

Digitising the Collection at the Museum of Design in Plastics

An External Evaluation



Ian Taylor
Head of Liverpool Evaluation Unit

Adam Mannis
Project Manager at UK Centre for Materials Education

January 2010

Contents

Introduction	3
Part A: The Museum Perspective	4
Background	5
The Project	13
Risks and Challenges	17
Collaboration	25
The Team-in-Action – A New Website	29
Project Outcomes	37
The Way Forward	39
Part B: The Academic Perspective	43
Introduction to Part B	44
The Interviews with Academics	46
Learning at the College – Some Characteristics	47
Personalising the Learning Experience	50
The Plastics Museum – General Perceptions	52
Limitations	53
Using the Museum More	55
Some Reflections	65
Appendices	71

Introduction

This Report provides an evaluation of an initiative undertaken by the Museum of Design in Plastics (MoDiP), in the Arts University College Bournemouth (AUCB). The project was funded by JISC over a one year period, and started on 01 October 2008.

The main aim of this initiative was to improve the documentation of existing resources; to digitise a considerable proportion of the plastic artefacts currently held by the Museum; to produce high quality images and reference information relating to these objects; and to initiate the development of a bespoke website for the Museum.

This evaluation has, as its scope, a focus on the development process, as seen through the eyes of those involved within the College. In addition, issues are explored relating to the 'educational contributions' the Museum is able to make, along with a consideration of how this contribution may be enhanced.

To do this, a critical appraisal was undertaken of a range of documentation (reports, discussion papers, etc) which had been compiled as part of the project. In addition, in-depth interviews were held with the Project Team, with a small sample of academic staff and with a member of the college senior management team. The subsequent analysis is presented in two Parts.

Part A focuses on the Project Team. It considers, in-depth, the contextual factors which influenced the bid for funding, and which shaped subsequent development. It looks also at the Project Team itself and at how it operated. Sections follow relating to particular features of the project: the challenges and how these were met, and the learning premium placed on promoting development through collaboration. A case-study – on website development – has been included, to highlight the characteristics of the 'team-in-action'. Part A ends with sections on Project Outcomes, and on the Way Forward.

Attention on Part B switches to educational concerns, and draws heavily on the interviews held with academic staff. These have revealed something of the rationale and practices which underpin the College approach to promoting learning. Academic perceptions are also considered relating to the Museum and, in particular, with regard to its current contribution to the education process. In addition, strategies are identified which might operate to enable the Museum to contribute further to enhancing the student learning experience.

Finally, an attempt is made to summarise the evaluation in a brief 'Reflections' section.

Part A

The Museum Perspective

Background

“This project is a unique and vital opportunity to create a **lasting record of one of the most significant developments in materials and design in the twentieth century**. This is a niche area, difficult to resource, but it forms an **essential part of the understanding of the modern world**”.

“Understanding design in plastics requires a multi-dimensional, and inter-disciplinary approach. Previous projects in this area have been limited to a two-dimensional record of the artefact. The unique feature of this project **will be to create multiple** (up to 12) **views of each artefact**. It would thus produce the world’s largest and **highest quality digital record** of plastic artefacts; allowing for a much more comprehensive view, and **incorporating a more detailed interpretation**... a resource to support research into design in plastics and its cultural impact”.

The two comments, abstracted from project documentation, define the essential features of the project:

- The focus would be on plastics, and more particularly the plastic artefacts currently held by the Museum of Design in Plastics (MoDiP).
- The project represented an opportunity to create a unique resource; a lasting record which would capture one of the significant twentieth century developments in materials and design.
- It would take representation and description of the featured artefacts to a new level, to promote interpretation and to enhance understanding.

Clearly, the project would not operate in a vacuum. Its relevance and importance were determined by a number of contextual factors. Nor would it operate in isolation, but would connect to previous work and to the expertise and experience of others. All of this is considered below.

Plastic – The Twentieth Century Material

The Museum was able to articulate strong arguments relating to the significance and relevance of the project it was proposing to undertake. It did this, in part, by drawing on relevant literature.

These arguments are restated below, drawing on the same sources used by MoDiP:

- None of the advances in domestic, industrial, commercial or technological design would have been possible without the existence of plastics and its properties (Lyungberg, 2007).

An understanding of plastics, and of the social, economic and technological context shaping their manufacture and use, is fundamental to the development of any contemporary designer.

- Since the 1970s, plastics have become worldwide the material with the widest range of uses (Cascini and Rissone, 2004).

However, plastic materials are commonplace, and rarely receive the critical scrutiny applied to other resources, “apart from a focus in current debates on eco-design, sustainability and recycling”.

- Contrary to public belief, plastics are not stable (Shashoua, 2008), but degenerate over relatively short time spans, because of industrial processing and adulteration by additives, plastics are usually less stable than wood, ceramics or metal.

It is therefore **necessary to act now to record and capture, to a high standard, this degenerating resource, and make it widely available to a variety of agencies** – including academics and their students; historians, collectors and curators; as well as designers.

- **Sharing this resource, and accompanying knowledge, will promote a more widespread understanding and interpretation of plastics, and their design.**

The argument was put forward that a project, funded by JISC, was needed to enable this process of recording and capture to take place, and that the Museum of Design in Plastics (**MoDiP**) – **with its capacity to reach out to both the research community and to educators** – was the appropriate agent to make this happen.

A Museum of National Status

- The Museum is part of the Arts University College of Bournemouth (AUCB) – an institution specialising in arts, design, media and performance.
- Its status was made clear in the project submission, where it was described as “the UK’s leading accredited museum in design in plastics... acknowledged as the UK’s leading resource for the study and interpretation of design in plastics”.

This defined the Museum as a unique resource for research across the HE/FE sectors, and for professional curators throughout the UK, and internationally.

This status provided a platform upon which the project could build.

Further evidence, not included in the project submission, highlights the value of the Museum to the institution in which it resides.

Enhancing Student Learning

“The Museum of Design in Plastics provides a **dynamic study and research resource** for popular design and culture. It was created to **enhance student learning**, and holds more than 8000 international, historical and contemporary design samples **relating directly to the University College’s specialist area of study**”.

(Performance, Art, Design, Media: Arts University College Bournemouth Directory 2010-11, p12 – Evaluator’s emphasis added)

The comment above, from the latest University College directory, identifies clearly the messages the institution wishes to communicate to prospective students about the Museum. It is there to enhance learning, providing resources relevant to contemporary areas of study, and a dynamic resource for research and study.

This connection with the education process is a crucial one, because it means that the project, if successful, has the potential to enhance the quality of teaching and learning, both within the host institution and beyond.

A Decade of Achievement

This section considers a further feature of the project background. Here, attention is paid to developments which have taken place over the past decade that relate directly to MoDiP.

Two elements are considered, viz:

- The emergence of MoDiP as a 'resource' of national significance;
- The benefits gained by MoDiP through participating in a number of externally-funded initiatives.

MoDiP – The Emergence of a 'National Resource'

"It began in about 1988, as a group of objects **a lecturer used in her teaching**. She found it useful when describing styles or objects, to have those objects there. And she amassed this group of objects that ended up in a filing cabinet, and later in a cupboard as well. And then other people brought things, and added it to the collection. In the end, there was so much that it was allocated its own little room, which was in the **depths of a different building**. Effectively, just a store room..."

"...It [the museum collection] was **packed high on shelves**. Most things weren't boxed. It was **all open**..."

"... Then someone started to arrange that collection into groups of things, **to make it easier to access it**. So that they could remember what was there, and they started to list things. And at that this stage, I [current Collections Manager] became involved, giving about three hours per week **helping to catalogue things**, as I was working **in the library at that time**..."

"... Now, there is a **lovely new storage and exhibition space** [located within the library]"

The above comments provide a description of the development of the museum over the past two decades. It began life as a result of the initiative and enthusiasm of one lecturer, who clearly saw the value of using plastic artefacts to enhance the quality of the student learning experience. Its initial growth was haphazard, with the collection "in the depths of a different building". Over time, the value of this collection became more fully appreciated. An effort was made to catalogue the collection, and to store and locate it, so that it became more accessible. Currently, the collection is housed in a central location, alongside other learning resources, providing a "lovely new storage and exhibition space".

Now the museum has gained a national position, and represents a unique resource for researchers, historians, collectors, etc. But, it is the link with student learning that determines its primary function. Enhancing the quality of education is the key theme running throughout this Report.

Building on Firm Foundations

The development of the Museum, however, has not been shaped solely through changes initiated from within the institution. External funding has been successfully secured, with a series of projects also having an impact; see Exhibit 1 below:

Exhibit 1: The ‘Journey’ of MoDiP through Externally-Funded Projects

Project	Outcomes
<p>‘Digitisation of Plastic Resources’</p> <p><i>Funding agent:</i> ARHC: Arts and Humanities Research Council</p>	<ul style="list-style-type: none"> • Forged collaborations with the Plastics Historical Society, Bakelite Museum, and National Plastics Center (USA). • Began the process of digitisation – it set in motion a process of future work in this area. • Created a Project Team, based at MoDiP.
<p>‘SSN Networking’</p> <p><i>Funding agent:</i> MLA: Museums, Libraries and Archives Council</p>	<ul style="list-style-type: none"> • Established connections with national and regional museums / agencies in relation to plastics in collections. • Set up a national Plastics SSN (Subject Specialist Network).
<p>‘Care of Plastics in Collections – a series of Regional Workshops’</p> <p><i>Funding agent:</i> MLA: Museums, Libraries and Archives Council</p>	<ul style="list-style-type: none"> • Identified needs of museum professionals in relation to plastics in collections, through a series of Regional Workshops. • Undertook a detailed external evaluation of the initiative. • Developed an online manual, based on the outcomes of the project – a ‘prototype manual’. • Established a partnership with the UK Centre for Materials Education (UKCME), and forged connections with South West Lifelong Learning Network (LLN).
<p>‘Development of CPD Units for Museum Professionals’</p> <p><i>Funding agent:</i> South West LLN</p>	<ul style="list-style-type: none"> • Distributed a questionnaire to all participants of the Regional Workshops, to identify needs in relation to the development of CPD modules. • Developed four on-line modules (as CPD training resources) – drawing on the ‘prototype manual’ –with a focus on the conservation of plastics.

The initiatives above laid the foundations for the current Digitisation Project by:

- raising the profile of the Museum to give it a central role in development;
- bringing together a Project Team with appropriate experience and expertise;
- developing expertise in relation to digitisation, built on an understanding of the value of on-line resources;
- establishing partnerships with a variety of agencies and organisations;
- connecting directly with museum professionals, identifying needs and developing strategies designed to meet these.

It is clear from the above list that a major feature of earlier work has been the forging of collaborative partnerships as part of the development process. Such partnerships are also a major feature of the MoDiP initiative, as the next section considers.

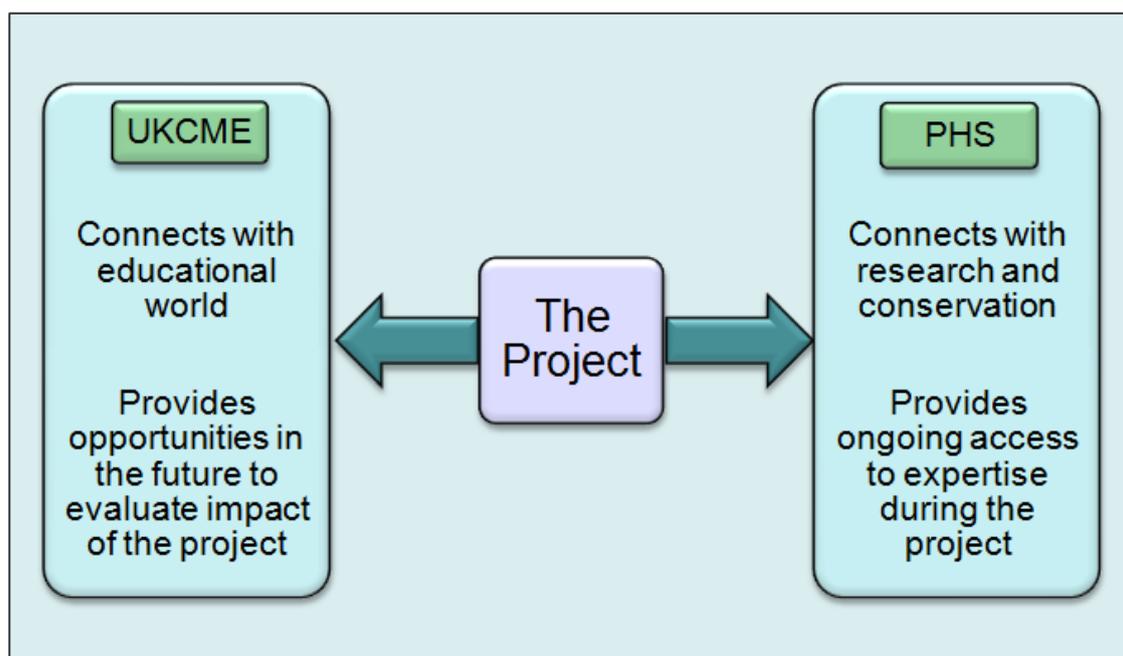
A Project to be Based on Collaboration

The project involved establishing a working relationship with two Partners: the UK Centre for Materials Education (UKCME), and the Plastics Historical Society (PHS).

These two Partners represented different consistencies. Each brought a different perspective and would be able to provide on-going support and 'critical guidance' as members of the Advisory Group.

Combined together, they provided a range of technical expertise; a variety of external contacts along with mechanisms (through websites and journals) for disseminating project outputs. All of this was seen as relevant both to the project, as it proceeded, and to any subsequent development; (see Exhibit 2, below).

Exhibit 2: UKCME and PHS Contributions



UKCME would give the project connections on a national scale to the 'world of education' in HE and FE. The Plastics Historical Society linked the project to a wider audience in research and industry. The former would offer opportunities, in the future, to evaluate the impact of project outcomes in the learning context. With the Plastics Historical Society, the benefits would be more immediate. The project would gain access to technical expertise in relation to identifying and describing individual plastic objects in the collection. The Society would benefit also through the digitisation of its own collection, much of which is currently on loan to MoDiP.

It is important to note that the Advisory Group operated only as a virtual mechanism. No formal meetings were held which brought together all of its members. This was noted in the final report under the heading 'Lessons Learned'. As was explained:

"We learned one lesson: that our partners understandably do not necessarily have the same priorities at the same moment as us. It is important to map out contact dates and deadlines at the outset. We mapped out a plan of contact with one of our partners at the outset, but not with the other. Another time we would draw up such a plan with all partners".

Despite the fact that opportunities were not created as fully as necessary to meet face-to-face with all Partners, there can be no doubt that, during this project the Plastics Historical Society in particular were able to make a vital contribution to the development work. This will be featured in a little later in this report (see Collaboration).

It is against the context and background explored above that the project got underway. An analysis of the development process now follows.

References:

- Cascini G and Rissone P (2004) Plastics design: integrating TRIZ creativity and semantic knowledge portals. *Journal of Engineering Design*, 15 (4), 405-424.
- Lyungberg LY (2007) Materials selection and design for development of sustainable products. *Materials and Design*, 28 (2), 466-479.
- Shashoua Y (2008) *Conservation of Plastics: materials science degradation and preservation*. Butterworth-Heinemann: Oxford, 151-190.

