and easy to use and particularly liked the provision of relevant
reading lists. The parts of the service which students were less positive about were the
practical exercises and the ‘stop and think’ questions. Although not all the students were
interested in the subject area of the unit chosen for them to evaluate, it enabled them to
conclude that the service would compliment and enhance the more traditional methods of
learning.

The tutor-led case study concluded that although this type of service does provide benefits,
such as easy access to texts of which the library may not hold multiple copies, more
interactivity could be introduced.

Overall, the CRDS and it’s associated learning and teaching resources were well received
during this evaluation and were perceived to be of much use either as self-directed learning or
as part of a course.
Appendix A - CHCC Evaluation Questionnaire

Please complete the questions below after you have looked at the learning and teaching unit http://www.chcc.ac.uk/CAS/unit7/unit7resources.html#. We would like you to concentrate on the style of the learning and teaching material rather than the content of the unit. You do not need to work through and complete the entire unit.

To put this unit into context and to view other units (an Athens password is required to access the other units) please try out the Census Resource Discovery Service http://chcc.essex.ac.uk/chcc-rd/RD

If you would like to be entered into a draw to win a £25 Amazon voucher please provide us with your email address in the first part of this survey.

Demographic Information

University/Organisation: ___________________________________________

Course/Job Title: ________________________________________________

Email: _________________________________

CHCC Learning and Teaching Material

Based on your experience of using the CHCC learning and teaching unit please circle your answer to the following questions:

1. Would you like to use it again? Yes No

2. Did you enjoy using it? Yes No

3. Did you think it was interesting? Yes No

4. Please indicate which statements you agree or disagree with:
   - It was hard to navigate through the tutorial Yes No
   - The content of resources was relevant to the topic Yes No
   - The resources were attractive Yes No
   - I ignored the 'stop and think' questions (question mark icon) Yes No
   - The on-line multiple choice questions were helpful Yes No
   - The practical exercises were not interesting Yes No
   - The on-line reading list was a useful aid Yes No
   - The material was relevant to my subject area Yes No
   - The tutorial was fun Yes No

Your Learning

Thinking about the learning and teaching unit you used, please indicate your responses to these statements:

5. Using the material is likely to stimulate my interest in the subject matter further (e.g. GIS, Pollution)

   Significantly A little Not at all

6. Using the material is likely to improve my understanding of the subject matter

   Significantly A little Not at all
7. Using the material is likely to enhance my methodological skills

- Significantly
- A little
- Not at all

8. Using the material will help in improving my all-round computer skills

- Significantly
- A little
- Not at all

9. Comparing the CHCC learning and teaching materials with other forms of learning did you think they were

- More Useful
- As Useful
- Less Useful

**Additional Comments**

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________

*Thank you for your contribution*
Appendix B - Evaluation of Census Learning and Teaching Materials

Please complete the questions below after you have looked at a learning and teaching unit from the Census Resource Discovery Service http://chcc.essex.ac.uk/chcc-rd/RD. If you do not have an Athens password you may access the following learning and teaching unit: http://www.chcc.ac.uk/CAS/unit7/unit7resources.html#.

Please concentrate on the style of the learning and teaching material rather than the content of the unit. You do not need to work through and complete an entire unit.

If you would like to be entered into a draw to win a £25 Amazon voucher please provide us with your email address in the section below.

Demographic Information

University/Organisation: ____________________________________________
Course/Job Title: ______________________________________________
Email: __________________________

Learning and Teaching Material
Based on your experience of using the learning and teaching units please answer the following questions:

1. Would you like to use it again? Yes No
2. Did you enjoy using the resources? □ □
3. Did you think the resources were interesting? □ □
4. Please indicate which statements you agree or disagree with:
   - It was hard to navigate through the tutorial
   - The content of resources was relevant to the topic
   - The resources were attractive
   - I ignored the 'stop and think' questions (question mark icon)
   - The on-line multiple choice questions were helpful
   - The on-line reading list was a useful aid
   - The practical exercises were not interesting
   - The material was relevant to my subject area
   - The tutorial was fun

Your Learning
Thinking about the learning and teaching unit you used please indicate your responses to these statements:

5. Using the material is likely to stimulate my interest in the subject matter further (e.g. GIS, Pollution)
6. Using the material is likely to improve my understanding of the subject matter
7. Using the material is likely to enhance my methodological skills
8. Using the material will help in improving my all-round computer skills
9. Comparing the learning and teaching materials with other forms of learning I thought they were

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<th>More Useful</th>
<th>As Useful</th>
<th>Less Useful</th>
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**Additional Comments**


Thank you for your contribution

Please return this questionnaire to:

Julie Missen  
UK Data Archive  
University of Essex  
Wivenhoe  
CO4 3SQ  
Email: jmissen@essex.ac.uk
Appendix C - Guidelines for the CHCC Evaluation Case Study

Introduction
Please try out the Census Resource Discovery Service, which is located at: http://chcc.essex.ac.uk/chcc-rd/RD, in particular focus on the learning and teaching resources found within the service. The majority of the learning and teaching resources will need an Athens password (except: http://www.chcc.ac.uk/CAS/unit7/unit7resources.html#). After you have viewed the service please consider the following questions:

Student Use
- how easy do you think students would find it to use this service?
- what problems do you think they may encounter?
- do you think that students would like to use this service?
- do you think that this way of learning will be beneficial to students. If so, please state why
- would you recommend students to use this service for self-learning outside of a course?

Tutor Use
- would you use this service as part of a teaching course?
- if so, how would you use this service as part of a course? E.g. as part of a tutorial or lecture, directed self-learning, recommendation to students
- how frequently would you consider using this service as part of your course? monthly, biannually, annually?
- how might using this service benefit you as a tutor?
- what improvements/additions would you like to see made?