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Museum Meanings

Series editors

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The museum has been constructed as a symbol of Western society since the Renaissance. This symbol is both complex and multi-layered, acting as a sign for domination and liberation, learning and leisure. As sites for exposition, through their collections, displays and buildings, museums mediate many of society's basic values. But these meditations are subject to contestation, and the museum can also be seen as a site for cultural politics. In post-colonial societies, museums have changed radically, reinventing themselves under pressure from many forces, which include new roles and functions for museums, economic rationalism and moves towards greater democratic access.

Museum Meanings analyses and explores the relationship between museums and their publics. 'Museums' are understood very broadly, including art galleries, historic sites and historic houses. 'Relationships with publics' is also understood very broadly, incorporating interactions with artefacts, exhibitions and architecture, which may be analysed from a range of theoretical perspectives. These include material culture studies, mass communication and media studies, learning theories and cultural studies. The analysis of the relationship of the museum to its publics shifts the emphasis from the museum as text, to studies grounded in the relationship of bodies and sites, identities and communities.

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Museums and Education

Purpose, Pedagogy, Performance

Eilean Hooper-Greenhill

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Museums: learning and culture

Towards the post-museum: the challenge of changing times

At the beginning of the twenty-first century, museums¹ are re-orientating themselves through imagining afresh what they can become; familiar practices are being reassessed and tired philosophies are being overturned. New ideas about culture and society and new policy initiatives challenge museums to rethink their purposes, to account for their performance and to redesign their pedagogies.

Bauman suggests that the present period of 'late', 'high', 'liquid' or 'post' modernity is characterised by endless incomplete processes of modernisation,² and in this respect the cultural field is no exception. Museums have been subject to innumerable calls to modernise as their purpose and performance have been scrutinised, analysed and critiqued.³ New ways of thinking about media audiences⁴ have confirmed the dynamic character of the relationship between museums and their audiences, and the interpretation of collections is high on the priorities of most museums:

The role of museums is no longer limited to the conservation of objects: they also have to share and continuously reinterpret them.⁵

Until recently, museums could be described as repressive and authoritarian symbols of unchanging solid modernity⁶ and indeed there are still some museums that cling to this out-dated identity, but across the cultural field many others have moved with nimble flexibility and creative fluidity to respond to the conditions of post-modernity. The creative re-imagining and reworking of the identity of the museum is one characteristic of the post-museum.⁷ The 'post-museum' is a useful hook on which to hang conceptions that signal a move into a positive and hopeful future for museums.⁸ One of the key dimensions of the emerging post-museum is a more sophisticated understanding of the complex relationships between culture, communication, learning and identity that will support a new approach to museum audiences; a second basic element is the promotion of a more egalitarian and just society; and linked to these is an acceptance that culture works to represent, reproduce and constitute self-identities and that this entails a sense of social and ethical responsibility.

As museums have renewed their philosophies and practices, they have begun to play a more central social role. This can be seen as part of the 'cultural turn'.⁹ Societies are becoming more aware of the significance of representation, and of the power of symbols to carry meaning, to signal identity and to invoke social and cultural alignments.¹⁰ As Hall puts it, there is growing recognition of the centrality of culture and its relation to identity.¹¹ The acknowledgement of interpretation as a practice grounded in social relationships entails the recognition that the interpretive processes which constitute cultural imagery cannot be perceived as neutral.¹²

The increasing awareness of the power of culture has opened up questions of consumption, subjectivity, meaning and identity, and all of these are central to learning. Museums are active in shaping knowledge; using their collections, they put together visual cultural narratives which produce views of the past and thus of the present.¹³ In displays and exhibitions, museums 'condense, dislocate, reorder (fictionalise) and mythologise'.¹⁴ Museum displays combine disparate artefacts and fragments of material culture into coherent, continuous and unified narratives, into what Hutcheon calls 'totalising narratives'.¹⁵ Museums must inevitably select from the collections that *could* be displayed those objects that *will* be displayed, and this selection shapes the visual narrative to be presented. Different contexts of meaning are invoked by the different assemblages that are produced.