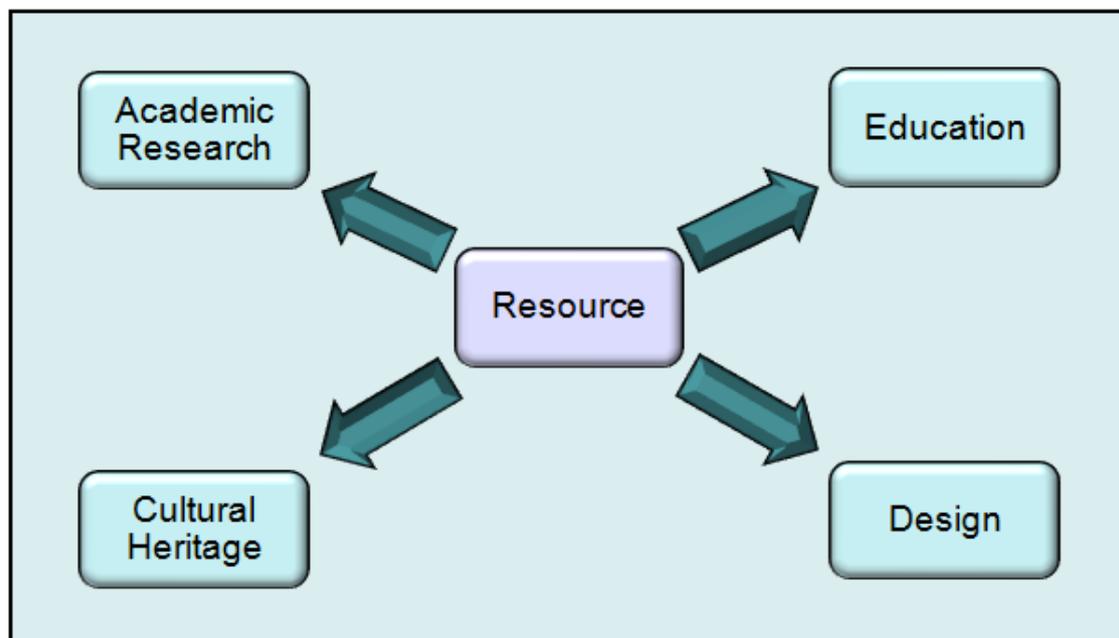
The Project

Its Objectives and Outreach

This project – the Museum of Design in Plastics Digitisation Project (MoDiPDiP) – was funded by JISC under ‘the pilot and small-scale digitisation’ programme. It ran for a year, from 01 October 2008.

The main aim was to create a unique and lasting record relating to the development of design in plastics. This would mean that the Museum would be able to reach out more effectively to its varied community of users; providing a high quality reference resource for work in a number of fields (see Exhibit 3 below).

Exhibit 3: A Resource for a Range of Users



It is clear from the Final Report of the Project (see p 13-14) that the work had several facets, involving: generating, communicating and disseminating information; forming partnerships and building relationships with educational and research establishments, and promoting connections with the wider community.

The Project's scope is represented below in Exhibit 4:

Exhibit 4: MoDiPDiP: Facets and Objectives

Facet	Objective
Generating high quality visual and written information	<ul style="list-style-type: none"> • Digitise to a high quality more than 1500 artefacts from MoDiP's unique collection; creating in excess of 4500 high resolution images. • Provide enriched descriptive metadata for these resources.
Communicating / Disseminating resources	<ul style="list-style-type: none"> • Develop the online presence of MoDiP to provide full online access to the research material. • Enable publication into JorumOpen, as the central JISC-funded repository for research outcomes.
Building Relationships / Partnerships	<ul style="list-style-type: none"> • Enable MoDiP to build on existing relationships with UK HE and FE providers. • Provide opportunities for partnership and knowledge transfer across the JISC and cultural heritage communities.

To address the above, the Project Team had to initiate and promote a range of development practices; and also had to meet a number of challenges. It is to the Project Team that attention now turns.

The Project Team

“As Collections Manager, I have **overall control**. I **arrange access** to the collection; **helping** students and staff see objects; **overseeing** exhibitions; **arranging** loans... **working with this collection now for ten years**”.

“... I was Assistant Curator previously [at named museum]. I am Assistant Curator here at the museum. I **catalogue** objects, **photograph** them, put on exhibitions, make sure the objects are housed well, **serve** students and staff when they come in, **help** visitors”.

The quotes above from two members of the Project Team provide an insight into the wealth of experience and expertise that was incorporated into this initiative, drawn in part from working at MoDiP, and in some cases from engaging in other roles in the museum sector.

The Team collectively brought to this Project a range of skills associated with project management, the organisation of exhibitions, and the maintenance of museum collections. Extensive experience had also been gained in relation to connecting with the general public and collaborating with academic staff and students. In addition, technical expertise had also been gained with regard to cataloguing, digitisation of images, and website development.

The fact that all the Project Team had worked together previously brought further advantages. Each had become aware of, and had learned to respect, the particular skills and attributes individuals brought to any initiative. They had learned to work together, and could translate this social expertise into the project development. Finally, working within the museum had taught them what was possible, and in what time-frame. This meant that the Project was able to set realistic targets.

How the above translated into the contribution made by each team member is now considered in a little more detail; again, drawing on comments made during the interviews:

“I was involved in the **day-to-day management** of the Project. This **complemented** the overall direction provide by [the Project Director]. I **set up the log, monitored** what we were doing, what we were achieving. I **checked** the images **to make sure the quality was** appropriate. And I **did some** cataloguing. I also **oversaw the work** of [named team member] and to some extent [other team member]”.

“[The Project Director] was the overall Manager, highlighting where we were and where we were not going right. [Named colleague] was **mainly cataloguing**. Getting the objects out of the collection and working on them. Giving them location records, and checking copyright. Then I **was able to photograph** them. What was really important was **getting the right standards** for digitisation and cataloguing. **That took time. We created object term lists and standards**”.

The comments above indicated that there was both demarcation of roles, but also some overlaps. The Project had both direction and strong management, and the need for this was evidently accepted. There was also a strong sense of collaboration; a feature of the Project to be considered later in this Report. Clearly, there was a concern to carry out the work to the highest possible standards.

Much of the work proceeded through informal collaboration, but formal strategies were also introduced. One – the log – will be considered later.

The other, involved bringing the team together for a one-hour weekly meeting. This meeting served a number of functions:

It meant that each member could participate in the planning of the Project, as well as making their own specific contribution. The meetings provided opportunities to articulate concerns and worries, to explore issues, and to build solutions to the problems and challenges that had been identified. The process was broken down into 'work packages', so that targets could be set on a short- and long-term basis. Finally, in conjunction with the log, the meetings also enabled progress to be monitored and quality to be assured.

A further critical appraisal of the team-in-action follows, with an initial focus on 'Risks and Challenges'.

Risks and Challenges

- As a requirement of the funding process, applicants were expected to undertake a risk analysis, by identifying risks; quantifying those (on a scale of 'one' to 'five') in terms of 'probability' and 'severity'; providing a risk score (the product of probability and severity scores); and finally identifying what action was proposed to prevent or manage the risk.
- The risk appraisal submitted by MoDiP was comprehensive and realistic. It covered a number of aspects relating to staffing (loss of staff, slow recruitment); technical inputs (accessibility, specifications, loss of images); lack of appropriate advice, guidance, resource implications (accommodation, time and cost creep) and conflicting priorities.
- In addition, the strategies submitted for managing and limiting risk were realistic, and in some cases were based on previous experience of engaging on development projects.
- For example, in relation to coping with technical demands, the submission was able to point out, that experience had shown that:

“taking and manipulating the images, obtaining copyright clearance and attaching the images on the on-line record takes on average 2.15 hours from start to finish per object. Improvement of metadata takes on average another 15 minutes”.
- In several cases, optimism in relation to coping with risk proved to be well-founded. Nevertheless, the Project did throw up challenges – early delays and unexpected demands – which slowed the work down in the early stages. These challenges, and more importantly the strategies adopted to meet them, are considered in greater detail below:

1. Project Management – Losing Time

Processes associated with the selection and appointment of new staff have become increasingly bureaucratic and time-consuming. This can have a disproportionately negative impact on short-term projects such as this initiative.

The original intention had been to make two overlapping appointments of six months duration. This strategy was modified; with a single ten month appointment made for the fourth team member. A major benefit to accrue from this arrangement was that the appointment made had already gained previous experience working in the Museum, and brought the appropriate expertise needed for compiling the meta information.

A further challenge, again common to externally funded projects related to a second member of the development team. Clearly, the project had over-estimated markedly the amount of time this colleague was able to devote to the initiative, especially in the early months because of other obligations.

As with most externally funded initiatives, money was made available to buy out a fraction of this colleague's time (in this case 75%); so that she could engage directly in project development. However, there remains a commitment to continue with normal working practices and this often, as is described below, sets up a conflict in terms of priorities:

“I have not played as big a role as I would have liked. Not because I wasn't offered a big role. **It was because I didn't have as much time as I thought I would. I had to get on with my day job. [The Project] really under-estimated the impact that one thing would have on another...**”

“... **You can't turn students away** when they come in and want your help, or want to use the collection. The last thing you can do is say 'Sorry I am working on another project, I can't deal with you at the moment'. They may well be our customers next year, or might be in their final year, and so won't have further opportunity to come in to the museum...”

“... As a result, I found that, if I was beavering away on the JISC project, **when a student came in, then you I had to put that to one side.** That is our fundamental raison d'être. Initially, I was meant to be spending 75% of my time on the project, in reality it was a lot less than that”.

It was clear to the colleague above that the first priority lay with supporting the students who connected with the Museum. It was not appropriate “to turn students away”. When they sought attention, the project had to be “put on one side”.

An insight is provided below as to why giving such attention was seen to be of paramount importance:

“We would like students to come in and chat to us after looking at the catalogue of objects. From **these conversations you generally find out that what students initially think they want, in reality they do not want. The conversations are the best way to explore this...**”

“.. It works the other way, as well. There are all kinds of reasons why students might tick a list of objects on an online catalogue. We would then be running around to get those things for them, to find later, when the student comes into the museum, that it was not really what they wanted. **By holding these conversations, directly talking with the students, we make our own job easier**”.

The conversations between students and Museum staff promote active and critical exploration of needs and are beneficial to both parties. The former are able to clarify their requirements. The latter avoid fruitless searches.

Under-estimating these day-to-day demands meant, as already noted, that only a fraction of the stipulated time was actually devoted to the project. Fortunately, in the summer months, when students no longer attend the College, a greater commitment could be given to ensuring development proceeded at an appropriate pace.

Other challenges related to ‘technical aspects’ of the project, as considered below.

2. Getting the Standards Right – Digitisation

“For the objects we had picked to catalogue and to document, we thought of objects that get used a lot. It was more useful for those objects to be photographed, put on the website, be seen by the public and our students. If the image is there, then they tend to pick that object, rather than one that hasn’t got an image...”

“... You need to look at the object, and think about what people would want to see. Each object was photographed about three or four times, in different positions. The lighting set up was standardised, not to make the object look arty but to highlight it so that it was clear to see”.

The comments above indicated that the project team were clear about what objects should be photographed and why. They also indicate that the process of getting images to an appropriate standard was ultimately successful.

However, as the series of comments below indicate – drawn from both the interviews and project documentation – getting the images right proved initially highly problematic. Determining the appropriate standards represented a major challenge.

“It took **a little while for us to get to understand what standards were required**. JISC were **asking lots of questions about the standard** of the images we were taking, **then saying it was not quite good enough**; but **not telling us what we needed to do**. So, there was a lot of to-ing and fro-ing. That meant that the photography didn’t start until way into the project. And that then meant **having to catch up during the remainder of the project**”

“I don’t think there has been very much help, really from the ‘funding agent’. I don’t think they do much work with museums. We have museum standards, which they didn’t recognise. As an accredited museum, these are the standards we need to work towards. So, it was a matter of getting them to understand what these standards are, and trying to work out whether the standards were equivalent. Were ours better or were theirs better? It was a very steep learning curve – for both parties – at the beginning”

“The setting of standards, at the outset, represented a **considerable challenge**. Many people did their best to help, and **we read many articles**, but it seemed at times as if there was an **unbridgeable gulf between our knowledge**, and the technical language being used...”

“... We soon realised that in terms of digitisation, our practice needed changing. Resolving the standards to adopt proved much harder. The advice we received in person, and from web papers approached the problem from what seemed to us **an overly technical stand point**. We would have found it helpful to have been able to consult a document **presenting examples of things of different scale** from, for example buildings to teeth, digitised with an explanation of pros and cons of the different standards used, **written in non-technical language**”.

“We could now definitely share what we have learned on the project. That **sometimes the way you do things is okay! The standards that you have are actually perfectly fine**. Just getting through that stage, was the first brick wall that we came up against. Often, we felt that there was **nobody to talk to other than JISC**, and they weren’t necessarily being helpful because of how we were stumbling with them. **If we had had another museum, or a project similar to ours**, then we could have just said to them ‘How did you get through this?’ Or having somebody just to say ‘It is like this for the **first few months**’, **just to reassure you this is what it is like...**

The comments above have been carefully selected and sequenced to illuminate a range of issues associated with establishing appropriate standards. They tell us:

- Although the funding agency appeared dissatisfied with the initial proposals for quality, they were unable to inform the project team of what was required.
- A lack of familiarity with the work of museums and the standards appropriate to this, limited the capacity of the funding agency to provide convincing guidance. It meant that it was difficult for “the project team to ascertain what exactly represented standards of the appropriate quality”.
- The initial expectation that appropriate standards would be defined and set by the funding agent had not been met. The Project Team had to become proactive in determining these standards for themselves.
- The team’s response was to engage in active exploration; seeking advice and turning to the research literature. Unfortunately, what they gained was of limited value; being overly technical, and unrelated to relevant and real contexts.
- Clearly, the Project Team have learned a great deal, not least that confronting problems – “hitting a brick wall” – is the norm in the early stages of project development. Nevertheless, this can be stressful – and participants need reassurance – as it does cause worrying delays.

As is explained, challenges in the management of the collection – the acquisition of new custom-built storage for the collection – also provided “a better space to photograph the artefacts. This meant that the sequencing of the work was altered, “with the artefacts being taken from their current storage for documentation and then delivered to this new facility for photography”.

The Project Team learned to trust their own judgements, realising that “your own standards are okay!”

Over time, the required expertise was gained, and a standardised approach adopted. Taking advantage of the new facility, the Team were able to use equipment of an appropriate specification to produce, crop, represent and store images of a very high standard.

Not only were the team able to make up for lost time, and reach their target for digitisation, they have also developed an approach to practice which is robust and can be used beyond the lifetime of this project (see Way Forward).

3. Getting the Standards Right – The Metadata

To facilitate navigation and enhance interpretation of the metadata, it proved necessary to adopt a structured and consistent approach to the sequencing and content of each inclusion. This, in part, involved reducing the number of descriptions by establishing an object term list.

After considerable consultation, for example with the British Museum, it transpired that **no suitable list existed in the public domain** “for twentieth century and contemporary artefacts in everyday use”.

The Project Team therefore developed their own term list, producing in addition, lists for “plastic materials, production methods, condition statements...” and so on.

The process involved is explained in greater detail, below:

“We had a really good look at the way we did things. We looked at how the catalogue records were laid out within our database. What we wanted to do was base every record the same. So that when you look at a record, you know where object location is going to be on that record, or description; all in the same order. So, we had to move a lot of elements around, trying to get that order right. Also, for the brief descriptions, trying to get them quite standard, as well. So, it was trying to get all that information standardised...”

“Before this JISC project, we were looking at an object and could call it many different things. As part of the project, we narrowed descriptions down to one option; simple names – that formed the term list. The aim there was to get **down to a relatively small manageable number** of names or terms, to avoid confusion. This is really important for our new website, because what we want are drop-down menus where people simply click on a term, rather than having to make a choice. We will have the names for an object in one word or one section, then you are going to find it”.

The rationalisation process described above resulted from a critical scrutiny of the existing collection, and was based on a determination to meet user needs more effectively, especially when clients – most particularly students – are able to connect with the Museum’s new website.

As one interviewee pointed out:

“All of this [process of standardisation] was **done partly for our benefit**, as cataloguers. Having gone through this process, **future work will be a lot easier and quicker**. But it has also made it much more user-helpful. Eventually, with our new website, things will be much easier for users and the visiting public... but our main user has got to be our students; above all, the website must meet their needs”.

