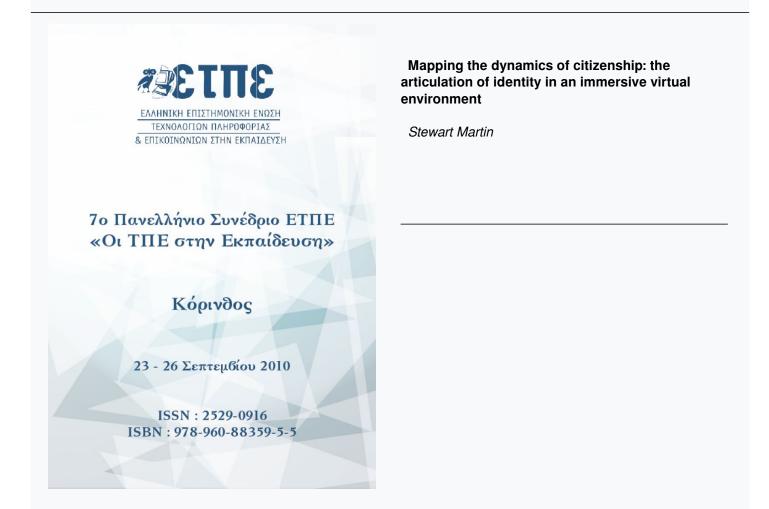




# Συνέδρια της Ελληνικής Επιστημονικής Ένωσης Τεχνολογιών Πληροφορίας & Επικοινωνιών στην Εκπαίδευση

Tóµ. 1 (2010)

7ο Πανελλήνιο Συνέδριο ΕΤΠΕ «Οι ΤΠΕ στην Εκπαίδευση»



## Βιβλιογραφική αναφορά:

Martin, S. (2023). Mapping the dynamics of citizenship: the articulation of identity in an immersive virtual environment . Συνέδρια της Ελληνικής Επιστημονικής Ένωσης Τεχνολογιών Πληροφορίας & Επικοινωνιών στην Εκπαίδευση, 1, 051–060. ανακτήθηκε από https://eproceedings.epublishing.ekt.gr/index.php/cetpe/article/view/4926

## Mapping the dynamics of citizenship: the articulation of identity in an immersive virtual environment

## Stewart Martin

s.m.martin@tees.ac.uk

School of Social Sciences and Law, Teesside University, Middlesbrough, UK

## Abstract

Young people from communities with distinct religious or cultural identities have often found it difficult to engage with or be welcomed into citizenship in the UK, where there is not felt to be a strong sense of inclusive national identity or of citizenship which embraces Europe comfortably. However, there is a general consensus that there is a need to develop a contemporary and more inclusive conception of citizenship and a wider participatory democracy. This paper presents a project that uses a custom-built immersive virtual environment that is designed to understand how immersive virtual worlds can improve the thinking and decision making ability of young people about citizenship, and help them develop identities in which strongly held cultural and religious convictions are in harmony with their role as active citizens in contemporary British society. The project is working with young people in secondary schools and their teachers in the North-east of England to:

- create an interactive, immersive learning environment within which conceptions of 'citizenship' can be explored using avatars in real-time and developed by the participants in innovative ways not available within traditional learning environments
- use this environment to articulate the critical factors preventing full engagement with contemporary
  expressions of citizenship and offer developmental exits from the impasses perceived by them
- map the key factors contributing to individual and collective citizenship identity formation for young people both as UK citizens and as members of a particular culture or religion using a mixedmethods approach comprised of avatar-mediated projection techniques for examining contentious and sensitive identity issues, group-based work, active listening, reflection and biography

Keywords: citizenship, identity, virtual environments, education

#### Introduction

Concerns have risen sharply in recent years about the level of public disengagement with political and civic life in the UK, as evidenced by falling turnout at national and local elections, rising cynicism and lack of trust in politicians and a perceived increase in the alienation and marginalisation of some groups. Particular anxiety has been expressed, both in government and the media, about the radicalisation of some young people and the association of this with the growth of cultural and religious fundamentalism (Home Office, 2001a, 2001b; Home Office, 2004; Home Office, 2006; Bradford Metropolitan District Council, 2001). Such concerns have been fuelled and given greater credence by international events, especially when perceived to be associated with political instabilities and terrorism and by rising levels of threat to individual nation states from military developments worldwide.