Through the activities of display and interpretation, using objects, paintings, photographs, models and texts, museums construct a view, present a story and produce resources for learning. These interpretive processes, which involve the attribution of meaning,¹⁶ make up much of the work of museums and could be described as the constitution of the 'curriculum' of the museum. This raises issues of which interpretations are being made, by whom and to what end. Much analysis of learning in museums focuses on pedagogic method (how to use objects in teaching, how people learn), but there are also important questions to be asked about content, namely what it is that museums set out to teach. Wenger discusses how learning transforms who we are and what we can do. Learning, he states, is not just an accumulation of skills and facts, but a process of becoming.¹⁷ Learning works to shape what Giddens calls 'self-identity'.¹⁸ In considering museums and galleries as educational sites, the relationships between the cultural perspectives that museums produce and the self-identities of learners must not be forgotten.

As museums have reshaped themselves for contemporary times, their educational purposes have become prioritised and their educational provision has increased. Since 1997, this has been driven forward in England by government policies that have insisted that education in museums should be centrally positioned:

The Government believes that education is central to the role of museums today.¹⁹

This emphasis has been welcomed by those from within the museum field who have long wished to democratise culture and have found that current government policies have offered opportunities to rearticulate these desires. Museum edu-

cation philosophies have been influenced by the deschooling movement,²⁰ and inspired by child-centred teaching philosophies and discovery learning strategies²¹ which have remained in use in museums long after they had been overturned in schools.

Along with government policies have come national funding programmes that have been made available for the specific purposes of developing closer relationships with schools and communities, of building partnerships between national and regional museums based on the development of joint educational programmes, of appointing specialist staff and of developing professional structures to support museums as they build their educational work. These government funds have come with the responsibility of providing evidence that the objectives for which they were intended have been met. Where formerly it has been enough to *claim* that museums could have an educational impact, today it is necessary to prove it.

The measurement of educational performance has been experienced as burdensome by many, but the necessity to account for the outcomes and impact of learning in museums has rendered the educational work of museums systematically knowable; by being able to articulate the value of museum education in new ways it has become more visible.²² In addition, the generation of material to present government and its agencies with evidence to justify the continued funding of the educational work of museums has produced a huge body of research that, as this book will describe, shows how museums have the power to position themselves as key sites for learning in post-modernity. The measurement of educational performance has revealed new possibilities for the post-museum.

Changing views of learning

Education and learning have been prioritised in museums, but there is no single view of what this might mean.²³ The words 'learning' and 'education' are understood by individuals in very different ways, depending on their experience of educational systems and of learning and teaching styles. These systems and styles vary within and between countries, and are underpinned by different theories of learning and teaching,²⁴ which may lead to diverse perceptions of the purposes, processes and outcomes of education and learning.

From a traditional and didactic approach to educational arrangements, 'learning' is synonymous with 'scholarship' or 'knowledge'. Learning is a noun – that which is or can be known.²⁵ Educational processes are designed to encourage the acquisition of knowledge and to enable the transfer of this learning/knowledge from the teacher (the expert) to the student (the novice). Within this educational paradigm, it is facts and information that are to be learnt, and the processes of grasping the facts and information are expected to be highly focused, purposeful and rigorous. Increased verbal knowledge is the objective, with resources for learning generally limited to the written or spoken word. Teaching methods are cognitive rather than experiential; they privilege the student's mind, and ignore

the (frequently regarded as too active) body. Schools and universities are perceived as places of serious study, environments that are kept separate from the everyday world.