Again, the message emerges of the creation of a robust mechanism which not only enabled the project to proceed more rapidly – and significantly improved the quality of record-keeping at the Museum – but will also be in place to inform future work.

The lists have also been made available to others on the JISC website, and will be available on the MoDiP website.

One final challenge remains, and here we move away from the ‘technical aspects’ of the project to consider a further facet of project management – Tracking Progress.

4. Project Management – Tracking Progress

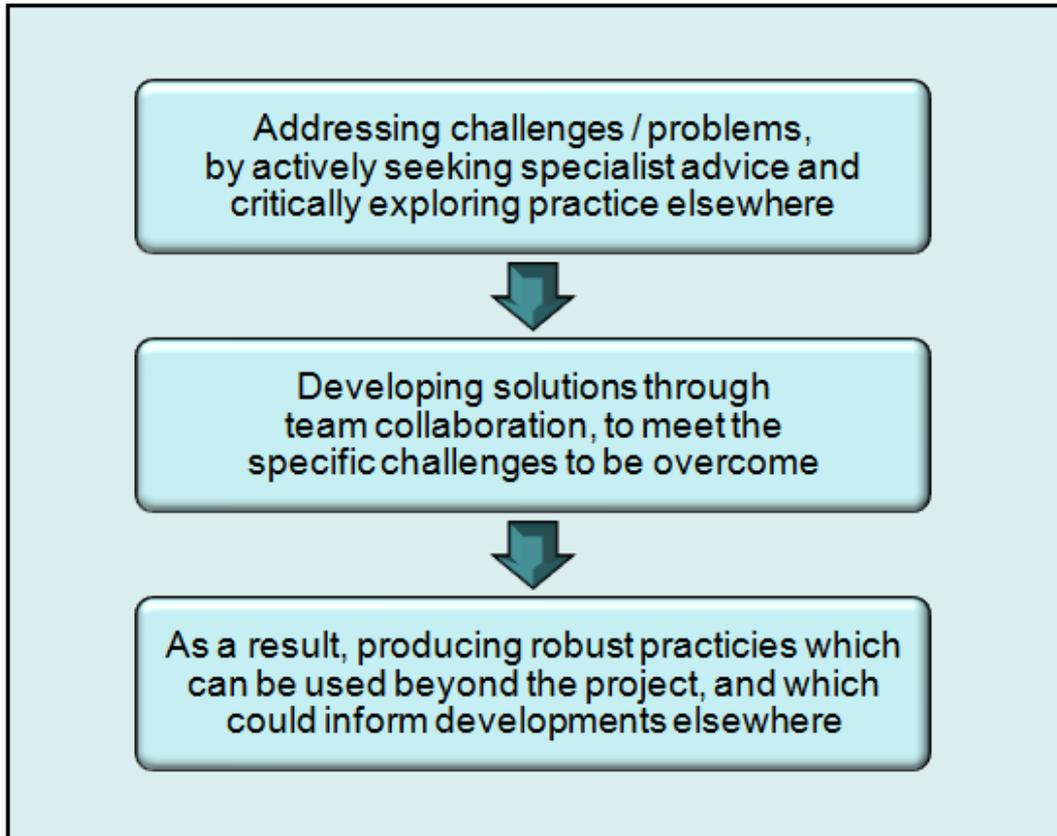
A further challenge involved keeping track of progress in relation to digitisation and the process of metadata collation. Again, steps were initially **taken to explore developments elsewhere**, and **to gain advice from others engaged in a similar enterprise**; e.g. from the John Johnson project at the Bodleian, Oxford. However, the tools developed were regarded as “too complicated”.

The team’s response **was to develop its own** bespoke log, with a structure based on an analysis and breakdown of the processes associated with digitisation, the compilation of metadata, and storage of artefacts. This log meant that at any moment the team could see “what had been done to each artefact, and by whom, and what remains to be done”.

This log has proved to **be a robust and valuable tool which will be used in conjunction with further work**.

A number of features have emerged (deliberately represented in bold type above) which have characterised the Project Team’s way of doing things; this represented in Exhibit 5 below:

Exhibit 5: Features of the Project Team's Work



One practice which defines the team's way of doing things relates to its determination to inform development through collaboration. This is considered next.

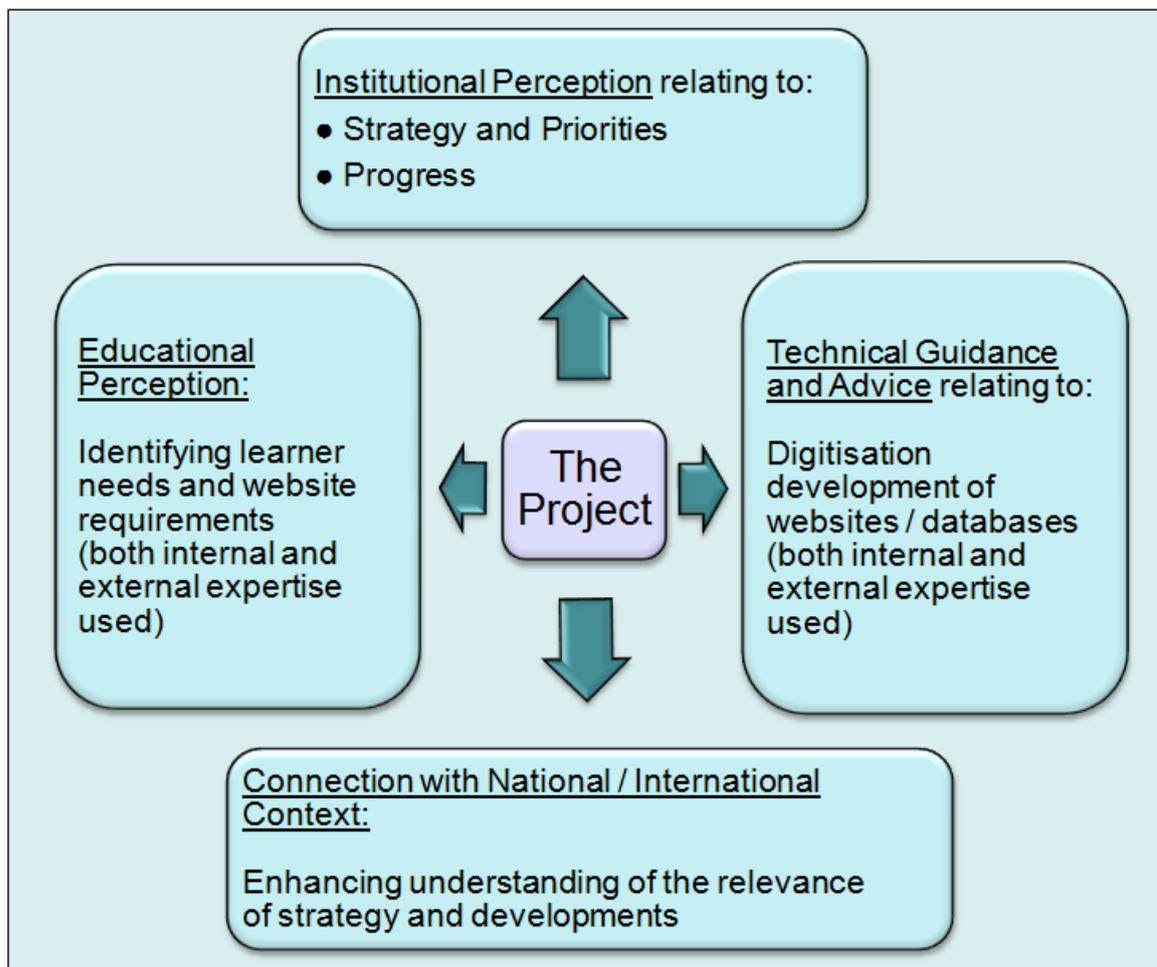
Collaboration

1. Drawing on External Expertise

In addition to the main project partners identified earlier (see Background), the Project Team actively drew on expertise and support from a range of sources within the institution and beyond.

Connections were made both informally and formally through the Advisory Group; the latter operating to monitor progress and provide quality control. A very important consequence of these collaborations was the range of advice and guidance which operated to inform project development; see Exhibit 6 below.

Exhibit 6: Advice and Guidance from a Variety of Sources



Access to this expertise located the project within the host institution and placed it in the broader national and international context.

In addition to providing actual scrutiny of progress – the project’s setbacks and successes – the Project Team gained advice and guidance in relation to both educational and technical practice.

A crucial element of this collaboration was with the Plastics Historical Society, and more detailed evaluation of this process follows.

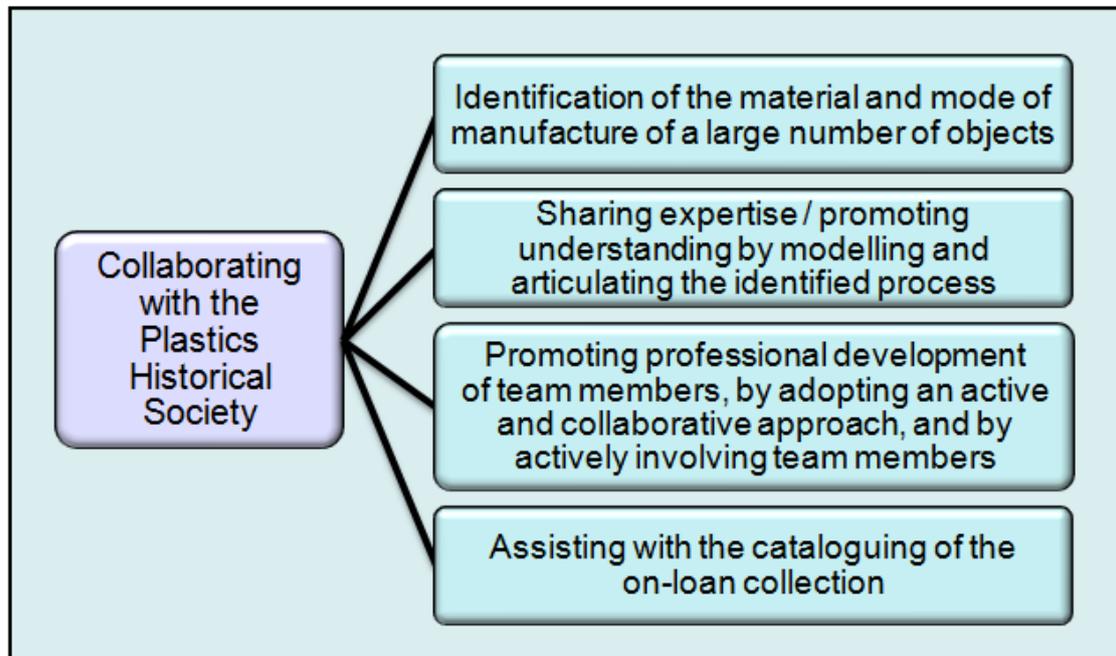
2. Collaborating with the Plastics Historical Society

It is clear that the project benefitted a great deal through its connections with the Plastics Historical Society (PHS) – and more particularly with its Chair.

The Society has placed on long-term loan to MoDiP a substantial proportion of their collection of plastic artefacts. In addition, the Chair of PHS made a substantial personal contribution – so important that he is referred to in project documentation as ‘the fifth member of the Team’.

In fact, six visits were made to MoDiP during the project, each of 1.5 days duration. An analysis of the impact of the visits is presented below, both graphically (in Exhibit 7) and using the words of the interviewees themselves.

Exhibit 7: PHS Contributions to the Project



“[Named colleague] was really helpful and gave very generously of this specialist expertise. He would spend hours **working with members of the team**, working through boxes of objects. **It was all hands-on**, and done so that **we were encouraged to take an active part**”.

“[Named colleague from PHS] has been so generous with his knowledge and understanding of the processes and materials. He has given us hours of tutorials, on: ‘This is made in this way, and this is made in that way’. It is something you learn only by **looking at the objects**, having [named colleague] **ask you how you think that was made**. You can read books until you are blue in the face, but **it is only when you have that object in front of you, and you can see** the little marks that the machine has left behind, or you can see where it has been broken off its injection moulding, **that you fully understand... And that means talking it through with an expert**”.

The comments above tell us a great deal, not simply about the tremendous experience brought to bear on these meetings, but also about the approach adopted. The team was getting much more than expert knowledge about individual artefacts. They were learning also for themselves how to engage in this process.

The importance is stressed of having a hands-on engagement with the objects, and of learning what to look for – how to detect the tell-tale signs.

As a result of this collaboration, the project team are confident they have gained definitive descriptions of the artefacts:

“... We feel we have consulted the oracle – and if he doesn’t know about a particular object, then it must be quite a tricky thing anyway!”

In addition, as the comment below acknowledges, team members now feel more knowledgeable, and crucially, have an increased confidence that they can be of help to others:

“One advantage is that we have gained a **new level of understanding** about the objects after having learned from his input, so we can now talk about certain objects or groups of objects **with more authority**, or **we can talk about the materials that have been used**. In the past, I often found that the students knew a lot more about the object than I did. Now, I feel I know a bit more than them”.

One further group of professionals were invited to contribute to this project, with consultations made with representatives of the academic staff at the University College. This is briefly considered next.

3. Collaboration – The Academic Staff

Academic staff, representing learners on a variety of courses, were asked to inform the development of the project by focusing on two technical aspects of the process. Colleagues were asked to identify how the quality could be improved relating to the presentation of the images, and the information on offer.

In addition, opinions were invited relating to the website.

The range and variety of contributions made has been incorporated into this Report, as Appendix 1.

It is important to stress that the Project Team do not believe that this approach would have resulted in a better resource – the strategies and practices put in place during the project were certainly appropriate to ensure a ‘high quality outcome’. The strategy was designed to:

“increase understanding about the Museum’s work, and about what it can offer staff and students within AUCB”.

With hindsight, the Project Team believe that greater buy-in from staff and students could have been ensured by adopting a different strategy, as described below:

“In particular, we would hold a lecture theatre event at which we would show people our current practice and ask them how it could be improved”.

Nevertheless, the interviews featured in Part B will reveal that staff had welcomed the opportunity – albeit limited – to become involved, and were particularly disposed to becoming more connected to the Museum and its collection.

There is a very strong determination by the Museum to engage more effectively with academic staff, and more particularly with students, and this will feature strongly later in this Report.

For now, the focus falls on the Team-in-Action, with a detailed consideration given to a specific aspect of the project – the work towards developing a new website.

The Team-in-Action – A New Website

The Project included funding to develop a functional specification for a website.

An independent website for MoDiP would, it was argued:

- Enhance the reputation of the museum and AUCB at both a national and international level
- Make more prominent the Museum and its collection as a resource to promote learning and research.

