

Creating an appreciation of money: Contextualised financial education through monetary collections

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Achieving economic well-being and improving financial capability are firmly set within current social policy agendas. Financial education is therefore a crucial element of creating citizens who will make a positive contribution to the world around them. However financial education is more than just being aware of saving strategies; students need to understand the role of money, both at a personal level and within society. This includes appreciating the power, responsibility, benefits and challenges that money can bring, and feeling confident in managing these very different associations.

Monetary museums and museums with access to a monetary collection are perfectly placed to provide a programme that will facilitate this appreciation. They have the unique opportunity to deliver financial education in a historical context; emphasising the development of money in society, various cultural relationships with money and the role money has played in the creation and destruction of entities. Taking inspiration from the collection in the Citi Money Gallery allows themes surrounding money, such as recessions, single currencies and bank accounts, to be explored. From this, students can develop an understanding that these apparent modern concepts have actually been experienced and evaluated over the last 4000 years.

Contextualised understanding is therefore paramount in developing an appreciation of money and the social impacts it can have, rather than simply gaining an isolated knowledge of the functions of money. This paper will further explore the importance of delivering effective contextualised financial education and the roles monetary museums play in facilitating this. A pilot case study for the Citi Money Gallery education programme at the British Museum will be utilised as exemplar material to investigate these themes.

Enabling students to experience money in such a broad context will directly contribute to a deeper appreciation of it. This will then enable the outcomes of contextualised financial education sessions to be transferred to every day interactions with money, creating a more robust and memorable learning experience.

Achieving economic well-being and improving financial capability are firmly set within current social policy agendas. Financial education is therefore a crucial element of creating citizens who will make a positive contribution to the world around them. However financial education is more than just being aware of saving strategies; students need to understand the role of money, both at a personal level and within society. This includes appreciating the power, responsibility, benefits and challenges that money can bring, and feeling confident in managing these very different associations. This paper will outline the importance of financial education and how monetary collections can support it. Examples will be drawn from the recently developed programme for the Citi Money Gallery at the British Museum.

Why have a financial education programme

Financial education raises awareness of expenditure-based issues and decisions, and is the umbrella phrase for financial literacy and financial capability. Although these two terms are often used interchangeably, it could be argued that financial literacy provides a surface level understanding of financial issues whereas financial capability incorporates the associated behaviours and attitudes. However for this paper, the terms are considered synonymous.

The recent global financial crisis has heightened the importance of providing people with the skills to make informed financial decisions. According to The Money Charity, based on Q3 2013 trends, 79 properties are repossessed every day in the UK. Although these will occur for a variety of reasons, a number could be attributed to poor financial decisions. The consequences of these then impact on the health and well-being of those individuals involved (the Money Advice Service, 2013), and often further financial assistance is required. The far-reaching implications of ‘financial illiteracy’, at both the personal and social level, are reviewed by Habschick et al (2006) and summarised in Figure 1 below.

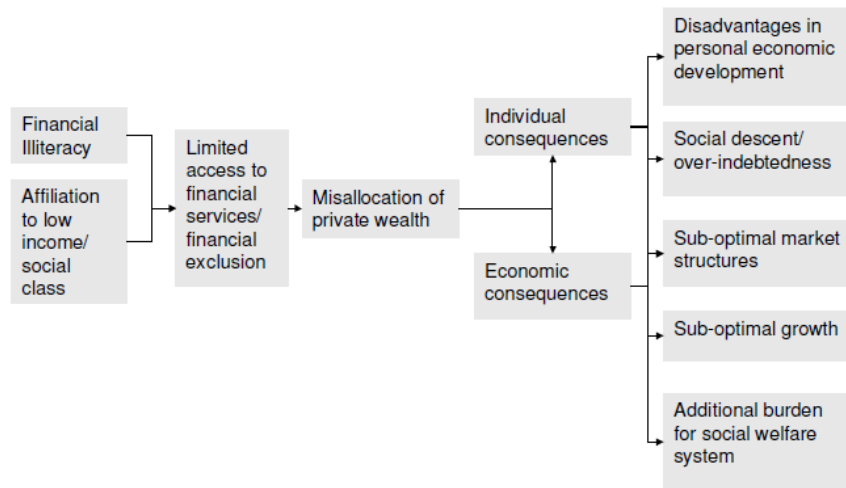


Figure 1: Risks deriving from financial illiteracy, Habschick et al (2006)