Teachers and educational theorists have argued for a long time against this narrow and prescriptive approach to education, and have insisted on a broader, more learner-centred basis for learning and teaching. Many different and powerful arguments have been made, including the fact that many of those labelled as failures by the formal education system have gone on to live successful and productive lives; that learning occurs in many more locations than simply those of formal instruction, where many people learn very little; and that traditional academic educational arrangements privilege those whose families have been educationally successful in the past, and dis-empower those that are not familiar with educational codes and practices.²⁶

In Britain, there has been a major shift from the expression 'museum education' to the expression 'museum learning'. The semantic shift from 'education' to 'learning' represents a major philosophical change in the way in which the educational functions of museums are being understood. The use of the word 'learning' indicates an increased focus on the learning processes and outcomes of users, and a shift away from thinking about the museum and its educational delivery. Attention is to how learning can be facilitated, in an attempt to put the production of a pleasant and useful experience for visitors in front of organisational convenience; in effect thinking from the visitor's perspective.

But the educational role of museums remains ambiguous. For some, this refers to the purpose of the museum as a whole, and for others, 'museum education' means the work carried out by specialist museum staff. There is also a range of ways in which the purposes of museum and gallery education can be conceptualised. Pringle, for example, draws a line between museum education which she characterises (quoting Falk and Dierking²⁷) as 'tried-and-true sources of understandable information, places one can trust to provide reliable, authentic and comprehensible presentations of . . . objects and ideas', and education in the art gallery, which she describes as concerned with intellectual speculation, with the sceptical self-conscious questioning of 'truth', authenticity' and 'reliability'.²⁸ But not everyone would agree with this way of defining learning in museums, or that education is so different in museums and galleries.

The contexts for learning in both museums and galleries are not the same as in schools or in other sites for formal learning. Museums are sites of spectacle and display, environments that can be rich and surprising. They can be overwhelming and difficult to manage, but equally can arouse curiosity or inspire new ideas. Museum-based learning is physical, bodily engaged: movement is inevitable, and the nature, pace and range of this bodily movement influences the style of learning.²⁹ Museums have no national curriculum – each museum may present a different view of a specific matter; they have no formal systems of assessment and no prescribed timetables for learning. Learning in museums is potentially more open-ended, more individually directed, more unpredictable and more susceptible

to multiple diverse responses than in sites of formal education, where what is taught is directed by externally established standards.

This is a dynamic moment in museum and gallery education, at a time of rapid social and cultural change, when many of the old signposts for thought and action have been removed, and social and cultural landscapes are being remapped and rearranged. But museum education in Britain is being expected to develop from a weak base; while there are 25–30 years of good practice to draw on, museum education is under-researched and under-theorised.³⁰

The 'educational turn' in museums

Educational provision was slow to develop in British museums during the twentieth century. With the lack of a strong commitment to education in the museum field,³¹ development depended on highly motivated individuals such as Molly Harrison at the Geffrye Museum in London, Barbara Winstanley in Derbyshire, and René Marcoué at the Victoria and Albert Museum in London.³² The first schools officers were appointed in the early 1900s; during the 1930s school services increased from eight to fifteen; 34 museum education services were registered in 1963 by the new Group for Educational Services in Museums, and this had increased to 48 by 1967. In 1983, 362 specialist education posts could be counted across Britain, concentrated in 154 museums.³³

By the early 1990s, however, in part inspired by the report *Excellence and Equity: education and the public dimension of museums* which was published by the American Association of Museums in 1992,³⁴ museums in Britain were asking questions about the limited nature of educational provision. A report for the lobbying body National Heritage written by Camilla Boodle in 1992 described how educational and local government legislation during the 1980s had opened up opportunities for museums to work more easily with schools through linking collections to the requirements of the new National Curriculum, while at the same time creating the possibility of museums losing funding for their educational work as the local management of schools meant that educational funds moved from the control of the local authority to the schools themselves.³⁵ Boodle quotes from an earlier (1984) and very influential AAM report, *A report of the Commission of museums for a new century*,³⁶ and remarks that these points could also be made of the position in Britain in the early 1990s:

Despite the obvious commitment of museums to learning, there is still confusion in the public mind about the role of museums as educational institutions and within the museum world, about the role of education in the institutional structure . . . Educational responsibility is firmly embedded in the philosophical foundation of museums, but there is no clear understanding of how people can learn best in the museum environment – a situation which is ironic when one considers the quantity and quality of educational programming in museums today.³⁷