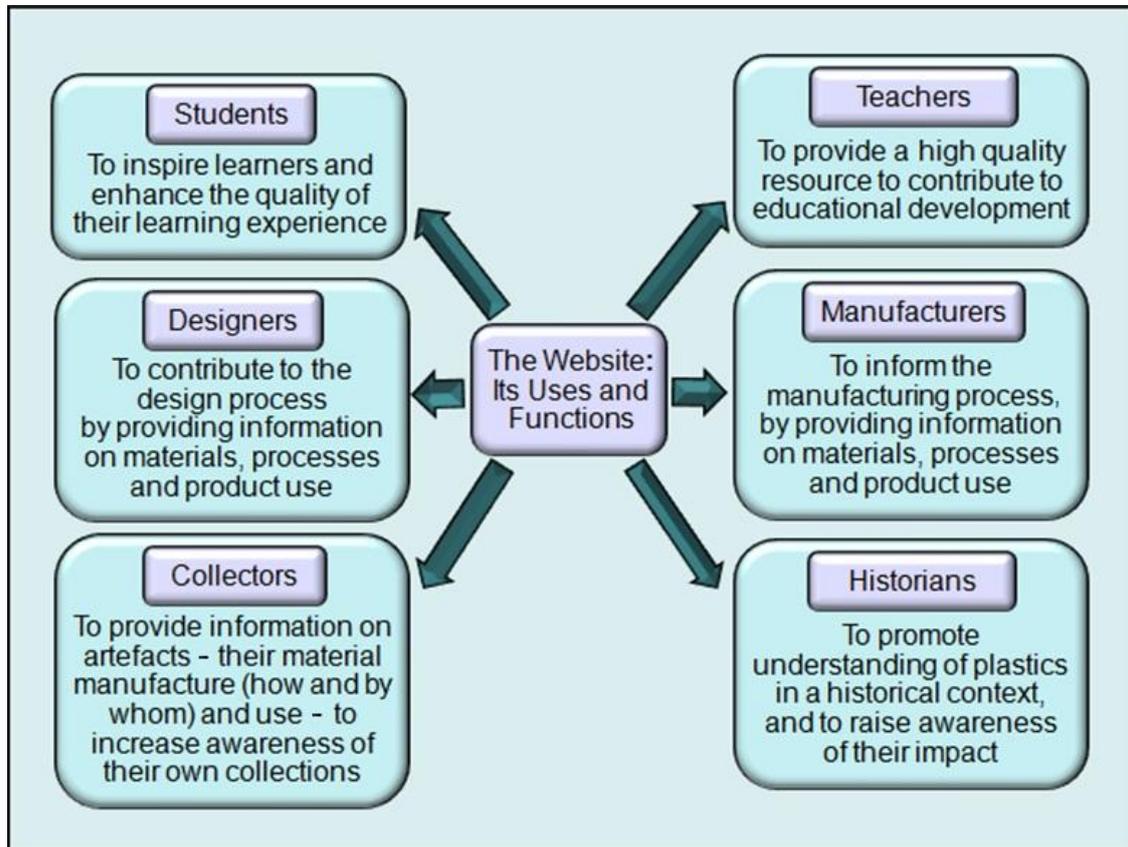
The processes associated with this development are delineated below:

- Identifying target groups, and the resources for their using the website:
- Clarifying the Museum's needs
- Exploring actively as a team what provision already exists and identifying aspects of this which would be of value
- Collaborating with colleagues within the University College who provide an educational perspective (what the learner needs) and a technical overview (what is desirable) feasible / appropriate in relation to the website
- Critically appraising what can be offered by external agency to push development forward
- Delineating a way forward.

More detail is provided below in relation to some of these strategies, drawn in part from a Discussion Paper produced by the Project Team (dated 16 March 2009).

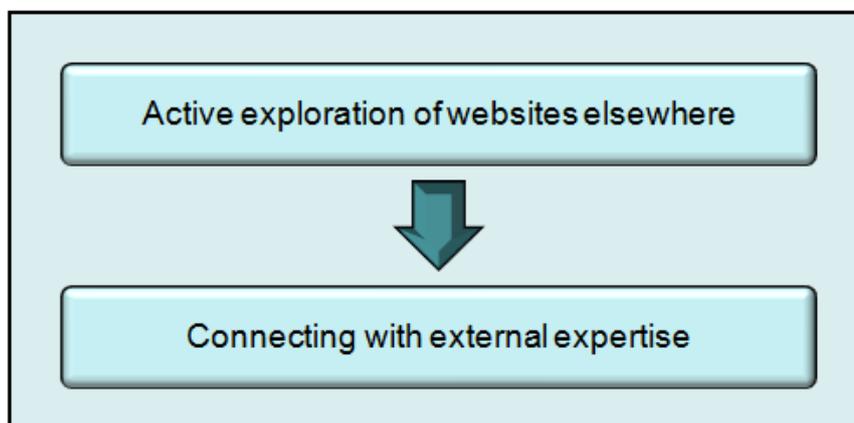
Identifying the Target Audience

Exhibit 8: Targeted Users of the MoDiP Website



The work in identifying the target audience has proceeded in two stages, as shown in Exhibit 9 below:

Exhibit 9: Stages in Identifying the Target Audience



Each stage is considered in detail in the following pages.

Stage 1: An Active Exploration of Current Practice Elsewhere

Exhibit 8 above provides a summary of the process of exploration undertaken by the Project Team and College colleagues.

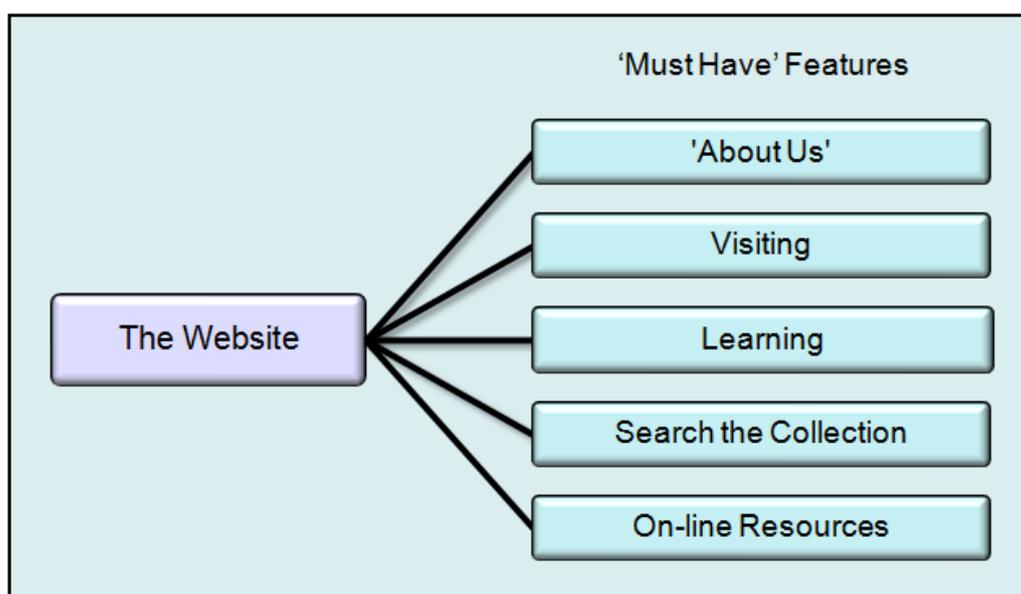
It reveals that the website used here was to meet the needs of a range of target audiences. Although it was stressed throughout that the needs of the student would remain paramount.

This critical appraisal of existing provision was undertaken in relation to two dimensions, viz:

- The Requirement
- Character and Feel

Establishing 'Requirement' involved an exploration to exactly what would represent the 'must have features' of the website. Five such features were identified, as shown in Exhibit 10 below:

Exhibit 10: Website 'Must Have' Features



A number of features of this identification process are noteworthy:

- Critical analysis was undertaken to break down each of the above aspects into discrete aspects
- An external research programme was undertaken of existing relevant web provision, in each case identifying valued aspects which could inform the MoDiP web development, but also rejecting features seen as limited or unstable.

These processes can be seen in action in relation to the feature ‘Search the Collection’:

“[Named websites] provide good examples of **what we are looking for in terms of capabilities**. We **like especially** the ‘full text filter’ and ‘related tags’ on the Powerhouse site and the advanced search facility of the BM site”.

“[Different sites]... the collection pages are examples of good pages in terms of layout, **although not** in terms of capabilities”

“The **images** part of the site **should provide** images of objects **to a high enough specification** to show how it is constructed with only objects accompanied by images search option... ideally we would also have the opportunity to show clips of the object in use”

“The metadata must include the ability to search under the following headings, and **be able to click** from a particular object record to more discursive information... The results of the search must provide the following information about each object...”

“We would like the website to have the facility **for searchers to add** information on any object (factual or reminiscence) and to send it back to the Museum. See for example [identified website]”.

“Online resources are separate. **For a model please see** [identified website]. Examples we might have are...”

The above comments have been abstracted from a much fuller description presented in the team’s Discussion Paper.

They exemplify the time and effort directed to the exploration process and to the critical appraisal – the pros and cons – of specific websites in relation to the features being sought. They show also the full extent to which analysis has been applied, leading to the production of highly detailed lists of requirements.

Functions of the website in relation to client interactivity have also been included in the requirements for the website.

Finally, they show also how the project team was able to build on the thorough work undertaken in the project relating to digitisation, and the use of object lists to define the meta information, undertaken to meet ‘project challenges’.

As becomes apparent a little later, a requirement to promote ‘fun’ was also identified as a ‘must have’ feature.

Exploratory work was also undertaken in relation to the 'Character' and 'Feel' of the website. Again, a major component of this involved a careful analysis of features, and an active exploration of what was already available. This can be seen in the following two comments, the second identifying three sites which appeared to work well.

"The structure and feel of the site must be inline with MoDiP's existing brand; **enticing to a student audience; easy to navigate and use; quick to display content; and be easy to read / understandable**".

"The following are museum sites that work well although they do not necessarily have all the capabilities we require:

www.museumofcostume.co.uk
www.cooperhewitt.org
www.designmuseum.org"

Further work was undertaken to delineate the appropriate features for maintaining and managing the site, and to establish a starting point for development relating to the current website.

Finally, the strategy was identified for the 'way forward'. Important here was to:

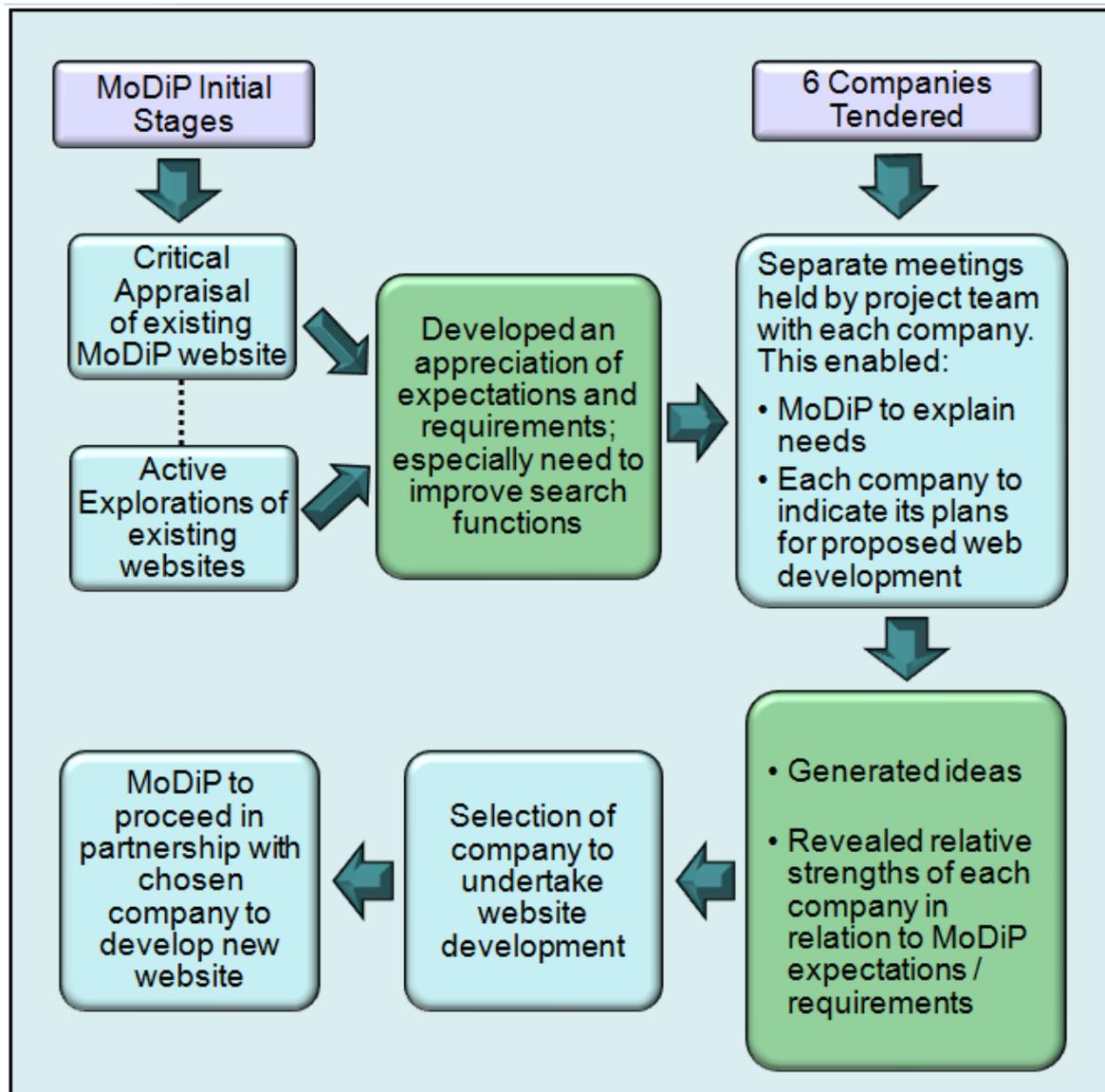
"restore the priority of getting the mass of material currently available via BlackBoard in-house to a wider public, and to capture the capabilities identified as economically and efficiently as possible".

By undertaking this critical exploration, web development was placed on a firm foundation for the next stage of development. This involved connecting with external expertise, a process considered below.

Stage 2: Connecting with External Expertise

A decision was made by the Museum to engage with an outside agency to develop the new website, rather than rely on consultancy. The processes of engagement – and its outcomes – are represented below in Exhibit 11:

Exhibit 11: Processes of Engaging with Website Company



From the evidence presented in this evaluation:

- A great deal of time and effort has been spent on selecting the appropriate company to develop the website.
- MoDiP was not engaging in this process with a 'blank sheet of paper'. As noted above, an extensive active exploration had been undertaken of existing websites 'operating in the museum context'. This had clarified what was required and expected.
- In addition, MoDiP had undertaken a critical appraisal of its existing website to identify its strengths, but also reveal its shortcomings. In particular, as described below, this established the need to enhance 'search capability':

"We already had a website and we were aware of its limitations. We knew we wanted the new website to search in a really open way. If it can't do that, it doesn't matter how many fancy things have been incorporated, it will not be adequately user-friendly".

Separate meetings were held with each of the six companies which had tendered. These meetings served a number of functions. They:

- Provided an opportunity for MoDiP to explain what it was looking for, enabling each company to articulate its plans for the proposed website.
- Made public the company's previous work, and so established its track-record relevant to this initiative.
- Generated ideas which could be taken forward to inform subsequent meetings.
- Gave Project Team members an insight into how well they would be able to work alongside the company.
- Ascertained the extent the company would prove flexible in its approach to engaging with the work.

As a result of this process, a unanimous decision was made to go forward with one company. The reasons for this decision can be found in the comments below:

“[The chosen company] just seemed to be on the same wavelength as the students. **They seemed to be younger in their approach.** We felt that they would be **able to make the students interested.** They seemed to **understand how students used websites.** They were easy to communicate to and to work with”.

“The chosen company were good. It brought a bit of an ‘edge’. They brought a **fresher younger approach**, with more fun ideas. We thought that they fitted with the image the museum is trying to project. The main target has to be students as users”.

For success, the company had to satisfy the Museum that it could reach out effectively to this group through the website. As well as providing ‘ease of navigation’, there was a need to meet the expectations of a student body which was ‘strongly visual’. The chosen company, it was felt, brought a “younger fresher approach” and understood how students use websites and what they found appealing.

However, another powerful reason emerged for selecting this company. They were able to break down the funding for each of the elements of the web development process.

Such information is vital for the Project Team, because colleagues can now analyse the cost-benefits of the ‘different functionalities’ and prioritise accordingly. The team now knows exactly what it wants; able to develop:

“a prototype for an improved MoDiP-specific website, with ‘good’, ‘better’ and ‘best’ pricing scenarios”.