Such anxieties are not unique to the UK and many governments have responded to concerns about the perceived fragmentation of and threat to political and national identity (Deakin et al., 2005). Some governments have reacted by increasing the attention given to producing citizens with appropriate senses of self, community and citizenship (Martin & Feng, 2006; Goldsmith, 2008), often through changes to their educational systems, via 'citizenship education' under various guises.

A. Jimoylannis (ed.), Proceedings of the 7<sup>th</sup> Pan-Hellenic Conference with International Participation «ICT in Education», vol. I, pp. 51-60 University of Peloponnese, Korinthos, Greece, 23-26 September 2010

The intellectual, legislative and political legacy of British colonialism, the subsequent growth of the UK as a multicultural democracy and the development of trans-national political structures have over time increased concerns about entitlement to and the nature of British citizenship. This contentious area has promoted considerable debate about what should constitute the appropriate responses through educational policies and outcomes.

The UK has one of the lowest voter turnouts of any western democracy and there is rising anxiety about the lack of political engagement with the state; "Concern about youth alienation from democratic processes has led, at least in part, to the introduction of citizenship education in schools. This has stemmed, in part, from angst about the low levels of voter participation by young citizens in the 18-24 age bracket, in particular." (MacFarlane, 2005: 298). This matters because one of the outcomes of increased international interconnectedness is that global tensions are being reflected on the streets of local communities. Particular anxieties exist about the disengagement and marginalisation of groups such as Muslims (Osler & Starkey, 2003), heightened by the growth of economic globalisation, international terrorism and high-profile extremist events. Media reporting of such factors can compound the resulting anxieties and confusion:

"Of Muslims in the 16-24 age group, our poll found 37 per cent wanted Islamic sharia law in the UK, 31 per cent wanted heretics put to death and 74 per cent wanted Muslim women to wear the full-face niqab veil or the hijab headscarf." Sharia law "specifies stoning, amputations and executions as routine punishments. Religious police bring suspects before special courts."

#### (Daily Mail, 2007)

Young people from communities with distinct religious or cultural identities have traditionally found it difficult to engage with or be welcomed into an inclusive sense of national citizenship, as considered by McGhee (McGhee, 2005). In the UK there is not felt to be a strong sense of inclusive national identity or of a sense of citizenship which embraces Europe comfortably, and the need for the development of a contemporary and more inclusive conception of citizenship and a wider participatory democracy in the UK has been noted both in government policy and more widely (McGhee, 2005; MORI, 2007).

However, the desire to develop a stronger, more cohesive sense of British citizenship by implementing Citizenship Education in schools has met with limited success. The intentions for citizenship education remain contested and misunderstood, its delivery often makes little reference to significant local and national issues and how politicians, the media and the wider society deals with these and in many schools the general provision for citizenship education is inadequate. Teachers find the topic problematic to teach, often due to poor knowledge, training and resources, overall attainment in citizenship education is poor when compared to other subjects and the National Curriculum for citizenship education is also ambiguous, lacks coherence and is unmanageable (Ofsted, 2006). There has been sustained criticism that "citizenship education is the worst taught subject in secondary schools" (Independent, 2006) and, despite improvements made since its introduction, the Chief Inspector of Schools' most recent Annual Report concedes that it "remains fragile" in many schools (Chief Inspector's Annual Report, 2008).

There a growing recognition that citizenship education in the UK needs to be more about empowerment and 'performativity' (Braidotti, 1994; Commission on Integration and Cohesion, 2007), about the society we want to see (The Equalities Review, 2007) and less about the study of academic content, citizenship duties, the institutions of government, 'the rule of law' (Ofsted, 2006) or citizenship as an act of social compliance and contribution, as is sometimes found when countries take a more overtly political approach to promoting social integration (Martin & Feng, 2006; Goldsmith, 2008). But engaging young people in civic and political life via an active citizenship is not only of advantage for them: "Being taught to respect the law without learning how bad laws can be changed and better ones promoted tends to create apathetic subjects rather than active citizens. At the worst, disengagement can lead to acts of delinquent rebellion against a social order that young people feel powerless to influence."