A year later, the Museums Association Annual Report in 1992/3 took the form of a report on museums and education entitled *Responding to change: museum education at the crossroads*.³⁸ It made the claim, to be heard over and over again in the years that followed, that education lies at the heart of museums and that many museums were founded explicitly for educational purposes. However, the reality that lay behind these claims is exposed in the recommendations that museum management and governing bodies should recognise education as a core function of museums, that management structures should reflect the importance of education, and that every museum should develop an education policy. The rhetoric of museums as 'educational' was not matched by clarity of purpose, staffing structures, sufficient resources or management support. At this time, museum education staff made up 1.8 per cent of all museum staff (including security staff) in the national museums, 3.6 per cent of all staff in museums that were funded by local authorities and 2.1 per cent of museum staff in independent museums.³⁹

Soon afterwards, the Department for National Heritage,⁴⁰ the government ministry with responsibility for culture and heritage, commissioned a report which was intended to 'review the current activities of museums in the United Kingdom as centres for formal and informal learning, and identify how this function can effectively be developed.'⁴¹ Two surveys were carried out, in 1994 and 1995, and extensive discussions were held. The resulting report was published in 1997⁴² and then again, under a slightly different title, in 1999.⁴³ The Anderson report (as it became known) identified 755 specialist education staff in 375 museum services. It was also found that one-third (37 per cent) of the 566 museums responding to the survey made provision for museum education, defined as on a limited level, and that half (49 per cent) offered absolutely no service at all. Only 23 per cent had a museum education policy.⁴⁴ This survey also reported that on average, 3 per cent of all paid and voluntary staff in museums were education specialists, and that there were far more curators and others (11 per cent of all museum staff) who contributed to the organisation and delivery of museum education for schools, adults and communities. Only 37 per cent of museums in the survey sample had received any help from education authority advisers.⁴⁵ In 2000, a central government statement on museums and education commented that:

at present the provision of educational services by museums is patchy, ranging from the outstanding to the mediocre.⁴⁶

Since the advent of the Labour government in 1997, a remarkable development in museum education has taken place. The state has become much more centrally directive, and one of the forms this has taken has been to demand increased provision for learning from museums and other cultural organisations. Since the publication of *A New Cultural Framework* in 1998, there have been consistent and unequivocal calls for museums, archives and libraries to develop their provision for learning, enshrined in a number of different policy documents, where government priorities have established major user-related policy initiatives for museums.⁴⁷ This has been driven by the ideological convictions of government that culture must be socially inclusive, accountable and used more by schools.

The development of the educational capacities of museums has moved at a rapid pace, as the demands of government have in the main been seen as opportunities to be exploited. In 2006, a report from the Museums, Libraries and Archives Council (MLA),⁴⁸ commissioned explicitly to map change in relation to Anderson's findings, found that, in 2006, there were 1,171 education posts in England, that 86 per cent of English museums were used by formal educational groups and 88 per cent by informal educational groups, that 69 per cent have an educational policy and that 87 per cent of curatorial staff contribute to educational activities.⁴⁹

Much of the development of the educational work of museums has been supported through government funds that have been forthcoming because evidence of the efficacy of learning in museums has been provided. Over the last few years, a method of 'measuring learning' in museums has been developed and this method has been used in three national studies of the outcomes and impact of museum-based learning. It is the task of this book to describe this method and the resulting evaluation studies, to assess the findings of the research, and to review the challenges that these findings present to some aspects of museum culture.

Much has changed during the last ten to fifteen years, and the need to theorise learning and culture, to move towards a cultural theory of learning, is very pressing. The pressure to develop educational capacities and to show evidence of effective learning has led to a flurry of educational evaluations. Evaluation is new to the UK; while well established in the USA, it has not been as well established here.⁵⁰ However, much of the educational evaluation being carried out at present takes the form of 'grey' literature;⁵¹ produced as reports, booklets, web-based accounts, and sometimes even posters or postcards. Much valuable work is being lost because it is not being made available through normal publication channels. The push from government for the development of museum education in England is taking place in a context where there is still much to be done in terms of theory-building and research.