The Team is now in a strong position to raise funding to create a new website.

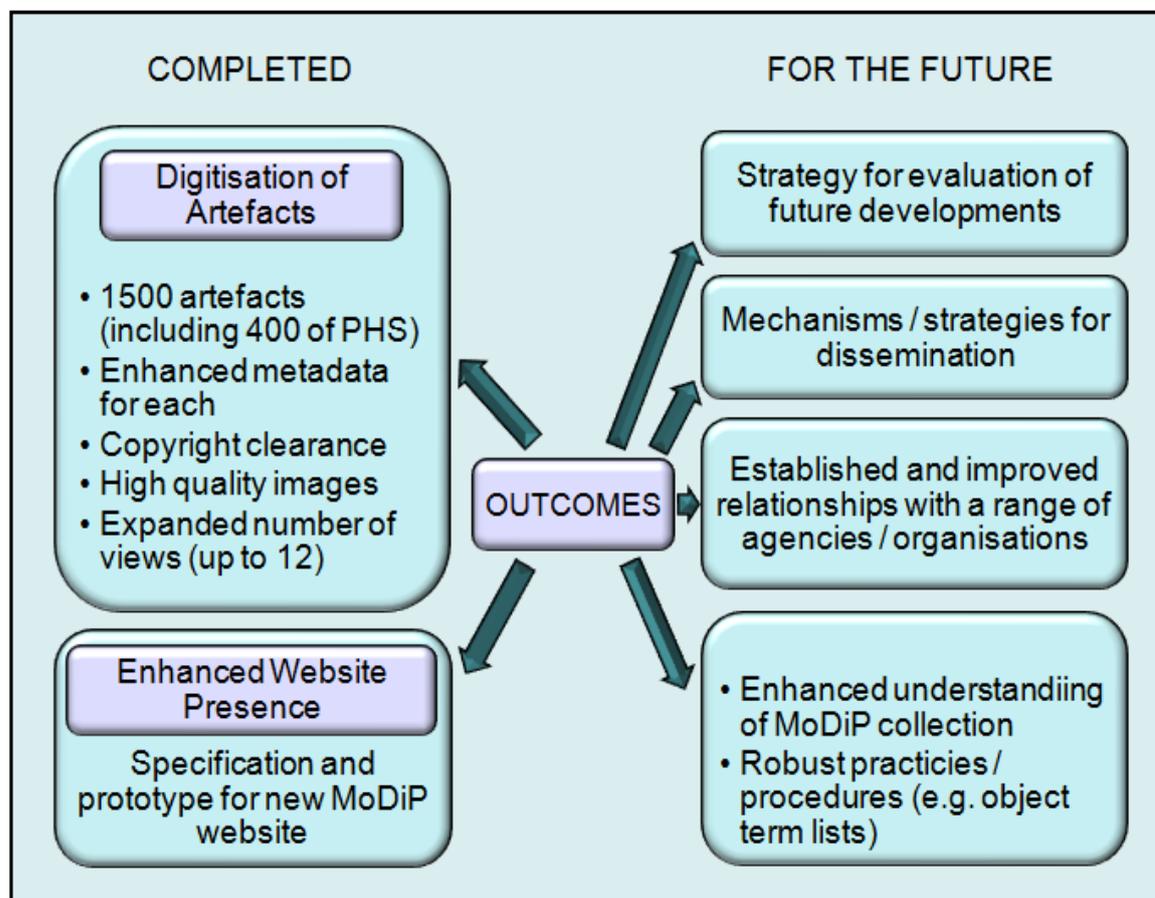
There can be no doubt about the importance the Museum places on moving forward from this project to establishing this new website, indicating that:

“Only when [the site] is built to the specification created, as a result of this project, will researchers be able to make full use of the images and metadata we have created”.

As we shall see in a later section, there is also an equal determination to build on this project to enhance the learning process, but we are in danger of getting ahead of ourselves here. The next section provides a brief summary of the Project Outcomes.

Project Outcomes

Exhibit 12: MoDiPDiP – The Project Outcomes



The above Exhibit 12 delineates the important outcomes which have accrued from this initiative. It is clear from the evidence gathered in this evaluation that this project has been about successfully reaching the ‘tangible targets’ set by MoDiP, and about establishing strategies and practices to enable the work to be sustained.

In terms of the former, 1500 artefacts have been digitised. Enhanced metadata and copyright clearance has been provided for each. And high quality images have been created, with each artefact presented in an expanded number of views.

In addition, a specification and prototype has been established for the creation of a new MoDiP website.

This project, however, has achieved much more than this. There is now a determination to continue and expand this work.

As a result of the project:

- The Project Team has now gained an enhanced knowledge and understanding of the collection, placing them in a stronger position to provide advice and guidance for a range of clients, but most especially students.
- Robust procedures and practices are now in place which will enable the Team to move forward effectively, when working to enhance the remainder of the Museum's collection of artefacts. One strategy, in particular – the object term lists – can now be shared with other museums.
- MoDiP has established and improved relations with a range of organisations. The link with the UK Centre for Materials Education (UKCME) will enable the Museum to connect more effectively with the 'world of education'. There is now a stronger bond with the Plastics Historical Society (PHS), enabling closer relations to be developed with the 'plastics community'. Collaboration with JISC will enhance 'knowledge transfer'.

Finally, mechanisms and strategies are now in place for dissemination and for the evaluation of developments in the future.

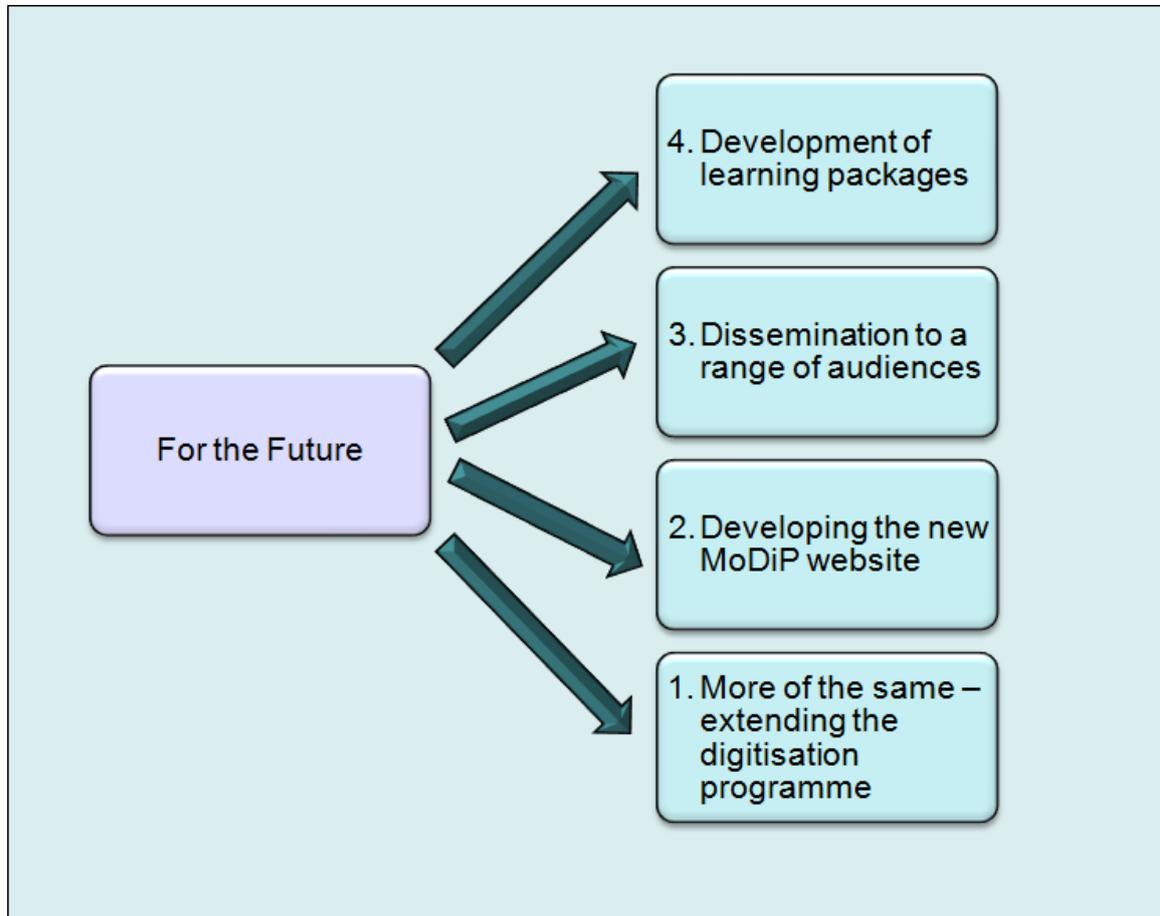
The importance of these 'outcomes for the future' cannot be overestimated. As the Project Director explains:

"The most significant outcome of the project we did not expect at its outset, was the impact it has had on how we will do things in the future".

Attention now falls in the final section of Part A on how things will be done.

The Way Forward

Exhibit 13: The Way Forward



The four aspects of future development are represented above in Exhibit 13. Two of these are essentially extensions of work already completed.

1. 'More of the Same' – Digitisation

The Project Team are confident that they can use the practices used during this project to enhance the quality of the remainder of the collection. Although, as the quote below indicates, this may prove to be something of a long-running challenge!

“There is a backlog that we are now working through. **We have given ourselves three years to work through it.** And then there is stuff that comes in all the time, that you have to deal with. It will be like painting the Forth Bridge!”

In fact, the plans are ambitious. 7500 artefacts remain to be 'processed', and the plans do not stop there. Already there is an active exploration of how this could be done better. Three specific suggestions have been put forward, through the addition of:

- An orbital image viewing facility for selected complex artefacts
- Contextualising stills and film clips of the artefacts
- Statements and reminiscences in relation to the artefacts.

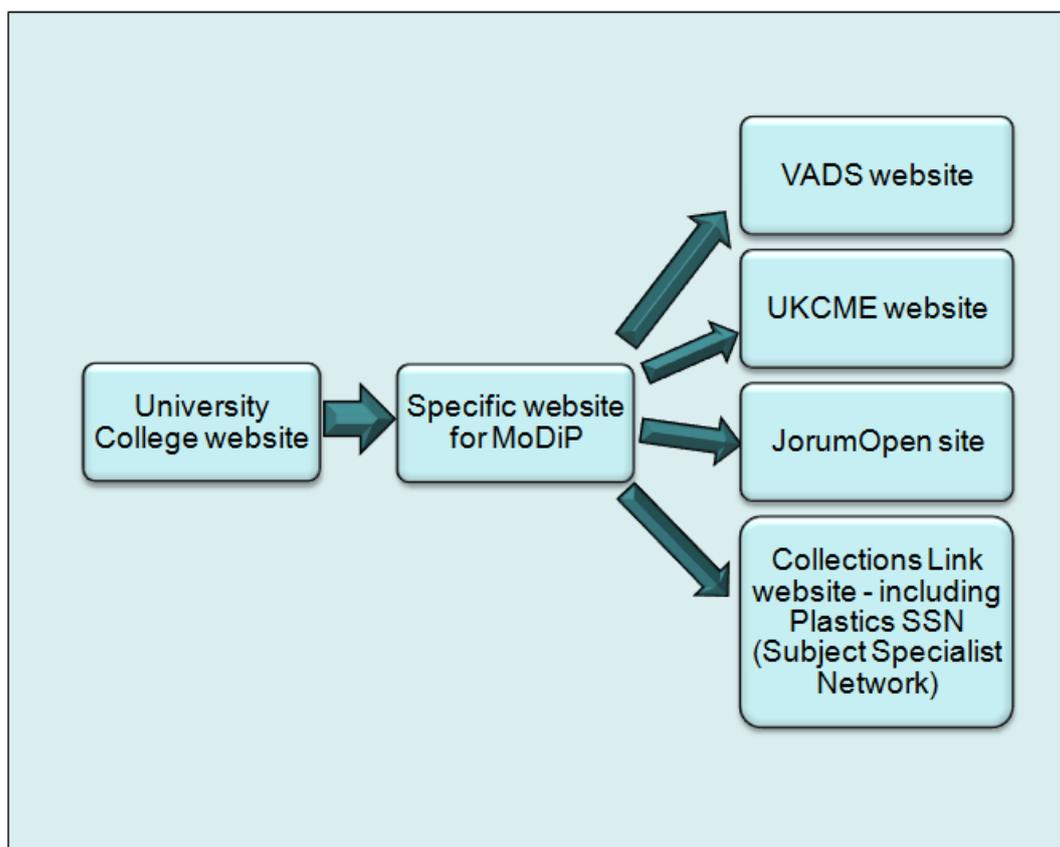
2. Developing the Website

As has already been noted, great strides have been made by the Project Team in developing a new website for MoDiP. Team members are confident that they can work well with the chosen Web Developer, and that the final product will meet their needs, most especially of student users. Funding allocations for each aspect of functionality now places the Team in a strong position to secure the necessary funding.

3. Dissemination

Negotiations have taken place to identify a range of avenues to enable the outcomes of this project, and subsequent developments to be more widely disseminated. This is represented below in Exhibit 14:

Exhibit 14: Dissemination through Websites



The creation of a new website dedicated to the outputs of this project is, as already noted, a major development of this project.

MoDiP has sought to build on existing partnerships, e.g. with VADS and UKCME, to provide further sites for dissemination of both the products of digitisation and ‘learning objects’ to be developed subsequent to this project.

This, it is intended, will make these products available widely, and could promote targeted use across a range of specific plastics modules in FE and HE institutions.

One further strategy for dissemination has been developed, with MoDiP intending to use its partnership with UKCME to hold national ‘Plastics Teaching Materials’ activities, these linked to the evaluation of the first set of “learning packages” from the project (detailed next). This will:

“situate the project outputs in the wider provision of Materials”.

4. Developing Learning Packages

Following the completion of the Digitisation Project, MoDiP is committed to the creation of “three learning packages a year, for three years”. An outline of this development programme is presented below:

- Each learning package will relate to a specific theme. A list for consideration has already been compiled; including Plastics in Sport, Plastics in Street Culture; Plastics: Materials and Properties; Plastic Processes of Manufacture; and so on. It is recognised that, over time, other ‘themes’ could be added to the list. Clearly, MoDiP are open to suggestions relating both to the topics to be developed, and on the format of the packages.
- The aim will be to enhance learning through the active investigation of the artefacts, and the information they can impart, relating to a particular theme.
- The objects will focus on the Museum’s artefacts. The packages will consist of between 20 and 40 artefacts. Each will have an introductory text (about 500 words), with a number of sections incorporated, each introduced by a short text.
- A number of issues have been identified with regard to the proposed development of learning packages, relating to the best way to represent and link material. In addition, a decision is needed as to whether to press forward, based solely on the 1500 artefacts whose images now exist at a very high quality, or to incorporate other images currently of poorer quality.

This drive to develop Learning Packages results from a determination on the part of MoDiP to become more actively associated with student learning, especially within the University College, but also beyond.

To do this more effectively, it is necessary to understand the educational perspective from those who are engaged in facilitating student learning: the academic staff.

Part B of this Report provides an analysis of that perspective.

Part B

The Academic Perspective

Introduction to Part B

“The Project has been as much about what the resource it has created **will make possible** in the future, as it is about the resource as it is now (Draft Final Report of MoDiP, 26 August 2009, p11).

“We need to build on what we already do to get students used to engaging and using the museum. They will then feel more confident about coming in and talking to us; making the museum part of their everyday learning. We need to make the **museum and its collection less frightening, less special; more everyday, more ordinary**. That’s basically what we want to do. We want students to feel comfortable about using the collection; to think of it in the same way as they do about using the library. The museum is another resource for students”.

“The students **do value it**, when they know about it, and the museum does have a bigger growing presence. **There now needs to be more interaction with lecturers** to integrate better the museum collection into their teaching”.