Sir Bernard Crick (Quoted in Ofsted, 2006: 5)

During adolescence young people are heavily engaged in the exploration of identity (Erikson, 1950), but schools are not generally able to afford students access to a rich resource of material and conceptual tools to support the development of workable prototypes and roles. The research reported here is developing an artefact and methodology for use in educational settings to help young people in their exploration and development of cultural and citizenship identity for an inclusive society. It makes imaginative use of technologies known to be attractive to young people, many of whom routinely use similar technologies such as online social networking to develop and maintain relationships, communicate with others and (re)present themselves. The research allows young people to practice citizenship in a safe environment which, whilst virtual, represents real-world contexts dealing with issues of relevance to them, their lives and their development as citizens.

#### Experimental environment

The software used is a purpose built technology developed from the commercial version of Second Life but represents a significant development of it. Additional functionality facilitates the creation of communal values, personal diaries, legacy recording and the expression of emotion. It also facilitates communal discussion of citizenship issues and the recording and storage of the collective values and associated definitions that emerge. The environment includes many useful and attractive features of Second Life but at the same time addresses and overcomes the perceived barriers to its use by educational institutions inherent in the public access version's lack of user activity monitoring, weak data protection, minimal privacy controls, exposure to 'griefing' (cyber-bullying) and prevalence of mature content. These factors make the commercial platform attractive to the wider public but constitute severe obstacles for educational use. The approach used in this project ensures that at its conclusion the research is able to access a route to adoption by providing educational and other institutions with a technology that draws upon those features known to be engaging and motivating Second Life but that overcomes the commercial version's inherent limitations, addresses anxieties expressed about its use by young people and provides secure and safe configurations for institutions to implement on their own servers.

Despite the introduction of citizenship into the school curriculum in several countries including England, there has been little debate about what content, tools, pedagogy, or assessment methods are most appropriate. This research uses an interventionist environment to study how citizenship education can use new ways to explore such relevant issues. Prior work has shown how such environments can facilitate the study of cultural and personal values (Csikszentmihalyi & Rochberg-Halton, 1981; Bisaillon, 1989; Bers & Urrea, 2000) and some has focussed on the value of multi-user environments and collaborative virtual spaces (Bruckman, 1998) to show that constructionist approaches maximise the learning, content production and creative expression of individuals in learning communities. However, the present research also uses a relatively small, virtual community to avoid the problems that tend to appear in large platforms (Kollock & Smith, 1996).

This project's innovative use of an immersive virtual environment to study citizenship draws on the work of Turkle and Erikson on identity formation and the tensions between the individual's need for social integration into family, culture and society (identification) and the search for boundaries between the self and others (differentiation) (Erikson, 1950, 1968; Turkle, 1995). The research also makes use of 'virtual autotopography' (Gonzalez, 1995; Bers, 2001) to represent identity through participants' selection of symbolically significant objects. Participants' virtual installations/homes are used to study personal representations of self (differentiation). Their involvement with the built environment (e.g. virtual civic spaces, artefacts or 'temples' representing religious traditions or cultural/group interests) is used to map their integration into the virtual society and culture (identification). Their attachment of values and stories to these artefacts and their reflections upon them and on their experiences and on introduced 'scenarios' provides data for studying the tensions between differentiation and identification and emerging perspectives on citizenship.

The imperative given to each participant is to develop a harmonious environment within which each individual feels welcome and empowered. This draws on the idea that individual moral development is critically shaped by participation in democratic social institutions designed to encourage self-government and group decision making (Kohlberg, 1985). In the present research, participants will test moral and personal values through conversations and actions in everyday behaviour.