This book describes research that grew out of the need to be able to present government with evidence of the outcomes and impact of museum learning. The research has taken place in a febrile, contested and fluid hot-house atmosphere where initiatives have flowed at a rapid pace, and cultural practitioners have been forced to interrogate their long-held views as the cultural map has been redrawn. While the research was commissioned for the purposes of advocacy, the researchers were adamant from the start that the research would be worthless if this was a prime factor in the design of the research process and in the interpretation of the research findings. The research has been carried out by the Research Centre for Museums and Galleries (RCMG) in the Department of Museum Studies at the University of Leicester.⁵² The motivations of RCMG in competing for and accepting government-funded commissions were grounded in the desire to better understand and to build theory about learning in museums.

This book aims to add to the evidence base and to contribute to the debates about the purpose, character and outcomes of learning in museums and galleries. The

research is concerned mainly with school pupils in active learning situations in art galleries and museums, but some work has also been carried out with communities and young people being educated outside school. A very large number of museums were involved in the research, including regional, independent and national museums in England, with collections which cover all disciplines.

This account can be seen as part of a new phase of research which moves beyond that research which focuses on iconic buildings and large national, often art, museums. In the UK, with increased regionalisation because of devolution, and with programmes of funding for non-national museums, tied closely to education, a new focus on regional museums has emerged.⁵³ This has deepened and complicated earlier views of museum culture.

From the quantitative and qualitative evidence that the research generated, the power of museum-based learning emerges. This powerful force for learning is shaped by post-modern pedagogic approaches. These contemporary ways of thinking about teaching and learning challenge those nineteenth-century ideas that are still found in museums today. The final chapter of the book reviews the questions that the research raises for museum culture as a whole.

The final section of this introductory chapter sets out the argument and structure of the book.

Inspiration, learning, identity – the potential of the post-museum

At the beginning of the twenty-first century, cultural organisations have to fight hard for survival in a political environment shaped by economic rationalism. An instrumental approach to culture demands evidence of value for public funds, sponsorship and the provision of resources. The calibration of culture can be observed on an international basis, and events in England provide a particularly detailed example. The very early years of the new century saw a deluge of official reports, consultation papers and policy documents from government, many of which addressed social inclusion and education. This was accompanied by a restructuring of the cultural field to link museums, archives and libraries, and the emergence of new national and regional agencies tasked with taking forward government policies. Museums, archives and libraries were charged with working to deliver government agendas, and funding was made available for them to do so. Educational evaluation, formerly not well established in the cultural field, developed rapidly.

A new national strategic body (Resource/MLA) was established in April 2000 to work with museums, libraries and archives across England; this body commissioned RCMG to develop an approach to 'measuring' the outcomes of cultural education. The approach can be used in individual organisations, but it has also been used to gather and interpret evidence on a national basis in the museum field, where it was used to evaluate three government-funded national educational programmes. As the same methods were used in each case, a very large body of evidence has been produced and this forms the basis for this book. It is highly

unusual to be able to present a national overview of the outcome of learning in museums. The method of 'measuring learning' was devised in a very public arena; it was explored, discussed, piloted and accepted by a large number of staff in museums, archives and libraries, with all stake-holders in the research being informed of the process as it evolved.

The approach is based on an interpretive scheme, a conceptual framework for the design of research tools, analysis and interpretation, founded on the idea that learning outcomes, while occurring at an individual level, can be classified into generic categories. The approach was designed to be used by practitioners, who were not necessarily researchers, in any museum, archive or library, to map and describe the learning of any of their users. The interpretive framework focuses on the outcomes of learning but avoids any behaviourist approach through asking questions in an open-ended way about the extent to which learning has happened and about the outcomes of this learning.