Financial education is a longitudinal course; skills and understanding develop over time rather than being taught in a single session. It is therefore important that an appreciation of money is created rather than trying to instil a set of procedures that should be applied in certain situations. Application of a rule has far less longevity as it is often perceived that rules are things to be remembered, and therefore if they cannot be remembered then there is no alternative solution. However, developing an understanding of how to respond to a situation supports the creation of a ‘skills set’ that can be drawn on for a variety of scenarios. Therefore, successful financial education should not be about whether students have left a session and ‘learnt something’, but whether they have understood the implications of making a financial decision so that they are confident in applying this in an unfamiliar situation. Young people are exposed to financial decisions from an early age, with 84% of 8 – 15 year olds in the UK receiving pocket money averaging at £6.50 per week, according to the Halifax Pocket Money Survey in August 2013. Yet according to research undertaken by the Money Advice Service, 49% of young people find it difficult to live within their means. This therefore highlights a very real need for effective financial education.

A more modern financial issue is the lack of understanding that money is tangible; “29.9 million plastic card purchase transactions were made every day in the UK in October 2013 with a total value of £1.479 billion” (The Money Charity, Debt statistics January 2014). Not seeing money as something physical has numerous connotations for the appreciation of it and ultimately the ability to make informed decisions. Young people have less exposure to physical money now as they observe daily transactions taking place in electronic forms,

including their lunch money at school occurring via contactless technology. There are numerous positive arguments for this, including making it safer for children by not carrying cash. However, the physical motion of giving someone money is a far more real experience than clicking ‘transfer’ or typing in a PIN (Personal Identification Number required for card transactions).

Financial education can be aimed at the personal, local, national or global level. Arguably the premise is the same for all; understanding the opportunity costs of available options will support the decision-making process at every level. People need to be encouraged to look past the immediate future and consider the implications over longer time periods. Again this is applicable to financial education at all levels and is most strongly demonstrated with examples. Using real life studies from history, either at the personal or global level, provides a reference framework for appreciating the consequences of various outcomes. Contextualised education is therefore a powerful learning tool, and monetary collections are able to support such a strategy.

The role of monetary collections in financial education

Monetary museums and museums with access to a monetary collection are perfectly placed to provide a programme that will facilitate the appreciation of money. They have the unique opportunity to deliver financial education in a historical context; emphasising the development of money in society, various cultural relationships with money and the role money has played in the creation and destruction of entities.

The Citi Money Gallery is a permanent display, found at the top of the South stairs in the British Museum. The layout is broadly chronological, starting with the beginnings of money and moving to the present day. Both sides of the gallery adopt a thematic approach within the cases, with the left side focusing on the role of money with authorities and the right side with individuals. There are additional island cases in the centre of the gallery which explore the making, storing and hoarding of money. Enabling students to experience money in such a broad context will directly contribute to a deeper appreciation of it. This will then enable the outcomes of contextualised financial education sessions to be transferred to every day interactions with money, creating a more robust and memorable learning experience.



The Citi Money Gallery

The gallery's coverage is global, making it a valuable educational resource. However, as a numismatic collection it faces the very real challenge of being a usable educational resource; a number of the objects are very small, they are all behind glass and there are a limited number of opportunities for interactive facilities. Throughout this paper, numerous methodologies and approaches will be considered that offer solutions to overcome these challenges.