This empirical research focuses on the significant gap in this area (Deakin et al., 2004) and on how immersive virtual technologies can facilitate and support reflection and discussion about citizenship choices and related ethical issues. The project is thereby likely to have an impact on citizenship education, education for multicultural understanding, the understanding of personal identity in relation to that of others, and about how these can promote a fairer and more tolerant society which has a more coherent and inclusive sense of what it is to be British. The project has been explicitly designed for scalability.

## Methodology

Pre-pilot testing will be followed by small-scale trials using university students comprising several religious/cultural groupings (e.g. Christian; Muslim; Jewish; Hindu; Sikh; other; and 'none') to validate scenario effectiveness and environmental instrumentation and resources. This will be followed by trials with pre/post-16 young people and their teachers, drawn from regional schools and facilitated by the City Learning Centres (CLCs) in the region.

Students on the university's email are invited to complete an anonymous selfadministered ethnic/cultural/religious identity questionnaire and participate in the project. From the population of willing respondents a random sample was drawn and further similar subsets will be selected (balanced by gender) to represent ethnic religious groups equal to the proportions of these in the national population. Using the same procedure a control group will be established from those with very low scores on the religious/cultural affiliation dimension in the self-reported profile. This procedure aims to obtain a selfselected, articulate and motivated group balanced for gender and representative of the national distribution of ethnic/cultural/religious identity drawn from an age range most likely to be open to reflecting on their citizenship identity as they first vote. These participants will be used for the pre-pilot, pilot and testing/refinement stages of environment development and content scoping for the database of artefacts for subsequent participant use. For the main study teaching groups from regional schools and colleges are being invited to participate in batches. They will complete pre- and post- experiment cultural/religious 'strength of identification' and 'social empathy' questionnaires (to assess how strongly they identify themselves with any culture or religion and the degree of their understanding and tolerance of the views of others) and be inducted into the use of the immersive virtual environment hosted on secure university servers and accessed via their school's computers or those at their local City Learning Centre. This environment has been designed by the research team and is created and maintained by DLab colleagues at Teesside and will be sustained for dissemination and impact beyond the life of the project.

The research employs experimental ethnographic simulation through immersion of participant teaching groups in a virtual world environment for approximately 2 hours per week for 6 weeks. Participants create an avatar to represent how they see themselves; through this they participate as 'citizens' in the environment, helping to form an ordered, harmonious community to represent the kind of Britain they would like to see established. Each avatar is provided with a habitat and access to artefacts (e.g. furniture, household objects, clothing) and actions (e.g. "tell a story", "make an argument") from a communal database. Using these, each participant is required to furnish a provided 'home' (an installation) to represent what matters to them, and what they value in their life as a citizen.

Avatars use the affordances of the object-oriented environment to move around (walk, fly, run, etc.) and interact with it (by selecting, creating and using objects, artefacts and structures such as community centres, temples or personal homes) and with other avatars (e.g. synchronously via real-time graphical chat, or asynchronously via postings on a communal discussion forum). Participants upload images of their own and incorporate these into the environment as objects added to the common database. Avatars are provided with a range of 'emoticons' to signal emotion when responding to others or to scenarios.

Each artefact or image that is used, selected or created (including the avatar) requires the assignment of attributes from three different categories: presentation attributes (graphical appearance; dynamic capabilities); ownership attribute (to control who can copy, modify and own the object); and narrative attributes that provide its description, associated story/biography, and an explanation of the personal and/or moral values and purpose that the individual ascribes to it - in the case of a created avatar each owner is required to categorise it as a hero or villain and to provide its biography. Copied objects retain inherited attached values but new owners must attach their own definitions so that objects increasingly are "collective repositories of meaning" (Bers, 2001, p383).

Participants will develop both abstract and universal expressions of their values separate from those they attach to any particular experience or instance by recording them and their explanations and definitions of them in the communal values dictionary which is empty at the start of the experiment but progressively includes all the values and any multiple definitions of these developed by the community. Participants are encouraged to comment on any perceived conflict between the definitions provided; to explore values and behaviours in concrete ways grounded in experiences and through more abstract means; and to explore the dictionary and develop conversations with the rest of the community about differring definitions of values, or to enter new values and definitions.