Chapter 2 discusses the cultural policy context in England and the concomitant demand for evidence of educational performance. It introduces the Learning Impact Research Project (LIRP) which resulted in the framework for 'measuring learning' using the Generic Learning Outcomes (the GLOs). Commissioned to find a way to 'measure the outcomes and impact of learning' in museums, archives and libraries, LIRP began by considering in depth what this actually meant. Chapter 2 describes how 'measure' and 'outcomes' were conceptualised. 'Measure' was understood as meaning both 'count' and 'understand'; 'outcomes' were conceived as open-ended and generic.

Chapter 3 analyses the third term 'learning', conceptualising learning in a post-modern way as a basic human attribute. We are learning creatures; learning processes are continuous, as natural as breathing, and not always specifically educational. Learning is not always purposeful; sometimes we can learn without intending to do so. Learning does not only involve the intellect, it involves the emotions and the body as well; it is both tacit (felt) and verbal. Learning can be experiential/performative; it may have depth or be quite shallow. If culture is understood as a process of signification, a means of producing meaning that shapes world views, then learning in museums and other cultural organisations is potentially dynamic and profound, producing self-identities.

Once the meaning of the statement – 'measuring the outcomes and impact of learning' – had been analysed and negotiated with the research stake-holders, LIRP moved to develop a methodology. It was important to work on the basis of the intellectual analysis while at the same time designing an approach to evaluation research that could be used in the individual organisations in a very diverse field and that would produce evidence that would be acceptable ultimately to the Treasury. The approach that emerged was established at a conceptual level. Rather than design a single research tool, perhaps a questionnaire, that could be used to 'measure learning' in any cultural site, the research team proposed a way of thinking – an intellectual framework that could be used by any researchers who wanted to 'measure learning' in their organisation.

The intellectual framework was based on the concept of generic learning outcomes (GLOs), with learning theorised using socio-cultural and constructivist ideas. It proposed that while learning outcomes can be observed in individuals, generic outcomes of learning can be identified which could be used as broad categories for the aggregation of individual learning experiences. This aggregation was important; as the findings of any research using this new method would be used for advocacy purposes, evidence had to take a form that was acceptable to government accountants, and thus statistical data was required.

Chapter 4 examines the five GLOs that LIRP identified. These are:

- Knowledge and Understanding
- Skills
- Enjoyment, Inspiration, Creativity
- Attitudes and Values
- Action, Behaviour, Progression.

The development, parameters and scope of the GLOs are discussed. This conceptual framework was suggested as a basis on which research could be designed and research tools shaped and research data interpreted.

However, the design of a research methodology cannot produce experience in those who were intended to use it, and piloting the approach across museums, archives and libraries exposed a variable level of expertise in evaluation research. The approach, with its straightforward and recognisable language, and the potential to mix quantitative and qualitative data, was welcomed as a solution to the problem of educational accountability. Following the development of the approach, RCMG was commissioned by Resource/MLA and DCMS/DfES to carry out three national evaluation research programmes between 2003 and 2006.

Chapter 5 describes the background to these research programmes, which include the evaluation of the educational work of *Renaissance in the Regions*, the modernisation programme for regional museums in England, and the *Strategic Commissioning Museum Education Programme* funded by DCMS/DfES to link regional and national museums through educational partnerships. These research programmes can be described as 'impact studies', but they do not focus on economic data as impact studies generally do, and they seek to go well beyond the advocacy purposes that limit the theory-building value of these studies. The research took a risk; had the findings not been as positive as they turned out to be, museums could have been exposed as poor providers of education.

The research used mixed methods, all of which used the GLOs; in all three studies questionnaires which asked about the pupils' learning outcomes were completed by 3,113 teachers and 56,810 pupils immediately after their museum visit and, in addition, case studies, interviews and focus groups were carried out where attitudes and examples were explored in more depth. As part of their questionnaires, pupils were asked to complete an open-ended statement – *What amazed me most at the museum today . . .* – and this proved unexpectedly successful, generating many thousands of spontaneous and dynamic visual and textual responses. The research data forms a vast body of linked quantitative and

qualitative evidence of learning in museums and the findings are discussed in Chapters 6 to 10.

