Impact of Visual Learning
(Action Research in Adult Community Learning)

'A Picture Is Worth A Thousand Words'

Maureen Frazer and Vikki Trace
## Derbyshire Adult Community Education Service

maureen.frazer@derbyshire.gov.uk

vikki.trace@derbyshire.gov.uk

Background

- Largest provider of part-time adult learning within Derbyshire

- Approx 2,600 courses with over 28,910 enrolments across 15 SSA to include Family Learning and Foundation Learning

- 60% of enrolments are on accredited courses

- 23 main centres – 100+ outreach venues

- 400+ part-time tutors

- Major restructure

- CWDW (Changing the Way Derbyshire Works)
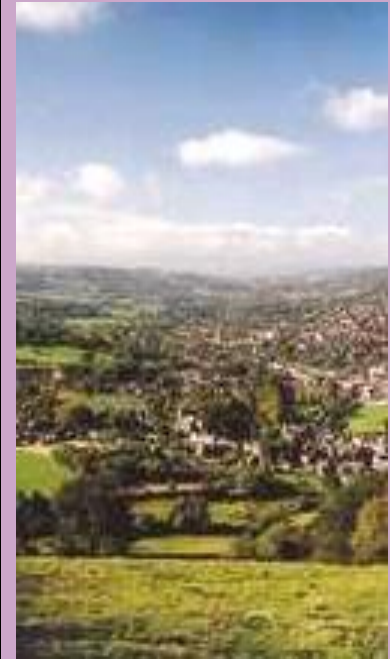
Research Methods

- Our main research process was an action research project using supported experiments and joint practice development on the theme of visual learning

- Research ethics: all the people involved were aware that a supported experiment was taking place and knew that their involvement and feedback would be requested. The final paper protects participants anonymity and confidentiality

The Process

- Explore the literature around communities of practice, joint practice development, supported experiments, and influences on learners learning.

- Set up a community of practice (CoP) from DACES tutors, managers; and professional peers

- Share the supported experiment concept with the CoP

- Gain support and commitment from tutors to join the CoP

- Engage the CoP in running supported experiments – with appropriate support

- Collect tutor and leaner feedback on the supported experiments

- Disseminate the outcomes of the supported experiments throughout DACES and the wider research community

Key Literature

- Buzan, T (2005). *The Ultimate book of mind maps -* Thorsons

- Coffield, F (2008). *Just suppose teaching and learning became the first priority* – LSN

- Coffield, F (2010). *Yes, but what has Semmelweis to do with my professional development as a tutor* – LSN

- Fielding M et al (2005) *Factors influencing the transfer of good practice*. Dfes/DMOS

- Hattie JA (1999)*Influences on Student Learning* Inaugural Professorial Address, University of Auckland, New Zealand

- Petty G (2008) *Evidence Based Teaching*/ Nelson Thornes

Data Collection & Analysis

- Data method was predominantly phenomenological using observations, questionnaires, visual and verbal feedback.

- 10 tutors, Change Agents (Mentors, Subject Learning Coaches, e-Learning Champions) and Managers took part in the research projects.

- Of the 10 supported experiments, all opted to introduce technology* to improve their practice (*netbooks, projectors and the MindGenius or Imap software).

Findings

- The overall consensus was that the use of the mind maps had added to learner recall and understanding of key concepts

- Images and colour contributed and enabled learners to 'visualise and fix the subjects more clearly in their minds'.

- Activities led to discussions on further use of mind maps in 'everyday' learning and planning situations

- Studies that involved learners with dyslexia produced particularly positive results; - as research indicates that learners with these particular types of difficulties do not normally respond well to information presented in list form and prefer to see information presented pictorially, particular if writing and spelling are issues.

- Learners with dyslexia found using mind maps enabled them to increase the number of strategies to overcome areas of difficulty

Impact of the Research

Learners

- Increased understanding of key concepts

- Increased results in learner achievement

- Increase in Learner autonomy

- Increased learner involvement in teaching and learning methodology

Tutors

- Increase in tutor's use and confidence in using technology within their delivery

- Broader range of CPD activities

Teaching & Learning

- Widening participation and increased measures to meet learner needs (EDI)

- Personalised CPD is effective

Recommendations

- Further investment in visual learning software (e.g. MindGenius &/ Imap)

- Continue with future applications for funding to support further CPD development

- Cascade the use of visual learning techniques to a wider selection of courses/curriculum areas

- Ensure that T&L remains high on DACES priorities

- Involve those tutors who have actively participated in this and similar funded projects to cascade knowledge/skills to colleagues

- Expand the current 'Change Agent' team

Next Steps

- DACES have been successful in a recent LSIS bid and now have a further £5,000 of funding to continue to run Supported Experiments and Joint Practice Development projects linked with visual learning and other technologies.

- DACES will continue to pursue projects of this nature as the main CPD method as opposed to the previous staff development cascade model.

- DACES will continue to put T&L at the heart of future development.