“We need to **let staff here know how they can use the collection**. They tend to have their lessons planned out in advance, and sometimes may do the same thing from year to year. It is trying to get them to look and to think about what other things they could use. The last place you tend to get recognition is at your own location. The onus, therefore, is on the museum to do more of an outreach task on staff in the institution...

... **The JISC project has allowed us to look closely at what we have in the collection**. We can now move forward with that. We now know more about what we have in the collection. This means that **we can be more effective at helping other people**. I have been here for two years, and never had the time to really know the collection. Through this JISC project I am really getting to know it now”.

The four comments above have been made by the Project Team, and represent a fitting opening to Part B of this Report.

The first provides a clear indication that the successful completion of this project cannot represent the end of the story. It is what this initiative now makes possible that really matters.

The other comments stress, once more, that the priority for the Museum must lie with the students.

The need is to increase further the engagement students have with the Museum, so that it becomes regarded, alongside the Library, as an essential learning resource.

Clearly, the strategy must involve convincing the lecturers of the value of the collection and its services, so that they integrate both more fully into the student learning experience.

The need is identified for the Museum to become proactive in facilitating change. How can this be accomplished? One strategy already identified by the Museum involves using the collection as the basis for the development of high quality resources; but what do academic staff think?

Part B will explore this issue, and will base this on an analysis of academic perceptions as revealed in interviews. To provide a context to this, an appraisal will be undertaken of the features of the education process at the AUCB which define the student learning experience.

The Interviews with Academics

The interview sample was relatively small, meaning that attention could fall on a very limited range of course provision at the University College. Time too was short, with the result that only a superficial exploration was undertaken – largely descriptive in nature – of the learning and teaching that was taking place.

Nevertheless, academic colleagues proved to be highly articulate; reflecting critically on what they are aiming to achieve, and on how they were facilitating learning to meet the desired learning outcomes. Much of what emerged is of relevance to this evaluation. Despite the scope identified earlier, an analysis of these interviews is provided below; focusing initially on the characteristics of the learning experience on offer.

Learning at the College – Some Characteristics

Very recently, the excellent provision at 'Bournemouth' has been acknowledged, with the award of University College status. This brings with it justifiable acclaim, but also sets some challenges. AUCB now finds itself standing on the national stage, certainly in terms of education, and potentially so with regard to research.

Although changes are envisaged, some things are to remain the same. Although there may now be a need for internal structural changes, the University College will resist any temptation to widen its 'discipline base'. It will resolutely stick to those areas of educational provision – Art, Design, Media, Performance – in which it excels. In addition, although the institution may now hold a national remit, there is a determination to provide services and learning opportunities which will meet the needs of the local region.

Clearly, these will be achieved to develop further a culture of research, within the institution, commensurate with its new status. But, again, there is a realisation that this must grow from what is already excellent. The College has developed a strong 'community of practice', and it is on this that research programmes can build; with AUCB in a unique position to explore more fully the pedagogy associated with 'educating for creativity', and to share the findings of such enquiry with others.

The characteristics of the learning experience offered by AUCB are explored very briefly below in Exhibit 15, based on the interviews held with academic staff.

Exhibit 15: Characteristics of the AUCB Learning Experience

<p>A commitment to encompassing diversity</p>	<p>There is a commitment to providing an educational experience which will meet the needs of a diverse group of learners; students drawn from a range of socio-economic backgrounds, bringing variety to their studies, in terms of expectations and learning experiences; and in some cases, in terms of prior educational qualifications.</p>
<p>Meeting individual learner needs</p>	<p>Addressing diversity does not stop at admissions. In a range of ways, through both content and sequencing of courses, there is a strong drive to offer educational experiences which meet individual learning needs.</p> <p>This can be seen in the programme of broad-based introductory courses; in the continued strong commitment to the Foundation Degree route; and beyond Foundation level, in the increasingly challenging and diverse options offered to learners.</p> <p>Students are encouraged to become generally more independent in their learning and choices, as they proceed through their studies, and are guided to develop along routes – broadly vocational and academic – which suit their aptitudes and career aspirations.</p>
<p>Promoting active learning</p>	<p>The College has excellent facilities and resources, and staff use these to encourage an active and hands-on approach to learning. Students gain a lot of studio experience, with opportunities to engage actively through projects, group discussions, etc.</p> <p>Such experiences provide opportunities for self-exploration or performance, along with a chance to learn from others; with the aim of encouraging self-expression and creativity.</p> <p>A public exhibition at the end of the final year serves to celebrate what each student achieves.</p>
<p>Learning from the ‘world of work’</p>	<p>There is a strong commitment at the College to enhancing learning by providing experiences ‘beyond the College’, through ‘live projects’, off-campus visits, work placements, etc.</p> <p>The aim here is to enhance students’ understanding of the issues and problems associated with the ‘real world’ – what is done, why and how. There is an expectation also that students will gain a fuller appreciation of what is required and expected when coping with day-to-day reality.</p> <p>In addition, these experiences provide opportunities to develop a range of personal and professional capabilities, by both individual endeavour, and by collaborating with others.</p>

The key words have been highlighted above in Exhibit 15. There is a strong drive at AUCB to offer learning experiences which meet educational needs and which promote active hands-on explorations. There is also a heavy emphasis placed on enhancing the context in which learning takes place, beyond the narrow confines of the College campus, in an attempt to raise understanding of the realities of the 'world of work'.

If the Museum is to play a greater part in the student experience, then it must offer learning opportunities which match the above characteristics.

Personalising the Learning Experience

There is quite appropriately some standardisation across the sector, associated with courses offering similar learning experiences. This can be seen in the course descriptors and basic structure, and broadly also in relation to course sequence and content. 'Commonality' is also encouraged through inter-College collaborations, with colleagues able to share experiences and influence one another in terms of what might be offered and how.

Nevertheless, as with educators at all levels of learning, lecturers at this University College seek to incorporate their personal imprint to the process. This stems not from a desire to impose their own notion of what the learning outcomes should be – sustaining a clear idea of what the student needs to know remains paramount – nor from a wish to impose on the course the lecturer's own particular interests. Rather, 'personalisation' results from lecturers at a particular College, both in course teams and individually, applying their own principles to think through how best learning outcomes can be achieved. It derives also from the lecturer's desire to draw actively on personal experience, expertise, contacts, etc to inform, stimulate and encourage their students more effectively.

As a result, each course gains its own distinctive balance and emphasis. Each offers a unique blend of taught elements, learning activities and experiences.

This process of personalisation was made manifest in a number of ways during the interviews. Three aspects of particular relevance to this evaluation are listed below:

- The **acquisition and choice of artefacts**, visual images, etc to inform the learning process.
- The **selection of topics** for discussion sessions and projects designed to meeting learning needs.
- **Identification of locations** (both within the University College and off-campus) to provide contexts for learning and development.

It is clear that the Museum of Design in Plastics can have a role to play in relation to the above, and strategies to promote this will feature later in this Report.

There's Always So Much To Do

“There is always so much to do. When a particular element of any course has been completed, **it drops off the radar**, as you move on to the next part”.

“Delivery is a really difficult thing. You are always thinking: ‘How can I do this!’ ‘How can I change that to make it better?!’ This is **continuous** throughout the year. **You only get one chance each year** to do something. Then that chance has gone, and only becomes available one year later. You can react within the moment with: ‘Oh, I really messed that up!’ But, **then something else comes along**, and it all gets pushed away”.

The two comments above describe the remorseless momentum that becomes established once courses get underway. As soon as one element is completed, “it drops off the radar”; “gets pushed aside” as a new element demands attention. Such relentless demands greatly reduce the opportunities lecturers have in the short-term to engage critically with what is happening in the educational process, and what might be changed to enhance the learning experience.

Nevertheless, as one interviewee pointed out, there was a need “to keep people’s minds fresh as to what might be possible”, with the Museum playing an active role in this.

In the following sections, ways are considered by which the Museum could operate to meet this need.

The Plastics Museum – General Perceptions

Interviewees were impressed by a number of features of the Plastics Museum, and of the staff associated with it. This Museum, it was acknowledged, had a unique and specialist collection, providing a high standard of presentation and service. Such a collection was clearly highly valuable in its own right; available to both the general public, and to a variety of specialists (historians, researchers, etc), but also represented a potentially rich resource for enhancing the quality of learning within the University College.

Museum staff were highly professional in their dealings with students and academics; responding positively to requests, and providing support and guidance. They had proved very knowledgeable about the collection, and were often able to help clarify 'visitor' requirements and to suggest alternatives from within the collection when specific requests could not be met.

The interviews revealed that the collection was being used in a number of ways, in an attempt to meet a range of learning outcomes, and these will be considered in a little more detail later in this Report (see Strategy 1). For now, attention falls on the academics' perceptions of the limitations currently associated with the Museum's attempts to enhance educational quality.

Limitations

1. Location and Separation

The collection is separated from the mainstream, located away from the day-to-day studios of the University College. Inevitably, this gives the Museum a low profile and limits the extent academics and students sustain an awareness of what it has to offer.

This argument is expressed in the extended comment below:

“It is a public museum, and a unique collection. Yet, in some sense, we seem slightly apologetic of it. We tell everybody we have got it, **but don’t see a great deal of that as visual evidence of its existence...**

...The museum staff are working very hard. The **physical location doesn’t help**. It is located in a shuttered-off mezzanine, at the back of the library... exhibition cases on a back wall...

... In a real world, the museum **would be more out there**. We should **all be aware of it**, more within the spaces that we use. We should be constantly **walking** through its objects”.

In addition, the small size of the museum limited the number of students who could be accommodated at any one time to engage in active explorations.

A further limitation relates directly to the collection itself.

2. Objects to be Protected

“When the museum hands out objects, it’s all white gloves. **There is this perception of the collection being precious. Something to be guarded**”.

“If an object is trapped behind a glass case, has to be handed in a particular way, with an emphasis on protection, **that might limit the opportunities that object could afford the learner for active exploration**”.

“It is a museum. It has curators and necessarily a notion of curation that has to be maintained. This creates an obvious conflict. There is the concept of having objects which are precious, to be valued and to be protected. **This is in tension with a desire to have these objects out there and being handled**. We would wish to **take these objects out of their context**, reinvent the context to inform a different interpretation, but often we are forced into what are **tight constraints**; those of a museum context”.

The three comments above relate to a further perceived limitation of the Museum's collection in relation to promoting learning. The need to have objects handled with "white gloves", or have exhibits "trapped behind a glass case", reminds us that these are specimens to be care for and valued. While academic staff see this as totally appropriate, they also see constraints. Staff can feel restricted in how they make use of the objects. There can be limitations on the extent students can engage in active and hands-on learning; as one colleague explains: "there is nothing like being with an actual object":

"No matter how well it can be reproduced, **there is nothing like being with an actual object**: seeing its actual colour, rotating it and handling it, feeling its texture and its weight".

One final – and more minor limitation – relates to the students themselves, or more accurately to their initial attitude towards the collection.

3. Not Taking the Collection Seriously

The initial response to the plastics collection for some staff could be one of bemusement. One interviewee explains:

"Students can be slightly wary of the collection. The response **can be dismissive**. 'I've got one of those'. Or, it could be something their mother or granny had!"

The effect can be that the collection and its objects are not taken seriously, and are dismissed as artefacts inappropriate as the starting point for serious study.

Although the limitations identified here did exercise the minds of colleagues during the interviews, the message, as expressed below, was not to see them as too damaging:

"Limiting parameters must be **viewed as a challenge**. Students must **go beyond** the space as a limiting factor and beyond the object as something on display. The best students will go beyond the object, to provide a reinterpretation or transformation".

Clearly, in the spirit exemplified above, while it is important to articulate the limitations, as expressed in the interviews, it is not appropriate to dwell on them too strongly.

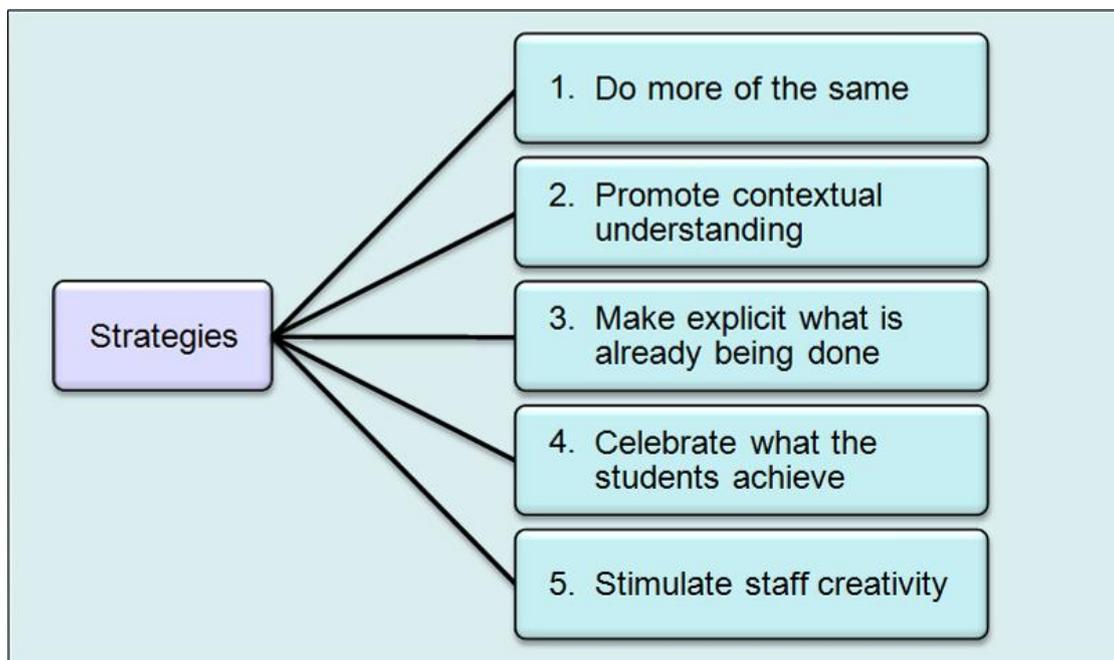
Instead, attention falls in the final Section on what would represent positive strategies to enhance the Museum's contributions.

Using the Museum More

It is important to maximise the number of people (both academic staff and students) who are actively involved with the Museum. That will generate a momentum. The more people become actively involved, the more a momentum will develop. Getting such a momentum is important if you are going to maximise potential.

What then would represent possible strategies to build such a momentum? The interviews provided some answers to this question, with a number of strategies identified, as represented below in Exhibit 16:

Exhibit 16: Using the Museum More



Each of the five strategies delineated in Exhibit 16 is considered in detail in the following pages.

Strategy (1): Do More of the Same

It is clear, from the interviews, that colleagues are highly satisfied with the quality and range of facilities and resources made available to them by the University College. And, as we have already seen, this response also applies to MoDiP. They acknowledged that, despite the limitations identified earlier, the Museum – through its collection and the expertise of its staff – was making a positive contribution to the learning experience offered by the institution.

This was being accomplished in a number of ways: through its exhibitions, “usually superbly presented, stimulating and informative”; by putting objects on display or making them available – either singly or collectively in ‘object boxes’ – to take outside the Museum; and through the expertise and support given by Museum staff.

As a result, learning and creativity were being promoted at a number of levels, either within the formal learning experiences offered by individual courses (see below), or informally when students make their way to the Museum to use it:

“as a source of reference or stimulation, by looking at certain genres or at individual exemplars”.

In formal educational settings, objects were acting as a resource to:

- Improve student’s artistic, technical capability (e.g. drawing, model making, photography)
- Enhance understanding and personal interpretation, and help students develop their own ideas by reinforcing messages from presentations
- Stimulate discussion, and encourage active explorations
- Promote individuality through creative transformation (with the object as the starting point).