Chapter 6 reviews the pattern of school use of museums. It shows that while primary-aged pupils make up the largest proportion of museum visits numerically, primary and secondary schools are represented in proportion to their distribution across England. Special schools, however, are more highly represented as museum users than would be expected and this reflects the effort that museums have made to respond to government policies. A review of the postcodes of all visiting schools reveals that while museums are working with schools across the social spectrum, a disproportionately large percentage of schools using museums can be found based in locations which are defined as deprived. Checking the level of eligibility of pupils for free school meals in these schools (as this is the measure used by DfES in relation to deprivation) confirms that large numbers of these pupils are at risk. Museums made strong efforts to reach schools in deprived areas where child poverty is high in order to comply with government policies, and they have done this successfully. Considered in relation to use by schools, the RCMG evidence shows that museums play a powerful role in working towards an inclusive society by working with special schools and by working with children at risk. In analyses of museum visitors, children and school use are rarely included; the continuing evidence is of use by highly educated middle- and upper-class white society. The evidence from the use by schools paints a very much more diverse picture.

Chapter 7 takes the discussion of the value of museums to teachers a little further. It shows how teachers most value their use of museums because of the pleasure and enjoyment that pupils gain from their museum experiences, and an overview of the pupils' questionnaires reveals that they did indeed experience very high levels of enjoyment, and that many were inspired by the events. Enjoyment–Inspiration–Creativity emerges as the most highly valued outcome of museum-based learning for both teachers and pupils. Teachers valued all the generic learning outcomes highly, although teachers' attitudes varied a little. Primary teachers were more likely than secondary teachers to find all learning outcomes very important, and the importance of learning outcomes varies according to teachers' purposes in using the museum. The more tightly linked to the curriculum, the more likely it is the learning outcomes will be perceived as important.

Chapter 8 explores the teachers' perceptions of the outcomes of their pupils' learning. Teachers are very enthusiastic about museums, and use them because the pleasure that pupils experience opens them up to new ideas. This is important for all pupils, but especially for those that find learning difficult. Teachers felt confident that the enjoyment of the visit combined with the tangibility of museum collections would enable their pupils to retain subject-related knowledge. Teachers responding to questionnaires seemed less interested in whether or not their pupils increased their skills; although they could, when asked face to face, list any number of diverse skills that museum visits could develop, it seems as though this was not the main focus of most visits, unless, of course as one of the case studies

showed, skills development was one of the specific aims. As pupils enjoyed themselves and developed their knowledge, teachers expected their attitudes to learning, to museums and galleries, and to themselves as learners to become more positive. Teachers found it difficult in the questionnaires completed immediately after the museum visit to assess the behaviours that museum-based learning might stimulate and it was found that focus groups and interviews produced more confident assessments. Here teachers talked about progression and gave examples. Differences in confidence in using museums were found between those teachers of art in the secondary school, who were the most confident, to those teachers of science in the primary school, who were the least confident.

Chapter 9 presents the pupils' views of their own learning. Straightforward questions about learning outcomes in questionnaires present a statistical overview of their attitudes, and the free writing and drawing that pupils produced at the bottom of the questionnaire sheet proved enormously useful in giving specific details. These visual and written statements provide a remarkable record of the pupils' responses to the often wonderfully exciting things they have just experienced in the museum. Their work is spontaneous, fresh and immediate, capturing their joy and enthusiasm before these are overlaid by events. In the responses to the stimulus question, the rich, immersive, memorable and personal character of learning in museums begins to emerge. It also becomes clear how integrated and holistic learning is; the GLOs, while conceptually distinct for analytical purposes, prove to be integrated in practice; cognition and the emotions are inseparably bound together. Mind and body are found to operate together, with much learning being stimulated by bodily experiences. Learning in museums for these pupils often involved unusual enactive experiences and this demanded an open-minded receptive attention that worked to generate new ideas. Learning did not take the form of a single defined focused intention, but was multiple and kaleidoscopic, such that lateral connections were made.