Participants are asked to interact though their avatar with other inhabitants using synchronous and asynchronous 'chat' and text in response to a series of experimenterintroduced situations and scenarios. These present contentious 'citizenship-related' issues and events, representative of those in the media, and participants respond to these and in so doing help develop social rules and contribute to a participatory community environment. Participants are asked to comment on scenarios with a view to reaching a communal agreement about them and their social implications. Participants can suggest additional scenarios. This approach is designed to minimise the possibility of assumptions being inferred by participants from the nature and design of the experimental environment about whether moral development proceeds universally from concrete to abstract thinking (Kohlberg, 1976), or may be differentiated by gender (Gilligan, 1982) or is conditional upon particular different ways of individual thinking (Papert, 1987; Turkle & Papert, 1992).

Participants keep a semi-structured private online reflective diary that encourages them to note ideas, thoughts and observations using guide headings. At the end of the experiment participants complete a 'legacy document' for subsequent visitors, which asks them to summarise what they have learned about citizenship and themselves through using this technology and invites comment about comparisons with their more usual experiences of citizenship education. At this time they also become 'virtual tourists' in the 'homes' (or of the installations) created by others and produce a written response to each of them. Participants complete an exit interview (structured questionnaire, given verbally, with some pre-coded answers') to gather opinions and user experiences of the project and reflections on the comments of others about their created home. This method of data collection is effective with young people who may need prompting and encouragement to articulate abstract ideas and insights into how they see their own identity, and needs experienced research staff to facilitate this. Analysis of this data will inform the project's work with the next round of schools and aid understanding of how individuals construct citizenship identity and how personal, religious and cultural values inform this. Implications for citizenship and citizenship education will be explored. Ready for later reconstruction and evaluation, the environment logs all user activity, 'chat' and action, with dates and times to enable classification and ordering of activity and events.

Participant activity is monitored (tracking the frequency of use of 'negative' emotional icons) to ensure that they do not experience distress. Exit interviews are used to identify and offer appropriate support to those who report negative effects from participating.

## Anticipated outcomes and conclusions

This project is developing an innovative and practical approach to the study of citizenship, identity and citizenship education at a time of increasing concern about the political disengagement of young people, the perceived rise of social tensions and radicalisation surrounding ethnicity, culture and religion in the UK, and concerns about the difficulties in addressing these issues through conventional educational means. The project's resulting methodology, technology and library of developed scenarios, responses, alternative proposals, and reflections on these by young people themselves, will add to knowledge, make a potentially significant impact on citizenship education and improve research design with virtual environments for wider use beyond the life of the project.

Key project partners include regional City Learning Centres (CLCs) whose remit is to support schools in raising achievement by facilitating innovative use of ICT in teaching and training for teachers and disseminating good practice in technology adoption. They are deeply embedded within the regional educational landscape and have extensive contacts with educational institutions; they are committed to promoting the educational use of emerging technologies such as Second Life. The Tees Valley City Learning Centres in Teesside, Middlesbrough, Hartlepool and Stockton are the main partners in this project. They contribute to the project's impact by facilitating access to a wide range of schools and pupils, which aids representation in the project from families with different ethnic and cultural histories, from rural and urban settings and from across a wide range of socio economic backgrounds. These CLCs support schools in raising achievement by training teachers and providing access to specialist ICT facilities and act as regional test beds for emerging learning technologies and for disseminating good practice. They run an annual cycle of educational experiences for students and teachers and are involved in developing curriculum resources across a range of subject areas. These CLCs have a special interest and expertise in the educational use of immersive technologies and aid dissemination by incorporating this software into their work and by committing resources and work alongside the project to promote it and its findings widely. They facilitate and host sessions with schools across the region that allow the project to draw upon groups of pupils in a rolling programme across the academic year and provide access to their networks for publicity as well as holding public dissemination sessions jointly with the research team. These kinds of collaborative engagements are essential if researchers are to bridge the traditional gulf between them and their work and educational or other practice. This gulf is well documented within the UK where in education we have to seek to overcome the historically strong influence of a utilitarian approach to educational pedagogy (Alexander, 2008), but the deep disconnect between research, policy and classroom practice also appears to be an international phenomenon of some concern (Hattie, 2009). We hope that through our work we may be able to help bridge this gulf and demonstrate to teachers and policy makers the advantages of evidence led practice that is informed by research rather than from inherited views of 'what works' or political dogma.