In effect, the Museum was enabling colleagues to engage in the process of personalisation identified earlier. One colleague provides an illustration:

“I was spending a lot of my time collecting things from all sorts of places, and thought ‘this is daft’. Then, **I thought of the museum**. I was thinking: ‘There is all that stuff there. **Maybe we could use that**’. So, I went there and said I was looking for such and such... It **just hadn’t occurred to me**. **You are very busy devising projects**, and you don’t think of where **the easiest place to get things might be**”.

As so often happens, within organisations the most readily available source of advice or resources may be the last place considered by those seeking support to enhance the learning experience.

This appears to be operating in the case below:

“It might have something to do with the mindsets of academics not thinking broadly enough **about how the objects could be used**. For example, we do a food packaging project, **but I have not thought of** going to the museum to see what might be available”.

The issue relating to how objects could be used will be considered a little further in this Report (see Strategy 3). The need defined here is to raise awareness of just what is contained in the collection.

As one colleague explained:

“The need is for more information **simply about what is there in the collection**. That could enable a colleague to think, ‘Perhaps I could base a project around that’ – a photograph, a piece of narrative, or the object itself”.

Another colleague sought similar information to stimulate development, with this based on a website to be accessed by teaching staff and students:

“If you were doing a particular project, it would **be good to be able to log on and see physically what we could have**, along with **some sort of documentation** saying where it was made, why it was made... Something that is not in a glass case, so that we could book it on-line and go and pick it up”.

Colleagues were aware that the JISC-funded project to digitise the collection would provide greatly enhanced images and improved meta information. Establishing such an improved resource was seen as an “important step forward”, enabling the museum to do better than what it was already doing. In addition, such a resource would be especially appealing to students who are well versed in accessing information through computer-based technology.

Although, as acknowledged earlier, such a resource could not replace providing approaches for direct connection with actual objects.

Each object in the collection represents an artefact frozen in time and space. Strategy 2, which follows, sought to build on this by providing an understanding of “the object within its context”.

Strategy (2): Promote Contextual Understanding

The need was identified to use the artefacts held by the Museum as a starting point for further enquiry and application.

This is expressed below:

“We all do art and design here, and the museum provides us with **a unique collection. Artefacts which can act as vehicles to help show how things have been developed, and how things led on to something else...**”

The implications are further explained:

“... Any design course cannot operate in isolation. There are an infinite number of political, social and economic influences. That’s **where a collection can make a contribution, by feeding into courses; informing, raising awareness of developments and of the contexts in which these occur**”.

Examples of the types of questions that could be asked, and of the possible issues to be explored are provided below:

“Why has this object come into being? Why is it like this? Is it as the result of the manufacturing process? Why has it replaced or superseded something earlier? **What’s the story there?** Practicality? Design? And so on”.

“You could, for example, have a radio which **demonstrates in a physical way** post-war optimism, the streamlining of American design, the space age, and that sort of thing”.

Although Strategy 2 would clearly bring the Museum collection into greater prominence, it is unclear as yet exactly who would take responsibility for ‘creating such stories’, and for demonstrating context ‘in a physical way’, and with what resources.

In Strategy 3, attention switches back to current practice, in this case in relation to promoting student learning.

Strategy (3): Make Explicit What is Already Being Done

It was pointed out that some people were already using the objects incredibly well. Others were not incorporating them into the students' learning experience.

Yet those non-users are not a single group. As one interviewee explained:

“There will be some who choose not to incorporate these objects into their teaching. For others, though, the fact that these resources can be the starting point for discussions and project work **may not yet have entered their conscious thinking and planning**”.

Having a high quality resource – the Museum, the objects, the enhanced website – is not sufficient on its own to raise awareness of its potential to promote learning. Marketing the resources – ‘this is what we now have available. Now, go ahead and use them’ – is not enough.

One interviewee explains what is needed:

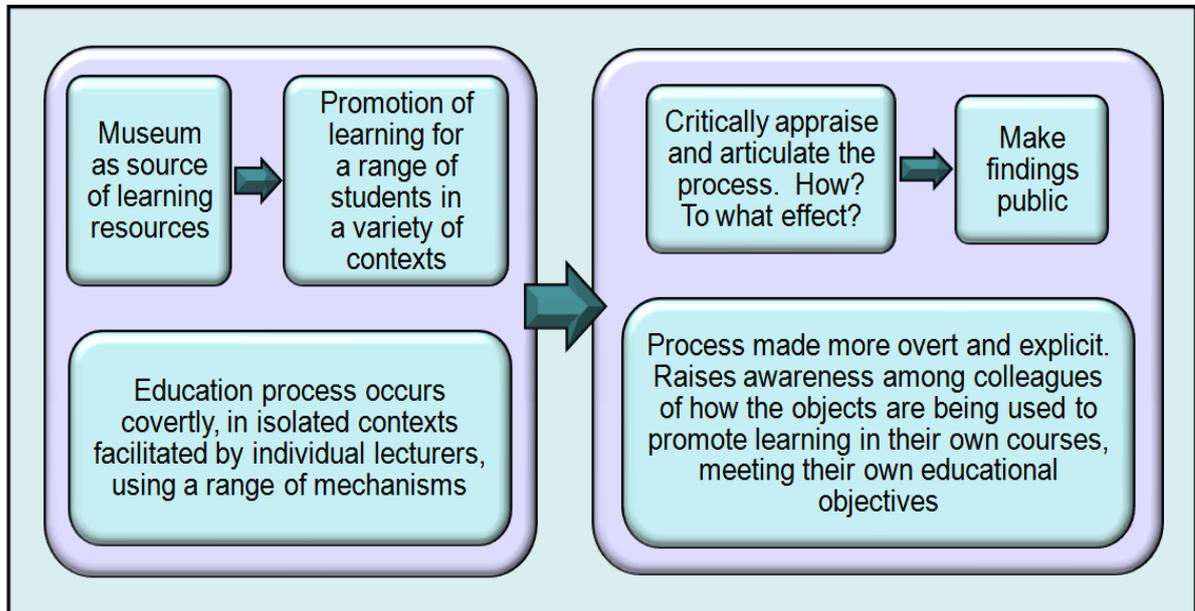
“It’s difficult to see the website or the collection per se stimulating changes in educational practice, in areas where previously it has made limited inroads. **There is a need to look at the courses, and more particularly the projects and teaching where these objects are being used...**

... The objects represent quite odd starting points. You can end up with diverse outcomes (as costume, film, etc). **There is a need to make more explicit how** the learner, and the teacher, **takes the object**, and **what can happen**. Some of the journeys are obvious. Others are more convoluted. Much of the **transformation** is initially unplanned. Some of it is exciting”.

The strategy here is to focus on actual practice to make more explicit and overt how these objects are being used, and to identify what is being achieved. Developing such an understanding, it was argued, “could be an eye-opener for staff”. **It would provide an appreciation of how the objects could be incorporated into the learning experience to “meet [colleagues’] own educational agendas”.**

This process is represented schematically below in Exhibit 17:

Exhibit 17: Making Explicit What is Already Being Done



While such an exploration of pedagogy could prove highly beneficial, the evaluators are fully aware of the problems this would impose.

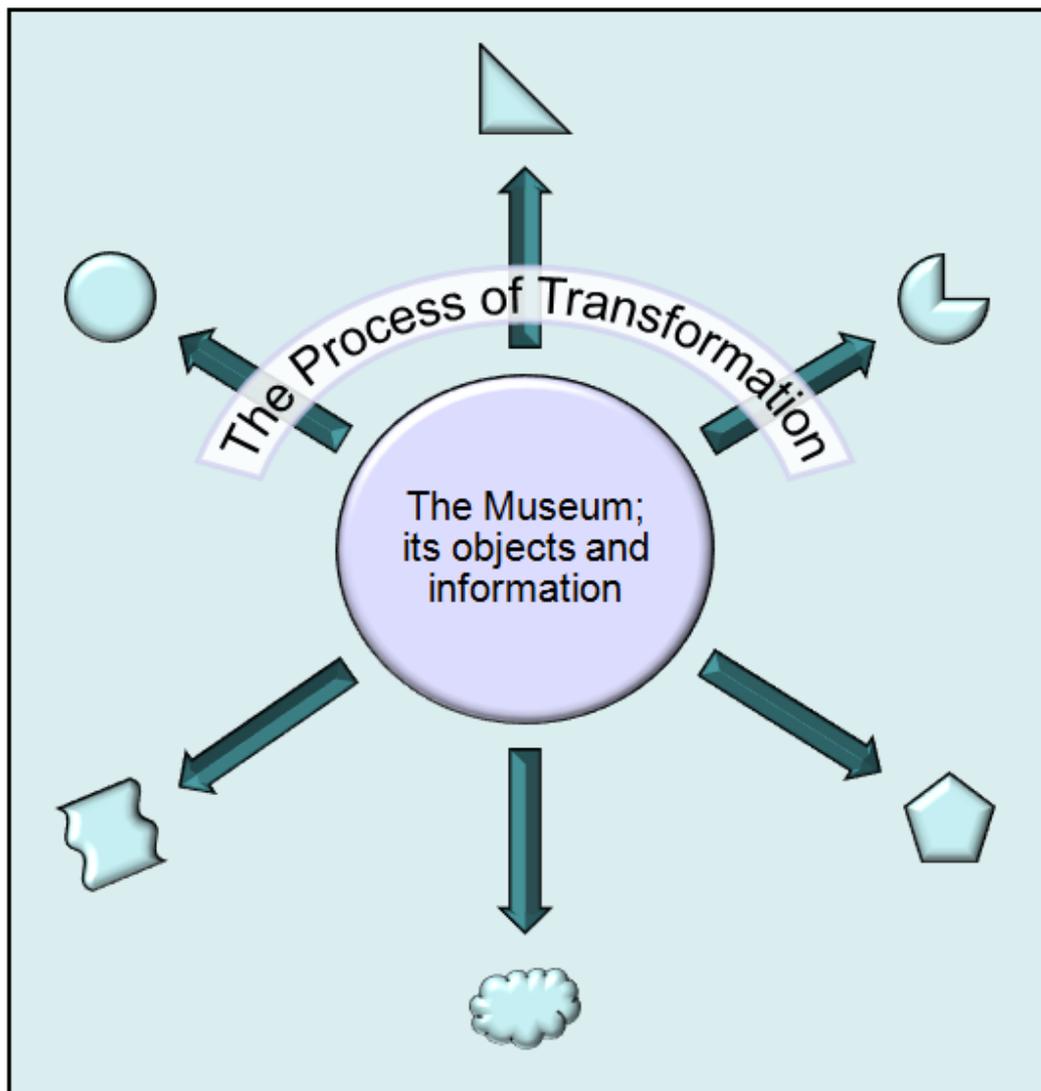
This cannot be done, for example, by imposing a pro-forma on colleagues, and expecting them to compile a written synopsis of what it is they do when they and their students engage with the 'objects'. This is, in effect, a research project.

An extension of this project, defined in Strategy 3, might prove a more practical starting point.

Strategy (4): Celebrate What the Students Achieve

As we have learned already, engaging with the objects on courses and projects promotes development in a number of senses. The learning process can relate to improved technical skill, enhancing understanding and promoting creativity. In a number of cases, they can involve transformation of the original object(s) into tangible products which are unique to the individual, as represented below in Exhibit 18:

Exhibit 18: The Process of Transformation



The strategy would involve making public what the students create, as a result of this process of transformation. It would form part of a wider drive "to celebrate the work of the students, at times throughout their studies. We don't see anything of their other work apart from the graduation shows".

Again, adopting this strategy – and basing it on the Museum objects as a start – would be demanding, as one interviewee pointed out:

“In the normal course of events, there just **isn't the time to document**, let alone make public, what the student has produced, represent what s/he has learned, **as a result of working with a particular object**. Obviously, **there could be examples** of what has already been done and what the students end up producing, but it would take time and effort”.

Again, resources and active support to colleagues would be needed to enable this strategy to become reality.

In the next strategy, attention switches from the students and from a direct consideration of learning, to focus on colleagues themselves; and more particularly on their artistic creativity.

Strategy (5): Stimulate Staff Creativity

A final strategy would build on the success of an earlier initiative successfully undertaken at the College. This project, undertaken over an 18-month period, culminated in a public exhibition of art created by the staff, and held at the Russell Coates Museum. The work was further celebrated through a publication.

The proposed initiative would use objects from the Plastics Museum as the starting point. A more detailed description of what is envisaged follows:

- The initiative would engage individual lectures from different discipline areas in an extended creative project.
- The aim would be to highlight the creative process, and to celebrate its outcomes.
- Each participant would embark on the “development of art work”. This would be a “personalised journey”, with each colleague “choosing their own ‘object’ from the Museum collection as a starting point”.
- Very little restriction would be imposed. Colleagues would be allowed to explore, and to represent and record the process, in any way they thought appropriate. “People could make anything”. They could run with it “in whatever direction the process takes them”.
- The outputs could include:
 - A public exhibition “drawing on the collective outputs from a disparate group, representing differing subject interests”
 - A publication.
- In addition, there could be major educational benefits, with staff encouraged to share with students their experience of engaging with this project:

“The process could be unpacked and communicated, with planned and unintended outcomes communicated. The relationship between the original object and the finished outcome could be explored. Ways chosen for recording the development could be explained”.

The initiative outlined above has an obvious appeal. There appear to be several winners: the University College itself, the Plastics Museum, the academic staff participating, the students. If successful, such an initiative would celebrate creativity, inform pedagogy, and enhance the status of the Plastics Museum.

However, it is important to sound a note of caution. A number of factors contributed to the success of the earlier project. Staff motivation and enthusiasm were sustained, and a high quality of work attained, because:

- Adequate funding was made available to purchase resources, release some staff time, and finance the exhibition and publication.
- The project was led by a highly capable and motivated member of the College staff, who throughout the initiative managed the process; both collaboratively (through progress meetings), and at an individual level (through one-to-one interaction with specific participating colleagues).
- Participation in the initiative did involve colleagues submitting a 'project brief', but care was taken to ensure that this process was neither demanding on time, nor prescriptive in terms of what each participant could do.

To repeat the success of the earlier initiative, the evaluators are convinced it would be necessary to replicate the above features.

Some Reflections

Some Reflections

Processes and Outcomes

Clearly, this Project has been a success, and this evaluation tells us why.

The Museum of Design in Plastics (MoDiP) put forward a convincing argument for undertaking this initiative, and was able to set realistic goals for its achievement. The Museum was able to build on previously funded work, and to strengthen a number of existing partnerships – with a range of organisations and agencies – as it embarked on the development programme.

In addition, the Museum was able to bring together a talented and enthusiastic group of people. Members of the Project Team pooled their expertise and experience, and worked alongside one another – and with outside specialists, as required – to push development forward. Formal team meetings enabled colleagues to air their concerns and share problems; promoted a discussion of issues; and, crucially, established strategies and practices which ensured outcomes would be delivered to a high quality.

Perhaps the most telling messages about Project delivery can be seen in the way the team engaged to meet challenges. Clearly, there was a willingness to reflect on practice and to appraise critically what was currently being done by the Museum. There was also a strong drive to seek support and guidance from outside. Often, this involved evaluating practice elsewhere, and sometimes it emerged that no suitable solutions could be found. The response has been for the Team themselves to develop practices and strategies. And the pay-off for this has not simply been that the Project got done, but that robust approaches to development are now in place to enable further work to be undertaken.

There is now much to celebrate. At the most basic level, the Project clearly delivered on its intended outcomes relating to digitisation; and did so despite early setbacks.

But the success of the initiative lies well beyond this. The Project Team realise that funded projects are of very limited value, if they come to an end when external funding dries up.

The Museum is determined to push forward, and there is much to build on. As already noted, practices have now been established which will mean that digitisation can be pushed forward with greater efficiency. Work already done on the website means that MoDiP is now in a strong position to seek further funding to complete this venture. In addition, partnerships forged through the Project place MoDiP in a much stronger position to reach out beyond the College, to the 'world' of plastics and education.