Taking inspiration from the collection in the Citi Money Gallery allows themes surrounding money, such as recessions, single currencies and bank accounts, to be explored. From this, students can develop an understanding that these apparent modern concepts have actually been experienced and evaluated over the last 4000 years. By recognising this fact, a direct parallel to modern learning can be drawn from historical examples. Contextualised understanding is therefore paramount in developing an appreciation of money and the social impacts it can have, rather than simply gaining an isolated knowledge on the functions of money.

Regardless of the regularity with which an individual is exposed to physical money, everyone has an awareness of it, and this provides an immediate access point to the collection. Visitors and students will be able to assimilate their existing knowledge to the collection in some format, and the learning can be developed from there. This again is a unique advantage of a monetary collection and is one that should be utilised.

“Coins are not ideally suited to display. They were never designed to be admired from a distance of two or three feet through laminated glass. Rather, they were always intended to be handled.” (Orna-Ornstein, 2001: 107). The concept of enquiry-based learning will be discussed further in the next section; however it is important to note here that monetary collections on display can often be supported by a handling collection. The opportunity to physically engage with an object, regardless of its size, should not be underestimated and can be used as the foundation for creating memorable learning experiences.

A visit to the monetary collection also has a cultural aspect; this is definitely applicable for the Citi Money Gallery which is housed in the British Museum, although the experience of visiting any institution has cross curricular benefits. While not in the strict sense a financial education outcome, it is still an advantage to visiting a monetary collection.

How learners learn

“Learning theorists believe that, through the designed learning environments (contexts) and learning with hands-on projects, new knowledge cannot only be learned, but learned in such a way that the knowledge can be transferred for other applications” (Berry et al, 2005: 23). This is a fundamental principle of constructivism, where students learn in context. Aligned with this is the REACT theory for teaching and learning; Relating, Experiencing, Applying, Co-operating and Transferring (ibid). These are identified as ‘contextual learning strategies’ and act as guidelines for creating learning experiences that optimise understanding and application. Learning about the history of money provides a natural context for students to relate their current experiences to, creating a dynamic continuum built on prior knowledge. This ultimately results in a deeper appreciation of the knowledge and should ensure it is vertically transferred to various scenarios.

Being able to interact with a monetary collection through handling opportunities will enable students to participate in enquiry-based learning, where the onus is placed on the student to consider different lines of enquiry and identify questions related to the object. Understanding students' prior knowledge and building on this is important element to any educational session.



Image of students' initial thoughts on coin designs

When students have a true understanding of a concept, they will “intuitively activate elements of [their] prior knowledge” (Rebello et al, 2007: 8). Therefore students handling objects are creating the links for themselves and are more likely to appreciate when and how they can apply their existing knowledge; as previously discussed, this is important for financial education as there may be a time lapse in developing this knowledge and applying it.

To further support this learning style, it is important that the collection “integrate[s] coins with other related objects” (Orna-Ornstein, 2001: 108). This will ensure that students can connect to the collection on a number of levels. It also promotes a more robust understanding, appreciating how other items and concepts are associated with money. The Citi Money Gallery incorporates money-related items alongside the coins and banknotes in the collection, furthering the appreciation of how money is used. As a number of these objects are often ‘unexpected’, they have the powerful advantage of creating memory image banks to which concepts can be related.

The home of the monetary collection should be viewed as an alternative learning space, and there has been a vast amount of research undertaken into the advantages of this. By the very nature of being away from their usual environment, students are more receptive to learning. They have the opportunity to think differently, arguably more creatively, and are gaining an experience alongside learning. This again is an area to promote in order to encourage participation in financial education programmes.

Engaging with the education audience

The education market in the UK is almost saturated with personal finance education schemes largely generic in their approach, yet many schools fail to successfully participate in any elements of delivering financial education. Numerous barriers to delivering it can be

identified, primarily that in the UK it is a non-statutory subject. Elements of financial education do now appear in both the secondary mathematics and citizenship programmes of study, but arguably this compulsory aspect is insufficient. Schools are keen to support the Every Child Matters agenda point of creating students who can achieve economic well-being; however pressures on teacher time and a lack of subject-related knowledge for delivering the resources hinder this ambition.