Some potential beneficiaries have been involved in the early stages of the project development including schools, the CLCs, national religious groups and some local and national politicians. National and local religious councils, community representatives, local authority offices and ex-government ministers have expressed strong support for the project and they or their representatives are members of the project Steering Group that, through regular meetings, informs and advises on the project's work and helps maximise its impact.

The Steering Group of stakeholders (including representatives of schools, parents, pupils and university students, community and religious groups, charities, policy makers) reviews and discusses emergent findings at its regular meetings and advises on modifications desired or improvements to be considered for environment design and functionality and curriculum support resources. The steering group also advises on communication and engagement to ensure benefit is gained most widely through public dissemination sessions and through the travelling exhibition about the project's work. Local, national and European politicians, local officers and faith representatives joined the project Steering Group and academic and general publications (refereed journals, local newspapers, the project website) are used to help engage a wider audience. The Steering Group plays an important role in advising the research team on ways to maximise current and future 'impact', which has recently been introduced as an explicit factor that is required within the application process for financial support by research funding organisations within the UK. Impact is also a newly introduced, if contentious criterion in the upcoming Research Effectiveness Framework assessment of Higher Education institutions which plays a large part in determining university income in the UK. The present project is expected to demonstrate considerable impact not only within the formal educational curriculum but also more widely within local and faith communities and at the policy level within national government. For projects such as the one reported here the engagement of an appropriate audience to ensure full dissemination, local and national influence, the clear identification of immediate and potential future benefit and a sympathetic reception with the national political discourse is and will be of increasing importance.

Academics, practitioners and professionals working in the closely related fields of education and sociology and for those working within computing, are likely to benefit from the outcomes of the project's innovative design and use of immersive virtual environments to explore individual identity and its relationship to socially significant issues and to political engagement. The project is also of relevance for the greater understanding of how individuals construct their internal sense of identity in the context of wider social structures and cultural influences, and will exemplify how novel uses of emerging technologies can be applied to the experimental study of these areas. The technical innovations embedded in the design of the virtual environment and the project's use of mixed-methodology will also be of interest to researchers working in fields exploring the individual-social interface. Researchers in other disciplines such as computing, sociology and psychology are also likely to gain more understanding of how experimental designs can be realised to explore individual and collective values and behaviours, and model these in simulated real-world contexts, using immersive virtual worlds.

Schools and colleges will gain professional development for teachers through their involvement in the research, including development of their ICT skills, and curriculum resources to support teaching and also from the environment and its resources, which will be made available to educational institutions, City Learning Centres, religious groups and charities in the region. Regional schools are enthusiastic about the project and teachers expect their involvement to offer an interesting use of technology that will help them bring life to a curriculum area that has been hampered by its apparent lack of relevance and poor resourcing. They expect that the research and its educational outcomes will be valuable whether citizenship-related education is delivered within a designated curriculum subject, through Personal, Social and Health Education, or in General Studies, Politics, History or as part of the overall 'pastoral' programme of the school or college when preparing young people for participation in adult life.

Community and Faith groups (local and national) anticipate that they will gain greater awareness of how faith and cultural heritage support civil society and feel that the project has strong potential to impact on national culture by increasing awareness of shared values, of how individuals see themselves and the impact of culture and belief on self-identity. The research intends also to explore whether the developed technology and its design has potential to promote empathy with others and better management of intolerance.

A greater understanding of how cultural values and heritage contribute to group and individual identity may help illuminate the impact of these factors on an individual's construction of national identity and by more clearly articulating the dynamics within this help to map the possibilities for an inclusive sense of 'Britishness'. For politicians, community and faith representatives and educationalists alike, these issues are of more than passing interest in a modern post-industrial pluralist democracy where there is uncertainty as to how individuals understand and relate to community, politics and values and how these influence identity and citizenship.