In Chapter 10, the research findings are assembled into an evidence-based grounded account of the power of museum-based learning. Learning in museums emerges as embodied, immersive, holistic, individualised, performative and identity-related. Museums stimulate the desire to know and to try harder; they stimulate a 'readiness to learn', and success in learning through the 'serious play' experienced in museums enabled learners to feel more confident, to begin to develop resilience and receptiveness and potentially, to develop a stronger self-image. Museums clearly have the opportunity to present themselves as powerful sites for learning in post-modernity.

The generation of evidence has enabled English museums to give an account of their educational value. The evidence enables museums to identify how they can contribute to government educational policy in three very specific ways: through working with teachers to promote creativity; through becoming part of an ongoing conversation about the personalisation of learning; and through working with schools and other agencies to fulfil the potential of every child.

The final chapter considers the research findings in the context of museum culture, where some ways of thinking act as barriers to the realisation of the power of

museum pedagogy. The character of the successful learning experienced by the pupils in the research discussed in this book was embodied, enactive and immersive, but this is not the learning experience that most museum visitors encounter. Most learning is based on the nineteenth-century idea of 'learning at a glance', where the use of the body and the senses is restricted. This approach to learning was informed by the Enlightenment view that mind and body were distinct entities, and that mind was superior to body. It was thought that the educational purpose of museums could be achieved merely by putting items out on display in the appropriate order. Learning styles in the museum were thus highly restricted, and it seems likely that only those who understood and felt comfortable with an abstract, intellectual, visual approach to learning found museums easy to use. Museums were proclaimed as educational sites for all but the pedagogic style operated as an excluding strategy. The RCMG research raises questions about which pedagogic approach should be used and how pedagogic styles might influence museum present-day visitor patterns.

Questions are also raised by the research about the curriculum of the museum. Museums have been charged with producing narratives that represent gendered and racialised social hierarchies. The stories told in what Bennett calls the evolutionary museum are one example of this where the 'archaeological conception of the person' linked pernicious ideas about the evolutionary idea and the attainment of 'civilisation'. It was plain in the research that museum-based learning worked to shape self-identities, and thus narratives shaped by intellectual frameworks such as these that denigrate peoples and communities can result in harmful and destructive learning.

Further questions arise about the educational purposes of museums. Up until the end of the nineteenth century, education was seen as integral to the character of museums, although how far and to what end was disputed. Education was based on the mastery of bodies of knowledge, its purpose to fit individuals to their expected station in life. The museum was expected to work towards the good society through inculcating a taste for the arts in the working classes, a civilising mission linked to the growth of citizenship. The educational purposes of the nineteenth-century museum do not hold today when it no longer seems possible to produce a unified 'good' society. Education is no longer expected to fit individuals for fixed stations in life, and instead is shaped around ideas about lifelong learning, flexibility, resilience and self-realisation. Learning is no longer concerned with the mastery of large bodies of knowledge, it is about producing people who, in a fluid and changing society, know how to learn, and who have strong self-identities. And putting things out on display for visitors to learn through looking is no longer enough to achieve the educational purposes of museums. Pedagogic style in museums today uses participative and performative modes of learning, where bodies are seen as potent resources for learning. And many museum programmes open up new knowledge, introducing pupils to black culture, feminist histories and representations of a more egalitarian society.

New ways of articulating the educational value of museums are needed today, at a time when perceptions of learning, the self and social life are changing. In post-modernity, questions of purpose, pedagogy and performance have come together

in museums in a swirling vortex that appears confusing, but in fact offers up potential for the future. The research shows that museums already know how to become powerful sites for learning; as the post-museum takes on a clearer focus, the strategies to develop museum-based learning are already in place. Museums enable the integration of mind, body and emotion, in a way that few other sites for learning do. Museums are already producing very effective learning experiences that are highly appreciated by their users. This deserves to be more highly celebrated and I hope that the presentation of the research will enable this to happen. This celebration will hopefully lead to increased appreciation and understanding of how and why learning in museums is as successful as it is. Even though the research shows very positive results, there is still a great deal to do.