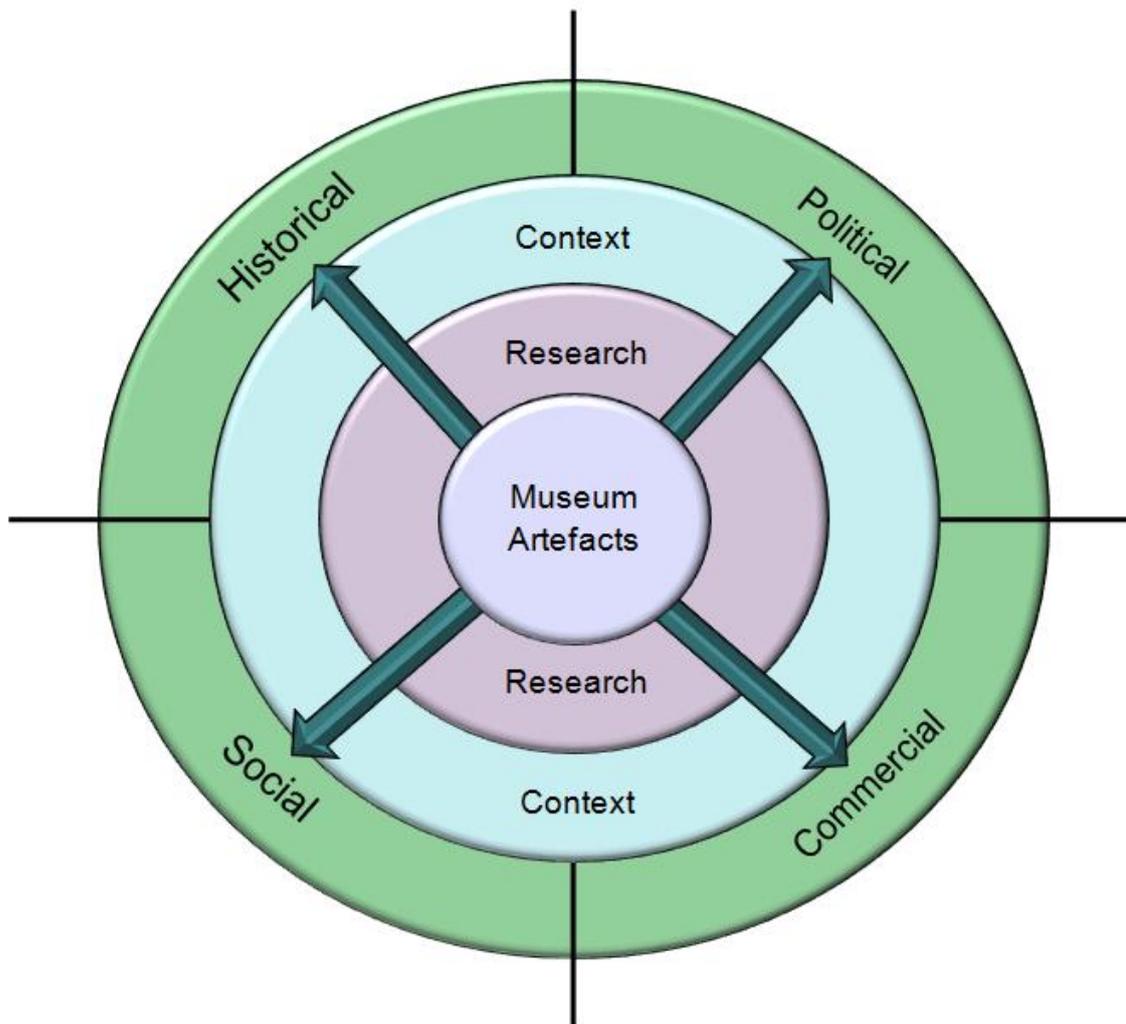
It is, however, with education that the main thrust must lie. Throughout this Project, it has been made abundantly clear that the students represent the most important clients. Enhancing the quality of learning remains the Museum's primary concern. Recent experience gained by MoDiP in developing Continuing Professional Development (CPD) modules for 'museum professionals', combined with the success of this digitisation programme, represents firm foundations on which the museum can now build to address this need.

The Way Forward

As noted earlier, gaining University College status brings with it an expectation that AUCB will develop further a culture of research within the institution. MoDiP appears to be well-placed to contribute to this in two senses.

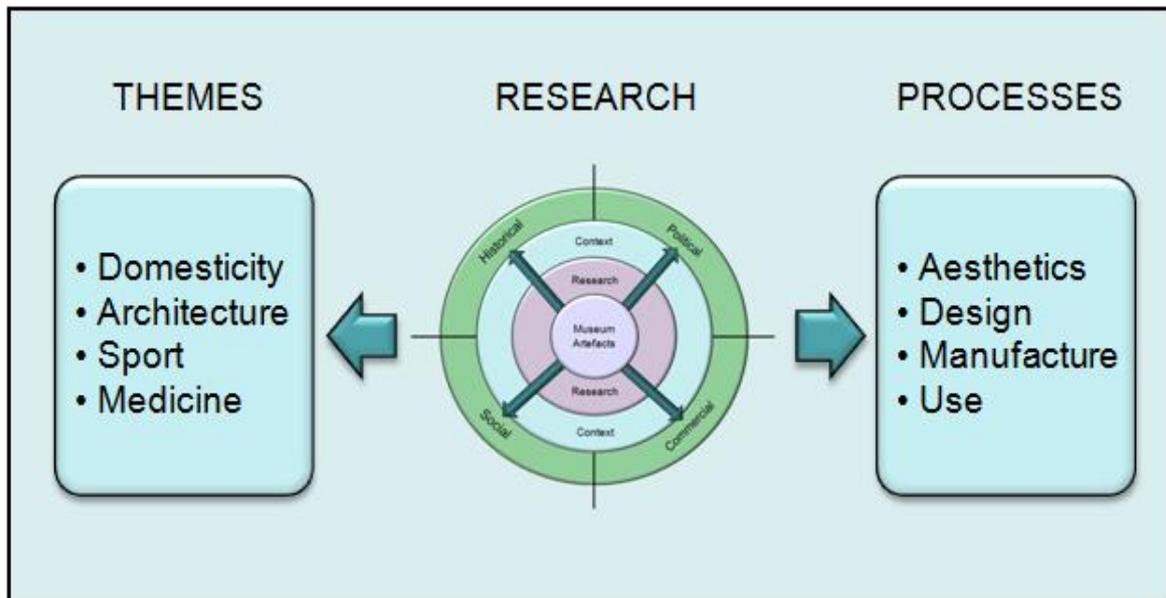
The drive towards designated museum status will strengthen further the position of MoDiP within the research and museum community. There is now the potential for this unique collection to become the focus of research which locates artefacts in their historical, political, social and commercial context, and which promotes critical enquiry into the design, manufacture and use of these artefacts; see Exhibit 19 below:

Exhibit 19: Museum Artefacts as the 'Focus' of Research



Several factors would shape such research. It could be considered in terms of ‘themes’ or with regard to processes, or a combination of both; as represented in Exhibit 20, below:

Exhibit 20: Proposed Research Activity –Themes and Processes

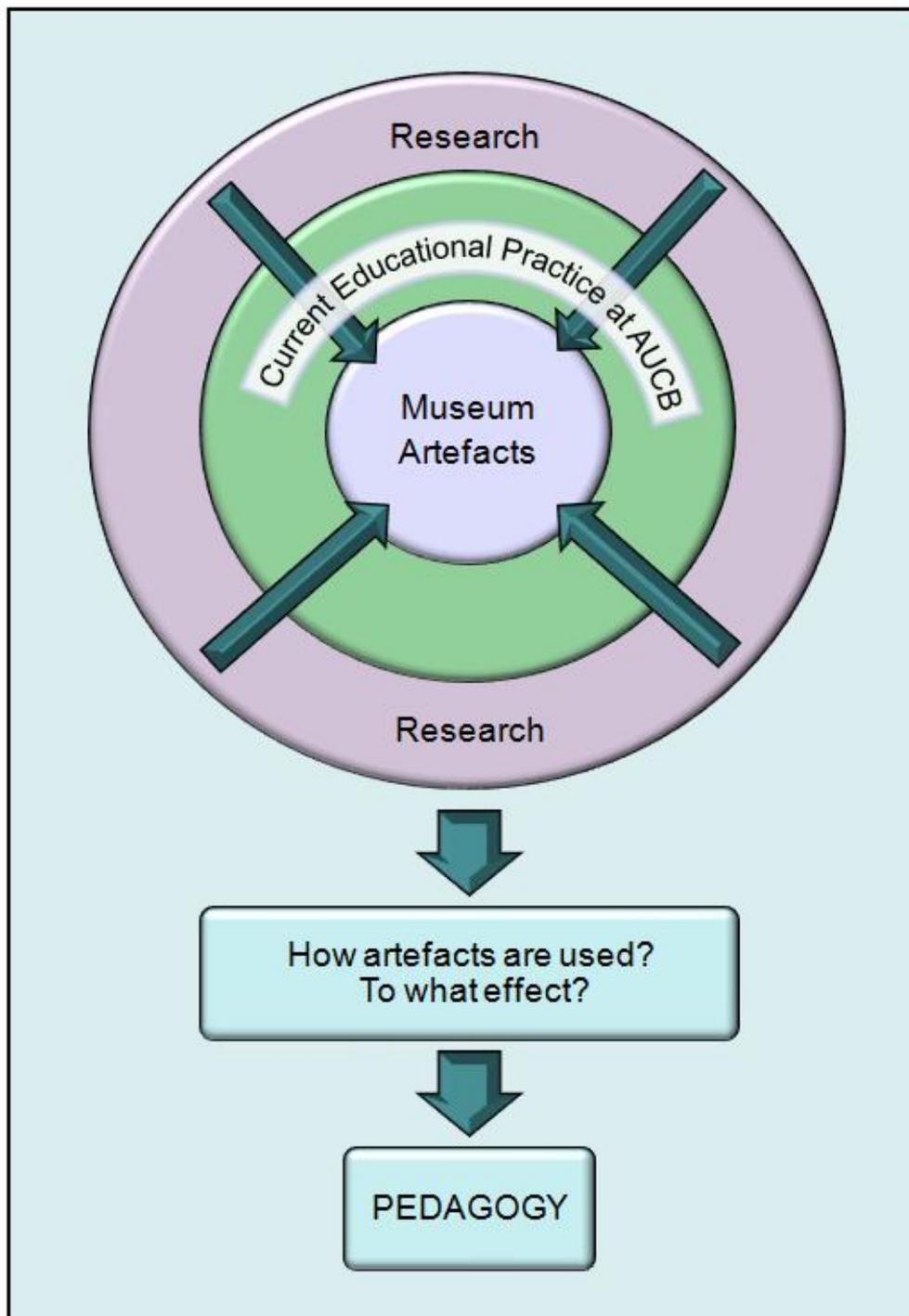


A further critical evaluation is now needed – located with those who have been partners in the JISC-funded Digitisation Project. This would provide a valuable insight into what can now be done to initiate such research. As seen in Part B of this Report, the outcomes of such work could prove to be an invaluable resource for academics seeking to enhance the students’ learning experience.

As has already been seen, the ambitions of the Museum lie beyond expanding its activities through research. There is also a strong drive to play a bigger role in student education. Again – given the drive of AUCB to engage in pedagogic enquiry – the Museum is strongly placed to make a positive contribution. Already, there are plans to develop ‘learning packages’. But Part B has indicated that there are other strategies that could be adopted.

Here, the emphasis lies not with the artefacts, but with current educational practice at the College which relates to the Museum and its collection. The aim is to explore critically how, and to what effect, artefacts are being used to enhance student learning, and to raise more generally an understanding of how this unique collection can be use more widely, and to greater effect. This is shown schematically in Exhibit 21, below:

Exhibit 21: Museum Artefacts Contributing to Pedagogic Research



Such work, it has been emphasised, cannot take part in an ad hoc fashion in the odd moments when practitioners may chose to think about it. It requires commitment and funding.

The next step should now be to engage in strategic planning to make the research happen.

Appendices

Appendix 1 – MoDiPDiP Staff Consultation

MoDiPDiP Staff Consultation

The MoDiPDiP Project Team asked a number of AUCB staff the following two specific questions:

1. How can we improve the presentation of the images?
2. How can we improve the information we offer?

Responses are summarised below:

Student group – Foundation

Catalogue:

- The information his students would find useful is: the designer, the date, materials, manufacturer (less important), historical context and a good description.
The example looked at was VANS snow boots.
- Although the extensive 'brief description' was great, the layout could be off-putting (i.e. all in one big block).
- It would be helpful if key words could be highlighted so that they could be related to the image and if there could be some way the image could be labelled that too would be a big help.
- The images are good and additional views excellent. The quality of the images was good.
- If the object is on current display, a note to that effect on the record would be an advantage and help to tempt students to investigate further by coming to the museum to view the actual object.

Website:

- Website layout poor. It would be better to have all the information on one page. Much of the screen isn't used. Thumbnail images along the bottom of the page would be helpful.
- Navigation of the site is poor. Very difficult to find your way around.
- Links to other objects would be very helpful (e.g. with same branding, styling, designers etc)
- Links to a time line, historical information or decades would be very helpful.
- Different 'levels' of information aimed at different student groups would be an advantage. Mark felt that some students wouldn't need or be interested in such detailed information where as others might benefit from very detailed descriptions & background information.

Student group – Product Design

Image quality not important to him although he likes to be able to see the texture of the material and how the object is constructed.
Advises use of plain background – not blocks.

Would like:

images of the object in use / context (e.g. marketing images)

search by materials with links to:

search by process with links to:

- technical information
- what else you can do with it
- advantages and disadvantages
- where you can get it/ who does it

Otherwise content with current practice.

Student group – Interior Architecture

Vital to have an image but quality not crucial – just good enough to tell what it is.

Would like to see objects in context.

Important to provide background to the product's manufacture and use or references for students to follow to that information.

Good to have all records to a shared standard but the more information the better.

Important to be able to click to next page of searches without having to scroll back up to the top of the page.

Website needs to be made more enticing.

Student Group – Graphic Design

Layout

- Could be improved by presenting text in a block and highlighting key words.
- The full page is currently not utilised. It would be better if all the information about an object was presented on one screen (no scrolling?) and thumbnails of other images along the bottom of the screen.
- The information given could be better and there are navigation problems.
- Links to other objects would be useful.
- Link to Black board would be useful.

Information

- If an item is currently part of an exhibition and on display a message to that effect could be usefully added to a record
- Important/useful information = Designer, date, material & possibly manufacturer.
- Historical context is considered very important.

Images

- Thought the images were v. good & liked the different views of each object.
- Images could be 'labelled' with key words which appear when the cursor is moved over the object.

Appendix 2 – Metadata and Multiple Images

An example of how the project Objects List translated into metadata for multiple images taken of an object from the MoDiP collection is given below:

Accession Number:	AIBDC: 005514
Classification:	toys and games
Type:	vehicle
Object Name:	lorry
Title:	Baby Truck
Description:	A child's toy refuse truck with bin emptying mechanism at the rear dating from the 1980s. This truck is made of multiple parts and assembled to form a robust, young child's toy in bright primary colours. The main body of the truck incorporates an easy grip carrying handle. The words 'Baby Truck' are embossed onto the front of the cab. Two stacking refuse bins are included which are carried by the truck at the rear.
Manufacturer:	Wader Speilen & Erleben
Designer:	Unknown
Place:	West Germany
Date:	1988-1989
Method:	injection moulded
Material:	plastic, PP, polypropylene
Condition:	good
Colour:	red, yellow, blue, black and green
Dimensions:	height 195mm, width 165mm, length 275mm