The policy makers and charities who form the community of direct interest for the research project and who are involved in its development through representation on its steering group also have a direct interest in seeing how this research may improve our understanding of how social policy is articulated in civil society, how it shapes citizenship and how perceptions of individual rights and responsibilities are active in framing citizenship identity. The relationship between personal responsibility and engagement with political issues in a participatory democracy is a source of continuing tension and intervention not just within the UK but more widely where countries have at times adopted highly directive approaches to citizenship education in its widest sense (Martin and Feng, 2006).

Students and their parents have received the project with enthusiasm and young people report that they find the experimental runs enjoyable if at times testing, that their experiences within the environment create a greater enragements with citizenship and its political and social implications and that they feel they have experienced personal growth and gained more understanding of and empathy with others. Young people within the pilot phase have also identified that they have gained more awareness of the importance of political engagement and tolerance within a pluralistic democracy, although it is likely that this outcome has also been influenced to some degree by the recent general election in the UK, particularly in light of its unusually complex unfolding and the continuing discussion and political interest beyond the election following the emergence of the first coalition government in the UK for over 60 years.

By the completion of this eighteen-month project the technology will be refined to the point where the software product and associated resources can be given to schools, faith groups and registered charities and may also possibly be exploited commercially. The next planned phase of the project is a national survey to test the external validity of the developed model that draws upon wider cultural contexts (e.g. Scotland, Ireland, Wales). By the end of this phase of the project we also expect to have developed a model of citizenship identity formation that aids our understanding of the complex processes at work within young people from a variety of backgrounds as they reflect upon their entry into the adult world and especially as they approach or undertake their first experience of democratic participation through the ballot box. We anticipate that this model will explicate the key contribution to citizenship identity that is made by cultural, religious and other values and will contribute to the development of an understanding of how these articulate within the family, the local community and civil society more generally. This model and its associated instrumentation will provide the foundation for the national study to follow and will aid the construction of a unidimensional Citizenship Assessment Scale to be used in that second phase, which by the use of methodologies such as item response theory it is hoped will generate a data set that will inform an understanding of national identity in young people and illuminate more clearly a contemporary understanding of national identity ('Britishness') and its implications for a pluralistic capitalist democracy.

For updates on the work of the project, its publications and general progress, see <a href="http://web.me.com/stewartmartin2/Stewart\_Martin/Citizenship.html">http://web.me.com/stewartmartin2/Stewart\_Martin/Citizenship.html</a>

## References

Alexander, R. (2008). Pedagogy, curriculum and culture. In K. Hall, P. Murphy & J. Soler (eds.), *Pedagogy and Practice*. London: Sage.

Bers, M. U. (2001). Identity construction environments: developing personal and moral values through the design of a virtual city. *Journal of the Learning Sciences*, 10(9), 4, 365–415.

Bers, U., & Urrea, C. (2000). Technological prayers: Parents and children working with robotics and values. In A. Druin & J. Hendler (eds.), *Robots for kids: Exploring new technologies for learning experiences* (pp.194-217). San Francisco: Morgan Kaufmann.

Bisaillon, D. (1989). Logo computer culture and children's development: The influence of socio-moral atmosphere. Unpublished doctoral dissertation. Harvard University, Cambridge, MA.

Bradford Metropolitan District Council (2001). Community Pride not prejudice. Bradford.

Braidotti, R. (1994). Embodiment, sexual difference, and the nomadic subject. Hypatia, 8(1), 1-13.

Bruckman, A. (1998). Community support for constructionist learning. Computer Supported Cooperative Work, 7(1-2), 47-86.

Chief Inspector of Schools Annual Report (2008). Chief Inspector of Schools Annual Report. Ofsted.

Commission on integration and cohesion (2007). Our shared future. London: HMSO.

Csikszentmihalyi, M. & Rochberg-Halton, E. (1981). *The meaning of things*. Cambridge: Cambridge University Press.

Daily Mail (2007). Daily Mail, January 29th.