It is therefore important that an education programme highlights a succinct outline of the learning outcomes, ensuring resources are accessible to teachers. The Citi Money Gallery education programme has adopted a bespoke approach, aligning the content with specific elements of the National Curriculum and programmes of study, including economics, citizenship and drama. Each session has clear subject specific aims, with the underlying theme of promoting financial education. Therefore the financial capability skills are enhanced within the realms of a subject, creating a dual learning outcome as well as contextualising the knowledge development.

Assumptions around what teachers and students want and need are often made in education programmes. This results in the two extremes of the resources spectrum; either very generic resources or resources that are too specific, neither of which are practical to a busy teacher. To address this, specialist knowledge should be sought in the development stages of the programme.

A teacher advisory panel was established within the scoping phase of the Citi Money Gallery programme. This enabled teachers to be involved from the very beginning, attempting to overcome the barriers identified. Schools that the British Museum has worked with in the past, as well as local schools, were invited to attend the initial meeting. The panel meetings are structured sessions, enabling teachers to share their views around key themes for the programme. There is also an open discussion in which the teachers raise their own thoughts or concerns, which feed into the structured section of the next meeting. Teachers have responded very positively to being involved in this process, appreciating that their knowledge and experience is being utilised for the benefit of a wider audience. This panel has also acted as a sounding board for ideas, knowing that practising teachers currently working within the framework of the national curriculum would provide honest and realistic feedback. This has been, and will continue to be, invaluable. It also adds validity to the programme; other schools will recognise the contribution made by their professional colleagues, entrusting their judgement and endorsement of the resources.

Through the teacher panel it has become evident that schools are also looking for opportunities for students to develop their key skills as well as content knowledge. The processes involved in these skills include the ability to reflect, justify, monitor, communicate and evaluate, all of which can be directly attributed to financial education scenarios. These can also be elicited through the use of objects and object handling, supporting the strategy of enquiry-based learning.

Although it is the students who will partake in the programme, buy-in is needed from the teachers. It is therefore important that teachers are fully aware of the programme and the benefits of it. One way of tackling this is to work with teacher training institutions, providing access to numerous teachers in one session. Modern teaching styles are creative and dynamic and so sessions should be inspiring to trainee teachers; they are keen to explore various ways of delivering the curriculum content. Therefore before they are in a full time teaching post is the perfect opportunity to sow the seed of using monetary collection environments as an

alternative learning space, as well as using items from the collection to support their lessons. On completion of their teacher training course, they will work in a variety of different schools, spreading the network of teachers that are aware of the education programme.



PGCE Mathematics students attending a session on using objects in the classroom

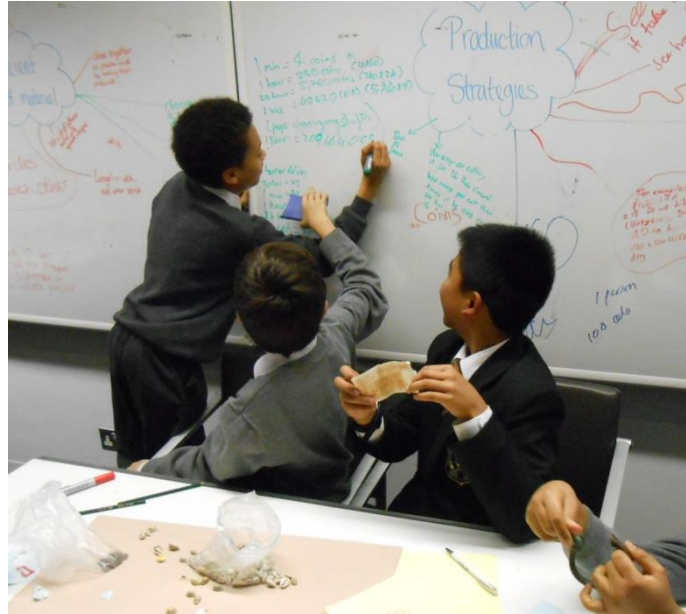
If the potential of external resources and alternative learning spaces are to be realised, schools need to be supported in how they look outside their classrooms. The Citi Money Gallery programme is very teacher, and therefore student, centred. It adopted this grassroots approach for the purpose of highlighting to teachers that their needs have been considered and addressed when using the Citi Money Gallery as a learning environment. To further encourage teacher participation, advertising of the programme needs to take place in the education market as well as the numismatic environment and, where possible, programmes should be offered at little or no cost.