Dissemination

- DACES Celebration Event

- DACES Practitioner support networks and PRD groups (EM ACL PRD group, EMFEC, EMCETT)

- The research report and all supporting materials will be accessible to tutors, managers and learners via DACES Moodle Learning Platform

- The research report will be made available and shared with the local and wider community

'Impact of Visual Learning'
(Action Research in Adult Community Learning)

Maureen Frazer
Derbyshire Adult Community Education Service

1 - Introduction

A Picture Is Worth A Thousand Words

This research illustrates how Derbyshire Adult Community Education Service (DACES) tutors were given the opportunity to take part in Joint Practice Development and Supported Experiment opportunities using the theme of visual learning and how participation in these projects impacted on their own practice, CPD and on DACES learners.

DACES has experienced a major restructure and is facing significant challenges with 'Changing the way Derbyshire Works' (CWDW) and the general austerity measures in the education sector. The organisation is constantly looking for efficiencies whilst still striving to maintain and improve the quality of its teaching provision. The research was carried out in this setting.

2 - Research Methods

The principal methodology was action research using Supported Experiments (SE) and Joint Practice Development (JPD).

Research ethics: all participants were aware that research was taking place and knew that their involvement and feedback would be requested. The final paper will protect participants anonymity and confidentiality.

DACES Research Process was to:

Explore the literature around the use of JPD, concept mapping, visual representation, and the effect on learners.

Set up a community of practice (CoP) from DACES tutors, managers; and professional peers.

Set up training on the use of visual methodologies and provide an overview of JPD & SE.

Engage the CoP in running Supported Experiments – with appropriate support.

Collect tutor and learner feedback on the Supported Experiments, write a report and disseminate the findings.

3 - Key Literature

Buzan, T (2006), *The Ultimate book of mind maps* – Thorsons.

Coffield, F (2008). *Just suppose teaching and learning became the first priority* – LSN.

Coffield, F (2010). *Yes, but what has Summative to do with my professional development as a tutor* – LSN.

Fielding, M et al (2005) *Factors influencing the transfer of good practice*. DfEs /DfES

Hattie, J A (1999) *Influences on Student Learning* Inaugural Professorial Address, University of Auckland, New Zealand

Petty, G (2006) *Evidence Based Teaching*/ Nelson Thornes

Websites:

www.mindgenius.com - www.thinkbuzan.com
www.learning-tech.co.uk/

Multisensory Learning - www.excellencegateway.org.uk

4 - The Projects

Data method was predominantly phenomenological using observations, questionnaires, visual and verbal feedback.

10 tutors, Change Agents (Mentors, Subject Learning Coaches, e-Learning Champions) and Managers took part in the research projects.

Of the 10 supported experiments, all opted to introduce technology* to improve their practice ('netbooks, projectors and the MindGenius or Imap software). After mind maps had been introduced to the learners, they were then encouraged to use paper, colouring pens, words and images to recreate their own mindmaps and embed their learning and understanding.

A selection of experiments:-

- SE – A fitness tutor using mindmap gain the classroom to aid learners memory with complex bones and muscle group
- SE – An ITT tutor using mindmap so makes visualise presentation of links gel connection on the range of assessment methods
- SE – A tutor introducing mindmap so he/p learners with dyslexia to plan tasks, remember faces and relate work
- SE – A tutor teaching basic French teaching family groups, verb groups, time related activities
- SE – An ILT tutor creating mindmap to organise the content of bb and (menus) on Office 2010 software.

For further information contact Maureen Frazer – email: maureen.frazer@derbyshire.gov.uk

8 - Dissemination

- DACES Celebration Event
- DACES Practitioner support networks and PRD groups (EMACL PRD group, EMFEC, EMCETT)
- The research report and all supporting materials will be accessible to tutors, managers and learners via DACES Moodle Learning Platform
- The research report will be made available and shared with the local and wider community.

7 - Next Steps

DACES have been successful in a recent LSIS bid and now have a further £5,000 of funding to continue to run Supported Experiments and Joint Practice Development projects linked with visual learning and other technologies.

DACES will continue to pursue projects of this nature as the main CPD method as opposed to the previous staff development cascade model.

DACES will continue to put T&L at the heart of future development.

6 - Recommendations

- Further investment in visual learning software (e.g. MindGenius &/ Imap)
- Continue with future applications for funding to support further CPD development
- Cascade the use of visual learning techniques to a wider selection of courses/curriculum areas.
- Ensure that T&L remains high on DACES priorities.
- Involve those tutors who have actively participated in this and similar funded projects to cascade knowledge/skills to colleagues.
- Expand the current 'Change Agent' team

5 - Findings

- The overall consensus was that the use of the mind maps had added to learner recall and understanding of key concepts
- Images and colour contributed and enabled learners to 'Visualise and fix the subject more clearly in their minds'.
- Activities led to discussions on further use of mind maps in 'everyday' learning and planning situations.
- Studies that involved learners with dyslexia produced particularly positive results; –as research indicates that learners with these particular types of difficulties do not normally respond well to information presented in list form and prefer to see information presented pictorially, particular if writing and spelling are issues.
- Learners with dyslexia found using mind maps enabled them to increase the number of strategies to overcome areas of difficulty

Summary

- Once initial issues are overcome relating to learning the new techniques and software, findings indicate that visual learning can positively influence learning and understanding.