- Deakin C. R., Coates, M., Taylor, M., & Ritchie, S. (2004). A systematic review of the impact of citizenship education on the provision of schooling. *Research Evidence in Education Library*. London: EPPI-Centre, Social Science Research Unit, Institute of Education.
- Deakin C. R., Taylor, M., Tew, M., Samuel, E., Durant, K., & Ritchie, S. (2005). A systematic review of the impact of citizenship education on student learning and achievement. *Research Evidence in Education Library*. London: EPPI-Centre, Social Science Research Unit, Institute of Education.
- Erikson, E. H. (1950). Childhood and Society. New York: Norton.
- Erikson, E. H. (1968). Identity: Youth and crisis. New York: Norton.
- Gallup (2009). The Gallup Coexist Index 2009: A Global Study of Interfaith Relations. Gallup.
- Gilligan (1982). In a different voice: Psychological theory and women's development. Cambridge, MA: Harvard University Press.
- Goldsmith, L. (2008). Citizenship: Our Common Bond. London: The Stationery Office.
- Gonzalez, J. (1995). Autotopographies. In J. Brahm and M. Driscoll (eds.), *Prosthetic territories: Politics and hypertechnologies*. San Francisco: Westview Press Inc.
- Hattie, J. A. C. (2009). Visible Learning. London: Routledge.
- Home Office (2001a). Building cohesive communities: a report of the Ministerial Group on Public Order and Community Cohesion. London: The Stationery Office.
- Home Office (2001b). Community cohesion: A Report of the independent review team. London: The Stationery Office.
- Home Office (2004). Strength in diversity. London: The Stationery Office.
- Home Office (2006). Strong and prosperous communities (white paper). London: The Stationery Office.
- Independent (2006). *Citizenship: Is this the worst taught subject?* Retrieved 15 June 2010 from <a href="http://www.independent.co.uk/news/education/education-news/citizenship-is-this-the-worst-taught-subject-406760.html">http://www.independent.co.uk/news/education/education-news/citizenship-is-this-the-worst-taught-subject-406760.html</a>
- Kohlberg, L. (1976). Moral stages and moralization: The cognitive-developmental approach. In T. Lickona (ed.), *Moral development and behavior*. New York: Holt, Reinhart & Winston.
- Kohlberg, L. (1985). The just community approach to moral education in theory and practice. In M. Berkowitz and F. Oser (eds.), *Moral education: Theory and application*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Kollock, P., & Smith, M. (1996). Managing the virtual commons: Cooperation and conflict in computer communities. In S. Herring (ed.), *Computer-mediated communication* (pp. 109-128). Amsterdam: Benjamins.
- MacFarlane, B. (2005). The Disengaged Academic: the Retreat from Citizenship. Higher Education Quarterly, 59(4) 296-312.
- Martin, S., & Feng, A. (2006). The Construction of citizenship and nation building: the Singapore case, in education for intercultural citizenship: concepts and comparisons. Multilingual Matters.
- Martin, S., & Vallance, M. (2008). The impact of synchronous inter-networked teacher training in information and communication technology integration. *Computers & Education*, 51(1), 34-53.
- McGhee, D. (2005). Patriots of the future? A critical examination of community cohesion strategies in contemporary Britain. Sociological Research Online, 10 (3).
- MORI (2007). What works in community cohesion. London: HMSO.

Ofsted (2006). Towards consensus? Citizenship in secondary school. HMSO.

- Osler, A. & Starkey, H. (2003) Learning for cosmopolitan citizenship: Theoretical debates and young people's experiences. *Educational Review*, 55(4) 243-254.
- Papert, S. (1987). The value of logic and the logic of values. In B. Inhelder, D. de Caprona & A. Cornu-Wells (eds.), *Piaget today*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- The Equalities Review (2007). Fairness and Freedom: The Final Report of the Equalities Review. London: The Stationery Office.
- Turkle, S. (1995). Life on the screen: Identity in the age of the internet. New York: Simon & Schuster.
- Turkle, S., & Papert, S. (1992). Epistemological pluralism and the revelation of the concrete. Journal of Mathematical Behavior, 11(1).