What should a contextualised education programme look like?

The programme will need to include a variety of activities addressing different learning styles and needs, with very clearly defined learning outcomes. For the on-site school sessions, there should be a fixed number of options that schools can choose from, providing a balance between the programme being too generic and being responsive. While there is validity in a responsive based programme, the consultation with teachers should take place before the resource development stage to ensure there are longitudinal values to the sessions created. It is important that schools are supported in the pre- and post- visits, provided with planning and follow-up material to be used in the classroom. These enable the teacher to embed the visit in a unit of work, which ultimately supports the justification of time being allocated to an external visit.

The Citi Money Gallery programme will provide the same morning session to all schools, based around financial capability. The afternoon sessions can then be selected from a list,

considering financial education in the context of a subject. For example, if history is chosen, the session will be based on rationing; art will consider how wealth is portrayed; mathematics will analyse efficient production techniques; geography will look at the financial impact of natural disasters. Alongside these sessions there will also be study days, allowing a subject area to be considered in detail.



Students analysing production strategies

Unfacilitated resources provide a valid aspect to an education programme. Often the numbers of facilitated on-site sessions a museum can offer are limited, being restricted by the confines of teaching spaces. Unfacilitated resources therefore allow students and teachers to explore the collection themselves but under the structured guidance of provided activities. The advantages of these are that they can be used on a very regular basis, enabling more schools to engage with the collection, and do not require a member of museum staff to be present. The Citi Money Gallery includes a handling desk, which is staffed by volunteers on a daily basis, and enables a wide audience to engage with the objects. It also ensures that students participating in an unfacilitated activity still have the opportunity to handle items in the collection.

Utilisation of the internet is high among teachers; therefore a comprehensive website supporting the collection and education programme is paramount. It should be succinct and easy to navigate, with resources available to download in an accessible format. The main section of the Citi Money Gallery education website is shown here for reference, and can be accessed at www.britishmuseum.org/money.

Resources



Resources inspired by the gallery take the form of stand-alone activities or image banks.

Longer projects, which could be used for transition or enrichment weeks, and short activities suitable for tutor time.

Critical Consumer >
 Financial loop game >
 How do you construct a 50p >
 Money and business image bank >
 Money and citizenship image bank >
 Money and mathematics image bank >
 Note-ably different >
 Warhol challenge >
 Which coin is which >

Sessions



Teachers can book Museum-led sessions and self-led sessions related to the gallery education programme.

How current is currency? >
 KS3 Maths Challenge >
 KS2 Measuring the Museum >

More sessions will be available in 2014.

Teacher opportunities

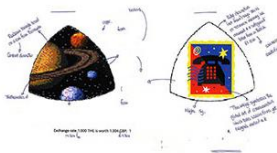


The education programme has been developed with the help of teachers and students.

There are ongoing opportunities to be involved with the education programme as well as using the programme to support your teaching needs.

- Teacher advisory panel
- CPD sessions
- INSET sessions
- Research opportunities
- Networking events

Competitions



At least one academic competition will be run every year, providing a unique chance to spend time at the Museum, among other prizes.

Current competition

The Citi Money Gallery are working with IMA Maths Careers and asking you to design a currency for Earth as part of 2013: Mathematics of Planet Earth.

Find out more >

Community projects



Onsite and offsite opportunities are available to support community initiatives developing financial awareness.

ITT provision



Sessions are available to complement initial teacher training programmes; bespoke sessions may be available on request.

- Enrichment days
- Museum education
- History of mathematics
- University based options

Citi Money Gallery education homepage

As discussed earlier, schools need to be encouraged to look outside of their immediate learning environment to identify opportunities that facilitate and develop knowledge. Numerous initiatives will be undertaken alongside the Citi Money Gallery programme, such as supporting existing national competitions for schools and organising a financial education conference. These will raise the profile of the Citi Money Gallery and develop teachers' confidence in using the programme. The involvement of teachers in the programme will be highlighted to all schools, providing reassurance and validity for investing time in a visit to the Citi Money Gallery. The role of initial teacher training institutions has been discussed but there is also a market for the development of existing teachers; providing practising teachers with access to the gallery and museum combined with an opportunity to improve their skills set. Therefore an element of the programme should be focused on teacher development, addressing the previously identified barrier of teachers having a lack of knowledge and confidence in delivering financial education.

As well as working with schools, the Citi Money Gallery education programme engages with community initiatives. A large element of this is achieved through outreach work, taking the collection to organisations that may have difficulty accessing the museum. This enables people to experience the collection within the security of their familiar environment. However it is still important to engage the community with the actual collection, and simple

inexpensive activities are a useful tool for achieving this. One such example undertaken last year at the British Museum was coin striking in the gallery. This has minimal start-up costs but a hugely positive effect on the audience; it acted as an inspiration for people to then spend time in the Citi Money Gallery.

The combination of these differing components should help ensure the programme's success. Regardless of the activity, it is important to remember that the outcome is the same; to help develop a student to become a critical consumer, conscious of their spending and aware of their decisions.

Session development: case study example of 'The notion of an economy'

Pilot material and resources have been developed with the support of the teacher panel. The strong relationship established with the schools through this panel has enabled the majority of the pilot material to be tested during outreach sessions based in these schools. Undertaking this ensures students are experiencing the materials in a familiar environment; this is of huge benefit to the programme development, allowing students' responses to be evaluated against the materials rather than this being incorporated into a wider experience of the museum.

The pilot sessions were based around education through discovery, putting the emphasis on student learning rather than direct teaching. In each session, the first activity was interactive to ensure engagement from the start. Handling of the objects featured prominently throughout the sessions, with students being given the opportunity to identify each object and how it could have been used, rather than being told. This relates to enquiry-based learning and the REACT theory of learning, as discussed earlier.

Through the teacher panel, a difficult teaching area was identified that a pilot session could focus on, namely exchange rates. This topic is common to mathematics and economics, with teachers suggesting that students found it difficult to grasp the concept. Numerous strategies were then considered to support this, and a group of sixth form students (aged 17 and 18) were heavily involved in the design of the session. As a result, a trading activity was created, which developed the understanding of behaviour economics and trade-offs from decisions. The outcomes of the trading activity promoted an awareness of appreciating individual items and their associated worth, which led to the understanding of how an exchange rate is developed. Students therefore experienced this concept in context, providing them with something tangible that they could relate their learning to. The activity was piloted with a group of key stage 4 students (aged 14 to 16), providing an opportunity to see the activity in action and identify areas for improvement.



Students using objects from the handling collection to create an exchange rate

Future implications

The pilot phase of the Citi Money Gallery education programme has so far identified a very real need in schools and educational institutions to support the delivery of financial education. While the evaluative process has highlighted areas for improvement it has also been hugely complimentary, with schools keen to stay involved with the programme and the opportunities it will offer. As alluded to earlier, there is no doubt as to the importance of students experiencing effective financial education, and this will always be the case. Regardless of changes in technology and the way money is transacted, people will still need to understand how to efficiently use money and make informed financial decisions. As discussed throughout the paper, monetary collections are ideally placed to support this. They provide an opportunity to ensure that the learning experience is memorable and delivered in a contextualised manner with direct references to items in the collection. This will ensure that students can appreciate the role that money has played, and continues to play, in society, enabling them to feel confident about making financial decisions in their futures.

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